The month was dry and cold, as Januaries are prone to be in Oklahoma, and its historical rankings reflect those traits. Drought conditions continued to spread thanks to a statewide average precipitation total of less than a quarter of an inch. That amounts to a deficit of more than an inch for the month and the sixth driest January on record since 1895. The statewide average temperature fell 1.3 degrees below normal to rank as the 33rd coldest January on record. Very little snow fell, although a couple of storms provided decent amounts for a few areas. Broken Bow and Ponca City both reported 5 inches of snow for the month. Very little in the way of traditional severe weather occurred, although high winds and low relative humidity combined at times to produce wildfires, especially late in the month when conditions were warmer.

## PRECIPITATION

The stingy skies during January continued a problem seen since early fall, and the December-January period looked equally bleak with a deficit of over 2 inches, the fifth driest such period on record. Northeastern- through central-Oklahoma were particularly dry over those two months, ranked as the secondand third-driest on record for those areas, respectively. The Mesonet station at Broken Bow led the state's precipitation totals with 1.47 inches for January. Many, many stations were relatively dry for the entire month, although Tipton won the actual prize with a total of 0.02 inches.

| Description | Extreme | Station | Day |
| :---: | :---: | :---: | :---: |
| High Temperature | $78^{\circ} \mathrm{F}$ | Fairview, Butler, Oilton 28, 28, 29 | $\begin{aligned} & 15 ; \\ & 20 \end{aligned}$ |
| Low Temperature | $-8^{\circ} \mathrm{F}$ | Hooker | 11 |
| High Precipitation | 1.47 in. | Broken Bow |  |
| Low Precipitation | 0.20 in . | Tipton |  |

## TEMPERATURE

The lack of moisture during the month did not come with a similar lack of cold air. Several powerful cold fronts kept the state in an arctic deep freeze, interspersed with a few days of spring-like warmth. The highest temperature recorded by
the Mesonet was 78 degrees at both Fairview and Butler on the 28th and Oilton on the 29th. Oklahoma City and Tulsa tied record highs on the 29th with 76 degrees and McAlester did the same with 74 degrees that same day. The month's low temperature of - 8 degrees occurred at Hooker on the eighth.

## JANUARY DAILY HIGHLIGHTS

JANUARY 1-8: The first eight days of the month were monumentally uneventful. The tranquility was disrupted by a weak cold front on the fourth. Other than that, the days were marked with mild temperatures to go along with cold mornings, as is the norm for January. No precipitation fell in the state during this period.

JANUARY 9-10: A break in the monotonous January weather came complete with snow and freezing drizzle. The heaviest precipitation fell on the ninth with 3-5 inches of snow in the southeast. Another couple of inches fell in that area on the 10th as well, in addition to some light snow along the Kansas border. Temperatures were customary for wintery weather with highs in the 20s and 30 s and lows in the teens.

January 2011 Statewide Statistics
Temperature

|  | Average | Depart. | Rank (1895-2011) |
| :--- | :---: | :---: | :---: |
| Month <br> (January) | $34.8^{\circ} \mathrm{F}$ | $-1.3^{\circ} \mathrm{F}$ | 33rd Coolest |
| Season-to- <br> Date (Dec-Jan) | $37.0^{\circ} \mathrm{F}$ | $-0.6^{\circ} \mathrm{F}$ | 36th Coolest |
|  | Precipitation |  |  |
|  | Average | Depart. | Rank (1895-2011) |
| Month (January) | 0.24 in. | -1.21 in. | 6th Driest |
| Season-to-Date <br> (Dec-Jan) | 1.17 in. | -2.30 in. | 5th Driest |
| Depart. = departure from $30-$-year normal |  |  |  |

JANUARY 11-17: This weeklong period began on the frigid side with lows briefly touching down below zero and highs that struggled to reach freezing. In some cases, high temperatures were suppressed by the previous period's snow and remained in the teens. The month's low temperature of -8 degrees occurred at Hooker on the eighth. A gradual warm-up occurred until some high temperatures reached the 60s by the 15th.

A weak cold front moved through the state on the 16 th and brought a bit of light rain to the southeast. Other than that, the state remained mostly dry through the period.

JANUARY 18-22: Another cold front cooled the state down on the 18th and triggered a few light showers in western Oklahoma. Low temperatures on the 18th fell into the 20s north of the front to the 40 s south of the front. Highs were also split along the front, from the 30 s in the north to the 50 s in the south. Some light snow fell on the 19th and 20th before moving out of the state. A gradual warm-up occurred with the return of southerly winds on the 21 st. By the 22 nd, high temperatures had returned to the 50 s and 60 s . The low humidity and southerly winds gusting to over 40 mph created high fire danger.

JANUARY 23-29: This period started with a series of cold fronts, bringing shots of reinforcing frigid air. Some light rain and snow gave the southwest a bit of moisture on the 25th. Temperatures began to increase by the 26th and 27th until record-setting warmth arrived on the 28th and 29th. Oklahoma City, McAlester and Tulsa all tied previous record highs on the 29th. Temperatures rose into the 70s with the month's high of 78 degrees at Fairview and Butler on the 28th and again at Oilton on the 29th. A cold front inched into northwestern Oklahoma late on the 29th. Low relative humidities and strong southerly winds combined to produce more than 20 wildfires that evening.

JANUARY 30-31: The warm weather disappeared quickly with a cold front and an approaching storm system. A shower in McCurtain County brought over a half of an inch of rain before the cold front exited the state. Lows on the 31st were in the single digits in the Panhandle to near 50 in the southeast. Freezing precipitation was beginning to break out late on the 31st in southwestern Oklahoma

## JANUARY 2011 OBSERVED PRECIPITATION



## JANUARY 2011 DEPARTURE FROM NORMAL PRECIPITATION



## JANUARY 2011 PERCENT OF NORMAL PRECIPITATION



## JANUARY 2011 AVERAGE SOIL MOISTURE AT 25CM



## JANUARY 2011 AVERAGE TEMPERATURE



## JANUARY 2011 DEPARTURE FROM NORMAL TEMPERATURE



## MESONET MONTHLY SUMMARY FOR JANUARY 2011

| NAME | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | $\begin{aligned} & \text { LOW } \\ & \text { TEMP } \end{aligned}$ | DAY | HDD | CDD | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | $\begin{aligned} & \text { HIGH } \\ & 24-H R \end{aligned}$ | DAY | NAME | $\begin{aligned} & \text { MEAN } \\ & \text { TEMP } \end{aligned}$ | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | $\begin{aligned} & \text { LOW } \\ & \text { TEMP } \end{aligned}$ | DAY | HDD | CDD |  | $\begin{aligned} & \text { HIGH } \\ & 24-H R \end{aligned}$ | DAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PANHANDLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arnett | 34.0 | 75 | 29 | 4 | 11 | 960 | 0 | . 26 | . 19 | 18 | Goodwe 11 | 33.0 | 73 | 29 | -5 | 11 | 992 | 0 | . 12 | . 04 | 20 |
| Beaver | 31.6 | 75 | 29 | -4 | 11 | 1035 | 0 | . 12 | . 06 | 20 | Hooker | 31.8 | 73 | 28 | -8 | 11 | 1029 | 0 | . 08 | . 04 | 20 |
| Boise City | 31.6 | 69 | 29 | -6 | 11 | 1034 | 0 | . 12 | . 06 | 17 | Kenton | 31.7 | 68 | 28 | -3 | 11 | 1033 | 0 | . 22 | . 12 | 17 |
| Buffalo | 32.1 | 75 | 29 | -2 | 11 | 1021 | 0 | . 12 | . 05 | 13 | Slapout | 33.2 | 74 | 29 | -2 | 11 | 987 | 0 | . 27 | . 12 | 18 |
| NORTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alva | 31.4 | 75 | 29 | 1 | 11 | 1042 | 0 | . 22 | . 16 | 13 | May Ranch | 32.2 | 73 | 29 | 0 | 12 | 1016 | 0 | . 34 | . 13 | 13 |
| Blackwell | 30.3 | 74 | 29 | 0 | 12 | 1075 | 0 | . 21 | . 13 | 13 | Medford | 30.5 | 74 | 29 | -1 | 12 | 1069 | 0 | . 29 | . 18 | 13 |
| Breckinridge | 31.6 | 75 | 28 | 2 | 13 | 1035 | 0 | . 17 | . 12 | 13 | Newkirk | 30.8 | 74 | 29 | -1 | 12 | 1059 | 0 | *** | *** | *** |
| Cherokee | 31.0 | 75 | 29 | -1 | 12 | 1055 | 0 | . 36 | . 23 | 13 | Red Rock | 32.2 | 76 | 29 | 3 | 13 | 1018 | 0 | . 21 | . 09 | 13 |
| Fairview | 33.8 | 78 | 28 | 5 | 12 | 967 | 0 | . 17 | . 07 | 20 | Seiling | 33.4 | 76 | 28 | 5 | 11 | 981 | 0 | . 20 | . 08 | 20 |
| Freedom | 31.9 | 75 | 29 | 0 | 11 | 1026 | 0 | . 17 | . 09 | 13 | Woodward | 33.7 | 75 | 29 | 1 | 11 | 970 | 0 | . 09 | . 04 | 13 |
| Lahoma | 32.1 | 76 | 28 | 5 | 11 | 1019 | 0 | . 14 | . 12 | 13 |  |  |  |  |  |  |  |  |  |  |  |
| NORTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bixby | 34.1 | 76 | 29 | 7 | 13 | 958 | 0 | . 26 | . 11 | 22 | Nowata | 30.9 | 76 | 29 | 2 | 13 | 1057 | 0 | . 12 | . 04 | 10 |
| Burbank | 31.3 | 76 | 29 | 1 | 13 | 1045 | 0 | . 27 | . 17 | 13 | Pawnee | 32.7 | 77 | 29 | 4 | 13 | 1001 | 0 | . 23 | . 09 | 13 |
| Claremore | 34.1 | 76 | 29 | 6 | 12 | 959 | 0 | . 42 | . 16 | 22 | Porter | 34.8 | 75 | 29 | 7 | 13 | 936 | 0 | . 32 | . 18 | 22 |
| Copan | 31.3 | 75 | 29 | 3 | 12 | 1046 | 0 | . 22 | . 08 | 20 | Pryor | 31.8 | 74 | 29 | 5 | 12 | 1030 | 0 | . 17 | . 07 | 22 |
| Foraker | 31.0 | 75 | 29 | 3 | 12 | 1054 | 0 | . 22 | . 08 | 14 | Skiatook | 33.5 | 76 | 29 | 5 | 12 | 977 | 0 | . 29 | . 18 | 22 |
| Inola | 32.7 | 76 | 29 | 5 | 13 | 1001 | 0 | . 33 | . 18 | 22 | Vinita | 30.4 | 74 | 29 | 1 | 13 | 1073 | 0 | . 10 | . 04 | 22 |
| Jay | 32.7 | 75 | 29 | 3 | 13 | 1000 | 0 | . 43 | . 28 | 22 | Wynona | 32.2 | 76 | 29 | 4 | 12 | 1017 | 0 | . 21 | . 07 | 13 |
| Miami | 31.3 | 74 | 29 | 2 | 12 | 1044 | 0 | . 19 | . 05 | 22 |  |  |  |  |  |  |  |  |  |  |  |
| WEST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessie | 35.7 | 76 | 28 | 8 | 11 | 908 | 0 | . 13 | . 10 | 18 | Putnam | 34.4 | 76 | 28 | 7 | 11 | 949 | 0 | . 05 | . 03 | 21 |
| Butler | 34.9 | 78 | 28 | 7 | 11 | 934 | 0 | . 18 | . 14 | 18 | Retrop | 36.1 | 76 | 28 | 7 | 11 | 896 | 0 | . 12 | . 05 | 18 |
| Camargo | 33.4 | 76 | 28 | 5 | 11 | 979 | 0 | . 37 | . 19 | 21 | Watonga | 34.6 | 75 | 28 |  | 11 | 943 | 0 | . 07 | . 04 | 21 |
| Cheyenne | 36.3 | 75 | 28 | 5 | 11 | 888 | 0 | . 19 | . 12 | 18 | Weatherford | 34.8 | 75 | 28 | 5 | 11 | 937 | 0 | . 03 | . 02 | 11 |
| Erick | 35.0 | 77 | 28 | 6 | 11 | 931 | 0 | . 06 | . 03 | 9 |  |  |  |  |  |  |  |  |  |  |  |
| CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acme | 36.3 | 75 | 28 | 7 | 2 | 891 | 0 | . 04 | . 02 | 21 | Ninnekah | 35.5 | 77 | 28 | 7 | 2 | 913 | 0 | . 05 | . 02 | 21 |
| Bowlegs | 35.7 | 77 | 29 | 8 | 13 | 910 | 0 | . 14 | . 09 | 21 | Norman | 36.0 | 76 | 28 | 10 | 11 | 898 | 0 | . 06 | . 04 | 21 |
| Bristow | 33.3 | 76 | 29 | 5 | 13 | 983 | 0 | . 18 | . 06 | 22 | 0ilton | 32.1 | 78 | 29 | 4 | 13 | 1021 | 0 | . 41 | . 24 | 22 |
| Lake Carl Blac | 32.6 | 76 | 28 | 3 | 13 | 1003 | 0 | . 29 | . 13 | 21 | OKC East | 36.1 | 75 | 28 | 10 | 13 | 896 | 0 | . 06 | . 03 | 21 |
| Chandler | 34.9 | 76 | 29 | 8 | 13 | 932 | 0 | . 15 | . 11 | 21 | OKC North | 36.7 | 76 | 29 | 9 | 11 | 877 | 0 | . 04 | . 03 | 21 |
| Chickasha | 34.3 | 77 | 28 | 6 | 2 | 952 | 0 | . 04 | . 01 | 9 | OKC West | 36.4 | 75 | 29 | 10 | 11 | 886 | 0 | . 04 | . 03 | 21 |
| El Reno | 33.7 | 76 | 28 | 5 | 12 | 971 | 0 | . 05 | . 02 | 10 | Okemah | 34.6 | 76 | 29 | 7 | 21 | 943 | 0 | . 19 | . 09 | 21 |
| Guthrie | 35.0 | 76 | 28 | 8 | 12 | 931 | 0 | . 07 | . 06 | 21 | Perkins | 34.4 | 77 | 29 | 7 | 13 | 950 | 0 | . 24 | . 11 | 22 |
| Kingfisher | 32.8 | 77 | 28 | 5 | 13 | 998 | 0 | . 08 | . 05 | 21 | Shawnee | 35.8 | 75 | 29 | 9 | 12 | 905 | 0 | . 07 | . 06 | 21 |
| Marena | 34.0 | 76 | 29 | 5 | 13 | 961 | 0 | . 33 | . 15 | 21 | Spencer | 36.0 | 75 | 29 | 9 | 13 | 898 | 0 | . 07 | . 04 | 21 |
| Minco | 35.3 | 75 | 28 | 7 | 11 | 920 | 0 | . 08 | . 04 | 21 | Stillwater | 33.6 | 77 | 29 | 7 | 13 | 975 | 0 | . 32 | . 15 | 21 |
| Marshal 1 | 32.4 | 76 | 28 | 5 | 13 | 1011 | 0 | . 29 | . 12 | 22 | Washington | 36.6 | 77 | 28 | 10 | 13 | 881 | 0 | . 06 | . 03 | 20 |
| EAST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cookson | 34.3 | 73 | 29 | 5 | 13 | 952 | 0 | . 56 | . 28 | 22 | Sallisaw | 35.6 | 76 | 29 | 9 | 13 | 911 | 0 | . 41 | . 15 | 20 |
| Eufaula | 36.8 | 75 | 29 | 11 | 13 | 873 | 0 | . 35 | . 11 | 21 | Stigler | 36.0 | 75 | 29 | 10 | 21 | 898 | 0 | . 34 | . 14 | 20 |
| Haskell | 33.9 | 76 | 29 | 6 | 13 | 965 | 0 | . 31 | . 18 | 22 | Stuart | 37.2 | 74 | 28 | 9 | 13 | 862 | 0 | . 20 | . 08 | 21 |
| Hectorville | 35.4 | 77 | 29 | 9 | 12 | 918 | 0 | . 29 | . 19 | 22 | Tahlequah | 33.4 | 74 | 29 | 4 | 20 | 980 | 0 | . 52 | . 30 | 22 |
| Holdenville | 36.4 | 75 | 29 | 10 | 12 | 888 | 0 | . 19 | . 08 | 21 | Webbers Falls | 35.7 | 75 | 29 | 10 | 13 | 908 | 0 | . 33 | . 09 | 17 |
| McAlester | 35.6 | 74 | 29 | 7 | 13 | 913 | 0 | . 29 | . 09 | 21 | Westville | 34.4 | 73 | 29 | 5 | 12 | 948 | 0 | . 43 | . 27 | 22 |
| 0 kmul gee | 34.3 | 76 | 29 | 5 | 13 | 952 | 0 | . 38 | . 15 | 22 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHWEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Altus | 36.5 | 77 | 28 | 9 | 11 | 882 | 0 | ***** | ***** | *** | Holl is | 36.3 | 76 | 28 | 7 | 11 | 889 | 0 | . 14 | . 04 | 9 |
| Apache | 36.0 | 75 | 28 | 9 | 11 | 898 | 0 | . 05 | . 03 | 10 | Mangum | 34.9 | 76 | 28 | 5 | 2 | 933 | 0 | . 09 | . 03 | 25 |
| Fort Cobb | 35.3 | 75 | 28 | 8 | 11 | 919 | 0 | . 06 | . 03 | 10 | Medicine Park | 38.5 | 74 | 28 | 11 | 11 | 823 | 0 | . 15 | . 07 | 18 |
| Grandfield | 37.5 | 76 | 29 | 9 | 11 | 854 | 0 | . 05 | . 02 | 9 | Tipton | 36.7 | 77 | 28 | 8 | 11 | 876 | 0 | . 02 | . 01 | 9 |
| Hinton | 34.9 | 75 | 28 | 7 | 11 | 933 | 0 | . 03 | . 01 | 11 | Walters | 37.2 | 76 | 28 | 10 | 11 | 861 | 0 | . 09 | . 06 | 18 |
| Hobart | 35.8 | 74 | 28 | 9 | 11 | 907 | 0 | . 15 | . 08 | 18 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ada | 36.6 | 76 | 29 | 9 | 13 | 879 | 0 | . 22 | . 05 | 11 | Madill | 38.4 | 75 | 29 | 12 | 12 | 824 | 0 | . 44 | . 11 | 9 |
| Ardmore | 39.1 | 75 | 29 | 14 | 11 | 804 | 0 | . 28 | . 10 | 14 | Newport | 38.9 | 76 | 29 | 13 | 11 | 808 | 0 | . 26 | . 10 | 14 |
| Burneyville | 37.7 | 77 | 29 | 11 | 2 | 846 | 0 | . 86 | . 31 | 31 | Pauls Valley | 37.4 | 76 | 29 | 12 | 11 | 855 | 0 | . 10 | . 05 | 20 |
| Byars | 37.3 | 75 | 29 | 11 | 11 | 859 | 0 | . 10 | . 05 | 21 | Ringling | 38.2 | 76 | 29 | 12 | 11 | 829 | 0 | . 52 | . 27 | 31 |
| Centrahoma | 36.1 | 76 | 29 | 10 | 13 | 896 | 0 | . 15 | . 06 | 20 | Sulphur | 35.9 | 74 | 29 | 9 | 21 | 903 | 0 | . 12 | . 02 | 9 |
| Durant | 38.6 | 75 | 29 | 15 | 12 | 817 | 0 | . 51 | . 16 | 14 | Tishomingo | 36.9 | 75 | 29 | 12 | 12 | 870 | 0 | . 20 | . 06 | 11 |
| Fittstown | 36.6 | 75 | 28 | 10 | 13 | 880 | 0 | . 16 | . 05 | 14 | Vanoss | 36.4 | 75 | 29 | 7 | 13 | 886 | 0 | . 15 | . 05 | 13 |
| Ketchum Ranch | 37.5 | 75 | 29 | 11 | 21 | 852 | 0 | . 07 | . 03 | 20 | Waurika | 37.6 | 77 | 29 | 13 | 2 | **** | **** | . 13 | . 05 | 9 |
| Lane | 37.1 | 75 | 29 | 11 | 13 | 864 | 0 | . 44 | . 17 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Antlers | 37.3 | 76 | 29 | 8 | 13 | 859 | 0 | . 61 | . 19 | 14 | Idabe 7 | 39.0 | 75 | 29 | 10 | 13 | 805 | 0 | 1.04 | . 28 | 16 |
| Broken Bow | 38.6 | 75 | 29 | 10 | 13 | 819 | 0 | 1.49 | . 55 | 30 | Mt Herman | 37.9 | 73 | 28 | 11 | 13 | 840 | 0 | . 78 | . 21 | 20 |
| Clayton | 37.0 | 74 | 29 | 8 | 13 | 868 | 0 | . 42 | . 17 | 20 | Talihina | 37.0 | 73 | 29 | 9 | 13 | 868 | 0 | . 39 | . 11 | 10 |
| Cloudy | 37.8 | 73 | 29 | 10 | 13 | 844 | 0 | . 63 | . 14 | 20 | Wilburton | 36.0 | 75 | 29 | 7 | 13 | 900 | 0 | . 35 | . 12 | 20 |
| Hugo | 39.0 | 74 | 29 | 13 | 12 | 805 | 0 | . 89 | . 22 | 14 | Wister | 35.3 | 76 | 29 | 7 | 13 | 920 | 0 | . 44 | . 16 | 20 |

2010 AND 2011 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL


January 2011 Mesonet Precipitation Comparison

| Climate Division | Precipitation <br> (inches) | Departure from <br> Normal (inches) | Rank since 1895 | Wettest on Record <br> (Year) | Driest on <br> Record (Year) |
| :--- | :---: | :---: | :--- | :--- | :--- |
| Jan-10 |  |  |  |  |  |
| Panhandle | 0.16 | -0.36 | 30th Driest | $1.92(2005)$ | $0.01(1904)$ |
| North Central | 0.21 | -0.72 | 17th Driest | $4.43(1949)$ | $0.00(1912)$ |
| Northeast | 0.25 | -1.32 | 10th Driest | $6.01(1949)$ | $0.01(1986)$ |
| West Central | 0.13 | -0.75 | 15th Driest | $4.08(1949)$ | $0.00(1912)$ |
| Central | 0.14 | -1.23 | 7th Driest | $6.18(1949)$ | $0.00(1912)$ |
| East Central | 0.34 | -1.79 | 8th Driest | $7.99(1932)$ | $0.04(1986)$ |
| Southwest | 0.08 | -0.98 | 12th Driest | $4.89(1949)$ | $0.00(1902)$ |
| South Central | 0.23 | -1.67 | 9th Driest | $6.85(1932)$ | $0.00(1909)$ |
| Southeast | 0.67 | -2.14 | 7th Driest | $11.08(1932)$ | $0.11(2003)$ |
| Statewide | 0.24 | -1.21 | 6th Driest | $5.23(1949)$ | $0.04(1986)$ |
|  |  |  |  |  | 1.85 |

2010 AND 2011STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL


January 2011 Mesonet Temperature Comparison

| Climate Division | Average <br> Temp (F) | Departure from Normal (F) | Rank since 1895 | Hottest on Record (Year) | Coldest on Record (Year) | Jan-10 (F) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 32.6 | -0.4 | 43rd Coolest | 42.7 (2006) | 19.5 (1930) | 32.6 |
| North Central | 32.1 | -1.4 | 35th Coolest | 44.6 (2006) | 19.4 (1930) | 32.0 |
| Northeast | 32.5 | -2.1 | 28th Coolest | 46.0 (2006) | 21.3 (1940) | 31.0 |
| West Central | 35.2 | 0.2 | 49th Coolest | 46.2 (2006) | 20.8 (1930) | 34.2 |
| Central | 35.0 | -1.2 | 35th Coolest | 47.4 (2006) | 22.5 (1930) | 35.2 |
| East Central | 35.4 | -1.9 | 25th Coolest | 47.8 (2006) | 24.8 (1940) | 37.3 |
| Southwest | 36.5 | -1.0 | 38th Coolest | 47.8 (1923) | 24.2 (1930) | 37.4 |
| South Central | 37.5 | -1.6 | 27th Coolest | 49.5 (1923) | 27.0 (1930) | 38.1 |
| Southeast | 37.5 | -2.1 | 19th Coolest | 49.4 (1952) | 28.3 (1979) | 36.9 |
| Statewide | 34.8 | -1.3 | 33rd Coolest | 46.4 (2006) | 23.5 (1930) | 34.9 |

## RECORD EVENT REPORTS

| Description | Lay | Location | Record | Previous Record | Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Maximum Temperature | 29 | Oklahoma City | 76 | 76 | 1911 |
| Maximum Temperature | 29 | Tulsa | 76 | 76 | 1947 |
| Maximum Temperature | 29 | McAlester | 74 | 74 | 2002 |

## MESONET EXTREMES FOR JANUARY 2011

| Climate Division | High Temp (F) | Day | Station | Low Temp (F) | Day | Station | High Monthly Rainfall (inches) | Station | High Daily Rainfall (inches) | Day | Station |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 75 | 29th | Buffalo | -8 | 11th | Hooker | 0.27 | Slapout | 0.19 | 18th | Arnett |
| North Central | 78 | 28th | Fairview | -1 | 12th | Newkirk | 0.36 | Cherokee | 0.23 | 13th | Cherokee |
| Northeast | 77 | 29th | Pawnee | 1 | 13th | Burbank | 0.43 | Jay | 0.28 | 22nd | Jay |
| West Central | 78 | 28th | Butler | 5 | 11th | Camargo | 0.37 | Camargo | 0.19 | 21st | Camargo |
| Central | 78 | 29th | Oilton | 3 | 13th | Lake Carl Blackwell | 0.41 | Oilton | 0.24 | 22nd | Oilton |
| East Central | 77 | 29th | Hectorville | 4 | 20th | Tahlequah | 0.55 | Cookson | 0.30 | 22nd | Tahlequah |
| Southwest | 77 | 28th | Altus | 5 | 2nd | Mangum | 0.15 | Hobart | 0.08 | 18th | Hobart |
| South Central | 77 | 29th | Burneyville | 7 | 13th | Vanoss | 0.55 | Burneyville | 0.25 | 9th | Burneyville |
| Southeast | 76 | 29th | Antlers | 7 | 13th | Wister | 1.47 | Broken Bow | 0.55 | 30th | Broken Bow |
| Statewide | 78 | 28th | Fairview | -8 | 11th | Hooker | 1.47 | Broken Bow | 0.55 | 30th | Broken Bow |

## Oklahoma Monthly Climate Summary

## FEBRUARY OUTLOOK

February is the warmest of the Oklahoma's three winter months, a product of the combination of gradually lengthening days - often heralding an illusory approach of spring - and the very real existence of the continuing winter. Recorded temperatures in Oklahoma during the second month of the year traverse a range of 126 degrees Fahrenheit, from 99 degrees at Arapaho on February 24, 1918 to -27 degrees at Vinita on February 13, 1905. The latter thermometer reading is tied as the state's all-time lowest temperature. Oklahoma's normal monthly temperature, based on data obtained from 1971 through 2000, is 42.3 degrees. Monthly values of normal daily maximum temperatures across the state range between 60.3 degrees along the Red River at Waurika and 49.5 degrees at Newkirk near the state's northern border. Normal daily minimum temperatures vary between 34.4 degrees at Waurika and 22.0 degrees in the Panhandle at Beaver. The monthly mean temperatures for February, compiled as a statewide average since 1892, have varied between a high of 50.7 degrees in 1954 and a low of 26.6 degrees in both 1899 and 1905.

## Temperature

| Mean | 42.3 degrees |
| :--- | :--- |
| Warmest February | 1954, 51.8 degrees |
| Coolest February | $1899,27.9$ degrees |
| Hottest recorded | 99 degrees, Arapaho, February <br> 24,1918 |
| Coldest recorded | -27 degrees, Vinita, February <br> 13,1905 |
| Hottest recorded | 92 degrees, Cloud Chief, <br> January 31, 1911 |
| Coldest recorded | -27 degrees, Watts, January <br> 18,1930 |
|  |  |

Of all the other months, only January has a normal precipitation lower, when averaged statewide, than February's 1.77 inches. Southeastern Oklahoma's Idabel possesses the state's greatest precipitation normal during February at 3.60 inches. Kenton, in the shadow of Black Mesa, gains distinction as the state's driest reporting station during February with a normal total of 0.33 inch. The February statewide-averaged precipitation varies substantially, being bounded by a low of 0.18 inch attained 1996 and a high of, 4.66 inches in 1938. In contrast to the many stations that have suffered through

February precipitation voids, Tuskahoma was treated to an excessive 13.21 inches during February 1945. Snow is an important part of the precipitation picture in northwestern Oklahoma. Helena and Woodward both average about 4.7 inches of snow during February, compared to less than onehalf inch at stations in southeastern Oklahoma.

Oklahoma's extreme snowstorm of record was the blizzard of February 21-23, 1971. This blizzard buried northwestern Oklahoma under as much as three feet of snow, not accounting for drifts. Buffalo was the hardest hit, reporting 23 inches of snow on the 21 st and a state-record snow depth of 36 inches by the morning of the 24th. The snow was driven by winds 30 to 50 miles per hour, producing drifts as high as 20 feet. Military cargo planes were used to airdrop hay to cattle stranded in the far-flung pastures of the region. Losses to agriculture were estimated at $\$ 2.1$ million ( 1971 dollars). Lost livestock included approximately 11,000 cattle, 3,500 hogs, and 1,000 sheep. Buffalo reported a total of 39.5 inches of snow during the month (a state record for all months).

## Precipitation

| Mean | 1.77 inches |
| :--- | :--- |
| Wettest February | $1938,6.44$ inches |
| Driest February | 1947 and $1996,0.20$ inches |
| Wettest location | Idabel, 3.60 inches |
| Driest location | Kenton, 0.33 inches |
| Most recorded | 13.21 inches, Tuskahoma, 1945 |

## Tornadoes

| Average February Tornadoes | 0.8 |
| :--- | :--- |
| Most | $6(1975)$ |

Tornadoes are not generally considered a February phenomenon, but a total of 44 February tornadoes have been recorded across the state since 1950, including six in 1975. Three people were killed on February 22, 1975, bringing the confirmed total of February tornado deaths in the state to nine, according to storm-by-storm death tolls compiled by Thomas P. Grazulis and published in the book "Significant Tornadoes: 1880-1989."

## FEBRUARY NORMAL DAILY MAXIMUM TEMPERATURE (1971-2000)



FEBRUARY NORMAL DAILY MINIMUM TEMPERATURE (1971-2000)


## FEBRUARY NORMAL PRECIPITATION (1971-2000)



FEBRUARY 1, 2011 SOIL MOISTURE CONDITIONS AT 25CM

U.S. Drought Monitor

## Oklahoma

February 1, 2011
Valid 7 a.m. EST

| Drought Conditions (Percent Area) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 0.36 | 99.64 | 57.77 | 5.51 | 0.00 | 0.00 |
| Last Week <br> (01/25/2011 map) | 0.36 | 99.64 | 54.35 | 5.51 | 0.00 | 0.00 |
| 3 Months Ago <br> (11/02/2010 map) | 47.71 | 52.29 | 5.66 | 0.00 | 0.00 | 0.00 |
| Start of <br> Calendar Year <br> (12/28/2010 map) | 13.82 | 86.18 | 47.90 | 1.50 | 0.00 | 0.00 |
| Star of <br> Water Year <br> (09/28/2010 map) | 66.28 | 33.72 | 4.21 | 0.00 | 0.00 | 0.00 |
| One Year Ago <br> (01/26i2010 map) | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |



Intensity:

```
D0 Abnormally Dry
D3 Drought - Extreme
D1 Drought - Moderate \squareD4 Drought - Exceptional
```

D2 Drought - Severe

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://drought.unl.edu/dm


Released Thursday, February 3, 2011 R. Heim/L. Love-Brotak, NCDC/NOAA


FEBRUARY 2011 U.S. PRECIPITATION FORECAST


Percent Likelihood of Above or Below Average Precipitation*

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

## FEBRUARY 2011 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*


## FEBRUARY CLIMATE NORMALS

| Climate <br> Division | Max. <br> Temperature <br> $\left({ }^{\circ} \mathrm{F}\right)$ | Min. <br> Temperature $\left({ }^{\circ} \mathrm{F}\right)$ | Avg. <br> Temperature <br> $\left({ }^{\circ} \mathrm{F}\right)$ | Precipitation <br> (inches) |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 53.3 | 23.8 | 38.6 | 0.64 |
| 2 | 51.4 | 25.1 | 38.3 | 1.23 |
| 3 | 52.9 | 28.8 | 40.9 | 1.96 |
| 4 | 53.2 | 26.9 | 40.1 | 1.09 |
| $\mathbf{5}$ | 53.9 | 29.2 | 41.6 | 1.77 |
| $\mathbf{6}$ | 54.4 | 31.2 | 42.8 | 2.35 |
| $\mathbf{7}$ | 55.9 | 29.0 | 42.5 | 1.36 |
| 8 | 56.8 | 31.9 | 44.4 | 2.21 |
| 9 | 57.3 | 31.9 | 44.6 | 3.13 |
| Statewide | 54.2 | 28.7 | 41.5 | 1.82 |

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.mesonet.org or http://climate.ok.gov/

## C OKLAHOMA CLIMATOLOGICAL SURVEY

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