Winter was noticeably absent through much of December, a deceptively warm month that ended more than 2 degrees above normal to rank as the 38th warmest since records began in 1895. The season finally lived up to its name during the month's final week, however, with a swath of 3-5 inches of snow along the I-44 corridor in southwestern Oklahoma, along with another icy plunge to ring in the New Year. New Year's Eve was celebrated with patches of freezing drizzle, snow, sleet and below-zero wind chills. Despite the snow and ice, preliminary data from the Oklahoma Mesonet still tracked a deficit of 0.67 inches for the month, the 55th driest December on record. The year itself was cool and dry as a whole, with 2014's statewide average temperature at 58.9 degrees, one degree below normal and the 27th coolest on record. The January-December statewide average precipitation total of 28.47 inches was more than 8 inches below normal and the 26th driest year on record. The 2014 Mesonet precipitation totals ranged from 13.2 inches at Kenton while Clayton had the most with 50.9 inches.

## December 2014 Statewide Extremes

| Description | Extreme | Station | Day |
| :--- | :---: | :--- | :---: |
| High Temperature | $75^{\circ} \mathrm{F}$ | Burneyville | 5 |
| Low Temperature | $-6^{\circ} \mathrm{F}$ | Kenton | 31 |
| High Precipitation | 5.12 in. | Mt. Herman | -- |
| Low Precipitation | 0.17 in. | Altus | -- |

December's average temperature might have finished on the warm side, but that statistic didn't come with lots of warm, sunny days. In fact, it was the least sunny December since Mesonet records began in 1994, receiving only 35 percent of possible sunshine. Fog was a frequent visitor throughout the month, and the high humidity values aided in suppressing fire danger. The clouds and moisture also helped account for the warmth, trapping heat close to the surface at night and preventing the low temperatures from plummeting. The statewide average high temperature, held down by the cloudiness, was actually more than a degree below normal, but the average low temperature was nearly 6.5 degrees above normal. The highest temperature recorded by the Mesonet in December was 75 degrees at Burneyville on the fifth. The lowest temperature, minus 6 degrees, came on the month's final day at Kenton. The
lowest temperature of 2014 was minus 12 degrees at Nowata back on January 6, and the highest temperature of 107 degrees came on July 26 at Freedom.

Severe weather made an appearance during the month, including a weak tornado near Lake Arcadia in central Oklahoma on the 14th, only the 25th December tornado since 1950. According to preliminary data from the National Weather Service (NWS), 2014 ended with a total of 16 tornadoes, the lowest count since accurate records began in 1950. If that total holds at 16, it would best the previous minimum count of 17 back in 1988. Large hail and severe winds also accompanied the storms on the 14th.

December 2014 Statewide Statistics
Temperature

|  | Average | Depart. | Rank (1895-2014) |
| :--- | ---: | ---: | :--- |
| Month <br> (December) | $41.2^{\circ} \mathrm{F}$ | $2.3^{\circ} \mathrm{F}$ | 38th Warmest |
| Year-to-Date <br> (Jan-Dec) | $58.9^{\circ} \mathrm{F}$ | $-1.0^{\circ} \mathrm{F}$ | 27th Coolest |

Precipitation

|  | Total | Depart. | Rank (1895-2014) |
| :--- | :---: | :---: | :---: |
| Month <br> (December) | 1.39 in. | -0.67 in. | 55th Driest |
| Year-to-Date <br> (Jan-Dec) | 28.47 in. | -8.03 in. | 26th Driest |

Depart. = departure from 30-year normal

No drought improvements were noted during the month thanks to the dry conditions. The U.S. Drought Monitor depicted 60 percent of the state in drought to start December and 62 percent as it ended. The amount of extreme-toexceptional drought, the worst two categories on the Drought Monitor, increased from 18 percent to 22 percent. One year ago, 38 percent of the state was considered to be in drought. Nearly 1.5 million Oklahomans were still affected by drought as the year came to a close.

## DECEMBER 2014 DAILY SUMMARIES

DECEMBER 1-3: Temperatures started out unseasonably cool as a result of a front the day before. However, as the highest maximum temperatures slowly dropped, the lowest
maximum temperatures crept upward. The warmest highs fell from 65 degrees in Mt. Herman and Idabel on the 1st to 55 degrees in Grandfield on the 3rd. The coolest highs took a major jump from 27 degrees on the 1st, to 38 degrees on the 2 nd , and 40 degrees on the 3rd. The highest minimums increased by 10 degrees from 35 to 45 degrees and the lowest minimums jumped from 10 degrees to 23 degrees. Ahead of an approaching warm front on the 3rd, patchy fog and drizzle-light rain fell in the north. Broken Bow received the most precipitation with .19 inches, followed by Cloudy with .15 inches. Winds were breezy, but died down as the days passed. The maximum daily average wind speed was 19 mph on the $1 \mathrm{st}, 15 \mathrm{mph}$ on the 2 nd , and 12 mph on the 3 rd .
december 4-5: Fog blanketed portions of Oklahoma on the 4th, reducing visibilities to a quarter mile in some places. Drizzle turned into light rain across northwest Oklahoma and spread eastward as the day progressed. The scattered light rain on the 4th and 5th produced maximum daily precipitation amounts of .56 inches in Beaver (Dec. 4) and nearly an inch in Mt. Herman (Dec. 5). Just before a cold front moved in on the 5th, a warm front pushed in and stretched from western north Texas to south-central Oklahoma. Maximum temperatures ranged from 42 degrees in May Ranch and Buffalo to 68 degrees in Waurika on the 4th, and from 51 degrees in Seiling and Lahoma to 75 degrees in Burneyville on the 5th. The highest minimum temperatures increased from 49 degrees in Burneyville to 54 degrees in the southeast and the lowest minimums increased from 25 degrees to 29 degrees in Kenton. Average daily wind speeds were less than 9 mph on the 4 th and less than 12 mph on the 5 th.

DECEMBER 6-10: Although dense fog persisted in several areas, rainfall was negligible from the 6th through the 10th. The first three days of this period reported 66 degrees as the highest maximum temperature in the state. Due to a stalled warm front across the state, the highest temperature on the 9th climbed slightly to 68 degrees in Broken Bow, but dropped back down to 64 degrees in Waurika on the 10th. The coolest maximum temperatures wavered in the 40 s. Minimum temperatures were between the 20s and 40 s. Daily average wind speeds were generally less than 10 mph .

DECEMBER 11-14: During this rainy period, temperatures warmed ever so slightly. High maximums climbed to the low 70s and low maximums climbed to the upper 40s and low 50s. The highest minimums increased from 51 degrees in Walters to 59 degrees in Burneyville and the coolest minimums increased from 22 degrees in Kenton to 34 degrees in Boise City. On the 12th, Oklahoma City broke a daily warm minimum temperature record at 47 degrees. Showers fell primarily in the southeast with daily maximum accumulations of .14 inches in Mt. Herman on the 11th, . 66 inches in Mt. Herman on the 12th, 13 inches in Idabel on the 13th, and 1.34 inches in Eufaula on the 14th. By the 14th, severe thunderstorms developed from a strong upper-
level low, causing 2.00 inch hail in Chickasha and Oklahoma City, and a brief tornado near Arcadia Lake. The maximum daily average wind speeds increased from 10 mph to 19 mph on the 13th and 22 mph on the 14 th with a peak wind gust in Skiatook of 66 mph also on the 14th.

DECEMBER 15: Lingering showers fell from the upper-level low that was slowly making its way out of the state. The highest rainfall amounts measured .74 inches in Mt. Herman, . 56 inches in Cloudy, and .35 inches in Broken Bow. By the afternoon, a dry cold front moved into Oklahoma. Highs ranged from 43 degrees in Boise City to 64 degrees in Hugo. Lows ranged from 24 degrees in Kenton to 44 degrees in Clayton. Peak wind gusts of 50 mph were reported in Arnett and Camargo and average wind speeds were between 10 and 24 mph .

DECEMBER 16-18: Since a dry air mass moved in with a cold front on the previous day, skies were rain free on the 16th. However, a mid-level disturbance caused a maximum rainfall of . 92 inches in Webbers Falls on the 17th and less than . 17 inches on the 18th. Temperatures tumbled downward with maximum highs falling from 52 degrees to 47 degrees and minimum highs falling from 38 to 35 degrees. Maximum lows increased from 36 to 39 degrees and minimum lows were 17 mph on the $16 \mathrm{th}, 23 \mathrm{mph}$ on the 17 th , and 15 mph on the 18th. The lowest temperature in the state was reported in Kenton each day. The highest daily average wind speed was 13mph on Tuesday and Wednesday, and a calm 7mph on Thursday.

DECEMBER 19-22: Despite light drizzle and fog here and there, rain was negligible and a warming trend ensued. Maximum temperatures increased from a range between 38 and 50 degrees to a range between 46 and 67 degrees. The coolest minimum temperatures were in the upper teens and 20s, and the warmest minimums were in the 40 s . A cold front started to enter northwest Oklahoma on the 22nd. Average wind speeds were less than 7 mph on the $19 \mathrm{th}, 11 \mathrm{mph}$ on the $20 \mathrm{th}, 17 \mathrm{mph}$ on the 21 st , and 16 mph on the 22 nd .

DECEMBER 23-24: Effects from the previous day's cold front started to become noticeable with the temperature trend. Compared to the day before, maximum temperatures dropped drastically. The highest temperatures recorded were 55 degrees in Buffalo on the 23rd and 52 degrees in Mangum on the 24th. The coolest highs were 33 degrees and 38 degrees on the 23rd and the 24th, respectively. The warmest lows dropped from 42 to 36 degrees and the coolest lows dropped from 23 to 14 degrees in the panhandle. Rain fell in the east and light snow fell in the northwest on the 23rd. . 40 inches of precipitation accumulated in Idabel and .29 inches accumulated in Broken Bow on the 23rd $\neg$. All other precipitation amounts measured less than one-tenth of an inch. Winds were very breezy, averaging less than 26 mph on the 23 rd and less than 16 mph by the 24 th.

DECEMBER 25-26: It was warm for the holiday as the warmest highs reached 65 degrees on the 25th and 67 degrees on the 26th. The coolest high was still a warm 53 degrees on Christmas Day; however, some areas only reached 31 degrees the following day as a cold front moved through. The warmest lows jumped from 37 to 51 degrees; the coolest lows fell from 21 to a bone-chilling 9 degrees in Kenton. Light rain fell ahead of the cold front in central and southern OK on the 26 th. Sulphur measured the most precipitation in the state with .59 inches. As winds shifted and became more northerly, they also became breezy. The maximum average wind speed was 25 mph on the 25 th and 17 mph on the 26 th .

DECEMBER 27: As temperatures dropped, snow began to blanket portions of the state. The heaviest hit region was from Oklahoma City southwestward with as much as 6 inches reported near Lawton. Oklahoma City broke its daily snowfall record that day with 3.5 inches. Highs ranged from 33 degrees in Boise City to 58 degrees in Talihina. Lows ranged from 6 degrees in Kenton to 35 degrees in Broken Bow and Idabel. The Mesonet measured .59 inches of melted precipitation in Cookson-the highest amount that day. Average wind speeds were less than 15 mph .

DECEMBER 28: Temperatures dropped overnight with highs only managing to reach 51 degrees in the warmest areas and 38 degrees in the coolest. Lows were between 9 degrees in Beaver and 32 degrees in Broken Bow. Skies were clear by the afternoon and wind speeds averaged less than 12 mph .

DECEMBER 29-31: Temperatures were seasonably normal on the 29th before a cold front moved into the region. Maximum highs tumbled from 55 degrees in Waurika on the 29th to 40 degrees in Broken Bow and Idabel by New Year's Eve. The coolest highs were 33 degrees (Boise City), 12 degrees (Kenton and Boise City), and 19 degrees (May Ranch, Newkirk, and Goodwell) each consecutive day. Lows were between - 6 degrees in the panhandle and 34 degrees in the southeast. While some light snow fell in the northeast, accumulations between a trace and one inch of blowing snow fell in the northwest on the 30th. On the 31st, several areas in the state received snow, sleet, and freezing rain. The maximum daily average wind speeds were 14 mph on the $29 \mathrm{th}, 22 \mathrm{mph}$ on the 30 th , and 13 mph on the 31 st .

## DECEMBER 2014 SEVERE WEATHER

## Hail (2 inches in diameter or greater)

| Size (in.) | Location | County | Day |
| :---: | :--- | :--- | :---: |
| 2.00 | 3 N Chickasha | Grady | 14 |
| 2.00 | Oklahoma City | Oklahoma | 14 |

DECEMBER 2014 OBSERVED PRECIPITATION


DECEMBER 2014 DEPARTURE FROM NORMAL PRECIPITATION


## DECEMBER 2014 PERCENT OF NORMAL PRECIPITATION



DECEMBER 2014 AVERAGE SOIL MOISTURE AT 25CM


DECEMBER 2014 AVERAGE TEMPERATURE


DECEMBER 2014 DEPARTURE FROM NORMAL TEMPERATURE


## MESONET MONTHLY SUMMARY FOR DECEMBER 2014

| 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 | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | $\begin{aligned} & \text { LOW } \\ & \text { TEMP } \end{aligned}$ | DAY | HDD | CDD |  | $\begin{aligned} & \text { HIGH } \\ & 24-H R \end{aligned}$ | DAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PANHANDLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arnett | 39.4 | 65 | 8 | 6 | 31 | 795 | 0 | . 48 | . 15 | 4 | Goodwel 1 | 36.7 | 71 | 13 | 3 | 30 | 876 | 0 | . 72 | . 34 | 4 |
| Beaver | 37.7 | 68 | 13 | 4 | 31 | 845 | 0 | . 88 | . 56 | 4 | Hooker | 36.9 | 70 | 13 | 3 | 31 | 870 | 0 | . 92 | . 42 | 5 |
| Boise City | 35.1 | 68 | 13 | 1 | 31 | 928 | 0 | . 60 | . 30 | 14 | Kenton | 34.2 | 68 | 13 | -6 | 31 | 954 | 0 | . 31 | . 20 | 4 |
| Buffalo | 38.0 | 65 | 13 | 7 | 30 | 838 | 0 | . 96 | . 52 | 4 | Slapout | 38.6 | 65 | 13 | 4 | 31 | 819 | 0 | . 55 | . 46 | 4 |
| NORTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alva | 38.1 | 64 | 13 | 9 | 31 | 833 | 0 | . 83 | . 23 | 4 | May Ranch | 37.5 | 65 | 14 | 3 | 30 | 852 | 0 | . 75 | . 33 | 4 |
| Blackwell | 38.8 | 61 | 14 | 11 | 31 | 811 | 0 | . 84 | . 30 | 5 | Medford | 38.8 | 62 | 14 | 10 | 31 | 812 | 0 | . 90 | . 30 | 5 |
| Breckinridge | 39.1 | 62 | 14 | 11 | 31 | 804 | 0 | . 67 | . 17 | 17 | Newkirk | 38.4 | 61 | 8 | 10 | 31 | 824 | 0 | 1.21 | . 44 | 14 |
| Cherokee | 38.5 | 64 | 14 | 11 | 31 | 822 | 0 | . 77 | . 22 | 14 | Red Rock | 39.9 | 61 | 14 | 13 | 31 | 777 | 0 | . 67 | . 22 | 14 |
| Fairview | 39.5 | 65 | 14 | 11 | 31 | 791 | 0 | . 74 | . 30 | 14 | Seiling | 39.1 | 66 | 14 | 9 | 31 | 804 | 0 | . 50 | . 18 | 17 |
| Freedom | 38.0 | 65 | 14 | 7 | 31 | 836 | 0 | . 60 | . 24 | 4 | Woodward | 38.9 | 64 | 14 | 6 | 31 | 808 | 0 | . 66 | . 22 | 14 |
| Lahoma | 39.1 | 63 | 14 | 11 | 31 | 802 | 0 | . 96 | . 38 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| NORTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bixby | 42.1 | 63 | 13 | 20 | 31 | 711 | 0 | 1.52 | . 48 | 17 | Pawnee | 40.5 | 63 | 8 | 14 | 31 | 759 | 0 | 1.12 | . 53 | 14 |
| Burbank | 39.5 | 62 | 8 | 12 | 31 | 792 | 0 | . 85 | . 25 | 5 | Porter | ***** | *** | *** | *** | *** | **** | **** | 2.18 | . 82 | 14 |
| Copan | 39.8 | 62 | 14 | 13 | 31 | 782 | 0 | 1.44 | . 64 | 14 | Pryor | 41.2 | 66 | 14 | 19 | 31 | 738 | 0 | 1.53 | . 56 | 14 |
| Foraker | 38.7 | 62 | 8 | 10 | 31 | 814 | 0 | 1.33 | . 49 | 14 | Skiatook | 40.5 | 63 | 8 | 15 | 31 | 759 | 0 | 1.60 | . 68 | 14 |
| Inola | 41.5 | 65 | 14 | 20 | 31 | 728 | 0 | 1.90 | . 75 | 14 | Talala | 40.1 | 63 | 14 | 15 | 31 | 772 | 0 | 1.59 | . 84 | 14 |
| Jay | 40.7 | 65 | 14 | 20 | 31 | 754 | 0 | 1.89 | . 63 | 14 | Tulsa | 42.3 | 63 | 8 | 17 | 31 | 704 | 0 | 1.77 | . 90 | 14 |
| Miami | 40.3 | 66 | 14 | 18 | 31 | 765 | 0 | 1.85 | . 75 | 14 | Vinita | 39.8 | 67 | 14 | 16 | 31 | 780 | 0 | 2.10 | 1.23 | 14 |
| Nowata | 40.0 | 65 | 14 | 15 | 31 | 777 | 0 | 1.34 | . 64 | 14 | Wynona | 40.4 | 64 | 8 | 14 | 31 | 763 | 0 | 1.23 | . 35 | 14 |
| WEST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessie | 40.7 | 65 | 14 | 10 | 31 | 753 | 0 | . 77 | . 55 | 14 | Putnam | 39.2 | 64 | 14 | 9 | 31 | 799 | 0 | . 52 | . 15 | 17 |
| Butler | 40.1 | 66 | 14 | 9 | 31 | 772 | 0 | . 44 | . 18 | 17 | Retrop | 41.4 | 66 | 14 | 10 | 31 | 730 | 0 | . 38 | . 18 | 14 |
| Camargo | 38.9 | 66 | 8 | 8 | 31 | 810 | 0 | . 44 | . 12 | 4 | Watonga | 39.4 | 64 | 14 | 10 | 31 | 793 | 0 | . 59 | . 22 | 14 |
| Cheyenne | 39.7 | 65 | 8 | 7 | 31 | 785 | 0 | . 36 | . 17 | 14 | Weatherford | 40.3 | 63 | 13 | 11 | 31 | 765 | 0 | . 55 | . 25 | 14 |
| Erick | 40.7 | 65 | 8 | 9 | 31 | 753 | 0 | . 33 | . 13 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acme | 42.3 | 67 | 13 | 15 | 28 | 704 | 0 | . 66 | . 22 | 17 | Ninnekah | 42.1 | 68 | 13 | 14 | 28 | 710 | 0 | . 65 | . 24 | 17 |
| Bowlegs | 42.5 | 63 | 5 | 20 | 31 | 698 | 0 | 1.63 | . 65 | 17 | Norman | 42.3 | 65 | 13 | 17 | 31 | 705 | 0 | . 97 | . 34 | 17 |
| Bristow | 41.6 | 62 | 8 | 19 | 29 | 726 | 0 | 1.93 | 1.03 | 14 | 0ilton | 40.7 | 62 | 14 | 16 | 28 | 753 | 0 | 1.22 | . 40 | 17 |
| Lake Carl Blac | ***** | *** | ** | *** | *** | **** | * | . 47 | . 12 | 4 | OKC East | 41.8 | 66 | 13 | 16 | 31 | 718 | 0 | . 81 | . 33 | 17 |
| Chandler | 42.1 | 63 | 14 | 18 | 31 | 711 | 0 | 1.17 | . 44 | 14 | OKC North | 42.0 | 65 | 13 | 15 | 31 | 713 | 0 | *** | ***** | *** |
| Chickasha | 41.7 | 67 | 13 | 10 | 28 | 724 | 0 | . 76 | . 28 | 17 | OKC West | 42.3 | 66 | 13 | 14 | 31 | 705 | 0 | 1.00 | . 39 | 14 |
| El Reno | 39.8 | 66 | 13 | 13 | 31 | 781 | 0 | . 62 | . 21 | 14 | Okemah | 41.3 | 62 | 5 | 21 | 31 | **** | **** | 2.21 | . 92 | 14 |
| Guthrie | 41.2 | 65 | 13 | 14 | 31 | 738 | 0 | . 45 | . 23 | 17 | Perkins | 41.3 | 63 | 14 | 16 | 31 | 736 | 0 | . 90 | . 36 | 14 |
| Kingfisher | 40.3 | 65 | 13 | 14 | 31 | 767 | 0 | . 36 | . 12 | 14 | Shawnee | 42.0 | 62 | 14 | 18 | 31 | 711 | 0 | . 89 | . 36 | 17 |
| Marena | ***** | *** | *** | *** | *** | **** | **** | . 60 | . 21 | 17 | Spencer | ***** | *** | *** | *** | *** | **** | **** | 1.01 | . 36 | 17 |
| Minco | 41.0 | 65 | 13 | 14 | 31 | 743 | 0 | . 60 | . 20 | 17 | Stillwater | 41.0 | 62 | 14 | 15 | 31 | 745 | 0 | . 57 | . 21 | 17 |
| Marshal 1 | 40.1 | 63 | 13 | 13 | 31 | 771 | 0 | . 70 | . 30 | 14 | Washington | 42.7 | 66 | 13 | 18 | 31 | 693 | 0 | 1.02 | . 48 | 17 |
| EAST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cookson | 41.7 | 62 | 14 | 22 | 29 | **** | ** | 3.59 | 1.06 | 14 | Sallisaw | 42.8 | 66 | 14 | 23 | 30 | 689 | 0 | 2.42 | . 83 | 14 |
| Eufaula | 43.3 | 65 | 13 | 24 | 29 | 672 | 0 | 3.21 | 1.34 | 14 | Stigler | 42.6 | 66 | 13 | 22 | 29 | 695 | 0 | 2.55 | . 91 | 14 |
| Haskel 1 | 42.1 | 65 | 13 | 22 | 29 | 709 | 0 | 2.08 | . 74 | 14 | Stuart | 43.7 | 65 | 5 | 24 | 31 | 662 | 0 | 2.82 | 1.03 | 14 |
| Hectorville | 42.3 | 62 | 8 | 19 | 31 | 705 | 0 | 1.72 | . 60 | 17 | Tahlequah | 41.8 | 65 | 14 | 23 | 31 | 719 | 0 | 3.19 | . 87 | 14 |
| Holdenville | 42.7 | 62 | 5 | 22 | 30 | 690 | 0 | 2.69 | 1.32 | 14 | Webbers Falls | 43.0 | 66 | 14 | 26 | 29 | 682 | 0 | 3.10 | . 93 | 14 |
| McAlester | 43.9 | 65 | 14 | 23 | 29 | 655 | 0 | 3.09 | . 92 | 14 | Westville | 41.6 | 63 | 14 | 23 | 31 | **** | **** | 2.94 | . 88 | 14 |
| 0kmulgee | 42.2 | 64 | 14 | 22 | 29 | 707 | 0 | 2.50 | 1.14 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHWEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Altus | 42.9 | 69 | 14 | 13 | 31 | 686 | 0 | . 17 | . 03 | 14 | Holl is | 42.6 | 66 | 14 | 11 | 31 | 695 | 0 | . 35 | . 14 | 14 |
| Apache | 41.6 | 67 | 14 | 14 | 31 | 725 | 0 | . 87 | . 28 | 14 | Mangum | 42.0 | 68 | 14 | 12 | 31 | 712 | 0 | . 32 | . 10 | 14 |
| Fort Cobb | ***** | *** | *** | *** | *** | **** | ** | . 52 | . 22 | 14 | Medicine Park | 42.5 | 68 | 14 | 13 | 31 | 696 | 0 | . 77 | . 30 | 14 |
| Grandfield | 43.9 | 70 | 14 | 16 | 28 | 655 | 0 | 1.02 | . 26 | 14 | Tipton | 43.5 | 70 | 14 | 14 | 31 | 667 | 0 | . 33 | . 11 | 17 |
| Hinton | 40.4 | 65 | 14 | 12 | 31 | 763 | 0 | . 50 | . 20 | 14 | Walters | 44.0 | 70 | 14 | 17 | 31 | 652 | 0 | . 67 | . 25 | 17 |
| Hobart | 41.9 | 67 | 14 | 12 | 31 | 715 | 0 | . 42 | . 25 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ada | 42.9 | 65 | 5 | 22 | 31 | 685 | 0 | 2.88 | 1.23 | 14 | Lane | 44.1 | 71 | 5 | 22 | 2 | 647 | 0 | 2.36 | . 71 | 14 |
| Ardmore | ** | *** | *** | *** | *** | **** | **** | 1.43 | . 73 | 17 | Madil1 | 45.5 | 71 | 5 | 24 | 2 | 604 | 0 | 1.53 | . 65 | 17 |
| Burneyville | 46.0 | 75 | 5 | 22 | 2 | 588 | 0 | . 95 | . 51 | 17 | Newport | 45.1 | 69 | 5 | 22 | 31 | 615 | 0 | 2.09 | . 85 | 14 |
| Byars | ***** | ** | * | *** | *** | ** | **** | 1.78 | . 86 | 17 | Pauls Valley | 43.7 | 66 | 5 | 21 | 31 | 660 | 0 | 1.53 | . 72 | 17 |
| Centrahoma | 43.9 | 67 | 5 | 25 | 28 | 655 | 0 | 2.37 | . 75 | 17 | Ringling | 45.3 | 70 | 13 | 21 | 31 | 612 | 0 | 1.21 | . 63 | 17 |
| Durant | 45.6 | 73 | 5 | 23 | 2 | 601 | 0 | 2.19 | . 77 | 17 | Sulphur | 43.4 | 66 | 5 | 21 | 31 | **** | **** | ***** | . 69 | 17 |
| Fittstown | 43.0 | 66 | 5 | 22 | 31 | 682 | 0 | 2.19 | 1.01 | 14 | Tishomingo | 43.9 | 69 | 5 | 24 | 31 | 655 | 0 | 2.20 | . 73 | 17 |
| Ketchum Ranch | 43.8 | 67 | 13 | 18 | 31 | 657 | 0 | 1.16 | . 55 | 17 | Waurika | 45.3 | 70 | 13 | 19 | 31 | 610 | 0 | 1.23 | . 70 | 17 |
| SOUTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Antlers | 44.1 | 70 | 5 | 22 | 29 | 647 | 0 | 3.03 | 1.33 | 14 | Idabe 7 | 45.7 | 74 | 5 | 25 | 30 | 597 | 0 | 3.22 | . 67 | 14 |
| Broken Bow | 44.9 | 72 | 5 | 24 | 25 | 622 | 0 | 3.31 | . 66 | 14 | Mt Herman | 44.2 | 66 | 5 | 27 | 24 | 644 | 0 | 5.12 | 1.28 | 14 |
| Clayton | 44.8 | 67 | 5 | 23 | 30 | 625 | 0 | 2.97 | 1.28 | 14 | Talihina | 44.4 | 65 | 5 | 21 | 29 | 638 | 0 | 3.20 | . 84 | 14 |
| Cloudy | 44.3 | 70 | 5 | 25 | 30 | 641 | 0 | 3.37 | 1.26 | 14 | Wilburton | 43.8 | 64 | 5 | 23 | 30 | 658 | 0 | 3.23 | 1.30 | 14 |
| Hugo | 45.0 | 73 | 5 | 25 | 2 | 620 | 0 | 2.73 | 1.29 | 14 | Wister | 43.3 | 65 | 13 | 20 | 30 | 673 | 0 | 2.71 | 1.18 | 14 |

## 2012, 2013 AND 2014 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



December 2014 Mesonet Precipitation Comparison

| Climate Division | Precipitation (inches) | Departure from Normal (inches) | Rank since 1895 | Wettest on Record (Year) | Driest on Record (Year) | Dec-13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 0.68 | -0.06 | 40th Wettest | 3.28 (2006) | 0.00 (1976) | 0.28 |
| North Central | 0.78 | -0.51 | 58th Driest | 3.59 (1984) | 0.01 (1950) | 0.49 |
| Northeast | 1.58 | -0.77 | 55th Driest | 7.61 (1895) | 0.14 (1950) | 1.35 |
| West Central | 0.49 | -0.70 | 43rd Driest | 4.04 (1911) | 0.00 (1908) | 0.59 |
| Central | 0.92 | -1.08 | 43rd Driest | 6.45 (1984) | 0.03 (1908) | 1.46 |
| East Central | 2.76 | -0.33 | 47th Wettest | 8.23 (1987) | 0.20 (1917) | 3.15 |
| Southwest | 0.54 | -0.87 | 42nd Driest | 5.65 (1911) | 0.00 (1908) | 1.29 |
| South Central | 1.81 | -0.82 | 58th Driest | 6.97 (1991) | 0.06 (1917) | 2.82 |
| Southeast | 3.29 | -0.71 | 60th Driest | 12.15 (1971) | 0.19 (1917) | 3.82 |
| Statewide | 1.39 | -0.67 | 55th Driest | 4.87 (1984) | 0.09 (1950) | 1.66 |

2012, 2013 AND 2014 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL


December 2014 Mesonet Temperature Comparison

| Climate Division | Average <br> Temp (F) | Departure from Normal (F) | Rank since 1895 | Hottest on Record (Year) | Coldest on Record (Year) | Dec-13 (F) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 37.1 | 2.1 | 36th Warmest | 42.1 (1933) | 22.6 (1983) | 32.8 |
| North Central | 38.8 | 2.7 | 31st Warmest | 42.9 (1965) | 21.5 (1983) | 32.5 |
| Northeast | 40.5 | 2.7 | 36th Warmest | 44.9 (1965) | 23.6 (1983) | 34.0 |
| West Central | 40.0 | 2.4 | 29th Warmest | 44.1 (1965) | 24.1 (1983) | 33.6 |
| Central | 41.3 | 2.0 | 42nd Warmest | 46.0 (1965) | 25.5 (1983) | 35.0 |
| East Central | 42.4 | 1.9 | 48th Warmest | 48.1 (1933) | 27.6 (1983) | 36.6 |
| Southwest | 42.5 | 2.3 | 33rd Warmest | 46.6 (1965) | 27.4 (1983) | 35.7 |
| South Central | 44.1 | 2.0 | 40th Warmest | 48.4 (1933) | 29.4 (1983) | 37.3 |
| Southeast | 44.4 | 2.5 | 30th Warmest | 49.7 (1984) | 30.4 (1983) | 39.1 |
| Statewide | 41.2 | 2.3 | 38th Warmest | 45.1 (1965) | 25.7 (1983) | 35.1 |

RECORD EVENT REPORTS DECEMBER 2014


## MESONET EXTREMES FOR DECEMBER 2014

| Climate Division | High Temp (F) | Day | Station | Low (F) | Day | Station | High Monthly Rainfall (inches) | Station | High Daily Rainfall (inches) | Day | Station |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 71 | 13th | Goodwell | -6 | 31st | Kenton | 0.96 | Buffalo | 0.56 | 4th | Beaver |
| North Central | 66 | 14th | Seiling | 3 | 30th | May Ranch | 1.21 | Newkirk | 0.44 | 14th | Newkirk |
| Northeast | 67 | 14th | Vinita | 10 | 31st | Foraker | 2.18 | Porter | 1.23 | 14th | Vinita |
| West Central | 66 | 14th | Butler | 7 | 31st | Cheyenne | 0.77 | Bessie | 0.55 | 14th | Bessie |
| Central | 68 | 13th | Ninnekah | 10 | 28th | Chickasha | 2.21 | Okemah | 1.03 | 14th | Bristow |
| East Central | 66 | 14th | Sallisaw | 19 | 31st | Hectorville | 3.59 | Cookson | 1.34 | 14th | Eufaula |
| Southwest | 70 | 14th | Walters | 11 | 31st | Hollis | 1.02 | Grandfield | 0.30 | 14th | Medicine Park |
| South Central | 75 | 5th | Burneyville | 18 | 31st | Ketchum Ranch | 2.88 | Ada | 1.23 | 14th | Ada |
| Southeast | 74 | 5th | Idabel | 20 | 30th | Wister | 5.12 | Mt Herman | 1.33 | 14th | Antlers |
| Statewide | 75 | 5th | Burneyville | -6 | 31st | Kenton | 5.12 | Mt Herman | 1.34 | 14th | Eufaula |

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 November 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 November 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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