January 2017 would have been remembered as exceedingly warm and dull if not for the visit from a powerful mid-month winter storm. The storm struck over the weekend of Jan. 13-15 and prompted a State of Emergency declaration for all 77 counties by Oklahoma Gov. Mary Fallin. An unusually moisture-laden weather system for January, the storm left the northwestern half of the state encased in ice and the southeastern half waterlogged. The freezing line meandered about the I-44 corridor at the beginning of the storm before slowly retreating to the northwest, bringing a mixed bag of impacts from southwestern through northeastern Oklahoma. Far northwestern Oklahoma and the eastern Panhandle were particularly hard hit, with ice thicknesses up to 1.5 inches coating trees and powerlines.

| January 2017 Statewide Extremes |  |  |  |  |
| :--- | :---: | :--- | :---: | :---: |
| Description | Extreme |  | Station | Day |
| High Temperature | $84^{\circ} \mathrm{F}$ | Altus | 11 |  |
| Low Temperature | $-19^{\circ} \mathrm{F}$ | Kenton | 7 |  |
| High Precipitation | 4.05 in. | Skiatook | -- |  |
| Low Precipitation | 0.84 in. | Hobart | -- |  |

Catastrophic impacts occurred in that region with widespread tree and electric utility infrastructure damage. At the height of the power outages, more than 23,000 customers were without service, many for several days. At month's end, there were still approximately 700 customers without electric service. According to the Oklahoma Department of Emergency Management, 65 total injuries were reported with the storm due to cuts, falls and automobile accidents. In addition, two electrical linemen were electrocuted in Beaver County while working to restore services, killing one.

The storm dumped 3-4 inches of moisture across the far northwest and south central regions of the state, while 1-2 inches of precipitation fell across most other areas. Another storm the following weekend added to those previous totals to produce a decidedly wet January across Oklahoma. According to preliminary statistics from the Oklahoma Mesonet, the statewide average was 2.52 inches of liquid precipitation, nearly an inch above normal and the 13th wettest January on record. Those records date back to 1895. January was the wettest on record for the Panhandle with an
average of 2.4 inches, close to 2 inches above normal. North central and west central sections each tallied their fourth highest totals on record. Skiatook led the Mesonet with 4.05 inches of rain, although Tulsa was close on its heels at 4.02 inches. The Mesonet's lowest total of 0.84 inches came at Hobart. That was the only Mesonet station that failed to record at least an inch of rain during the month.

Although the ice storm monopolized the headlines, the temperatures were certainly noteworthy as well. An arctic blast on the sixth and seventh of the month plunged Oklahoma into a frigid pool of air not seen in the state since February 2011. Kenton reached minus 19 degrees on the seventh, and Kingfisher and Chickasha fell to minus 12 that same day.

January 2017 Statewide Statistics
Temperature

|  | Average | Depart. | Rank (1895-2017) |
| :--- | ---: | ---: | :--- |
| Month (Jan) | $40.6^{\circ} \mathrm{F}$ | $2.9^{\circ} \mathrm{F}$ | 17th Warmest |
| Season-to-Date <br> (Dec-Jan) | $39.8^{\circ} \mathrm{F}$ | $2.0^{\circ} \mathrm{F}$ | 34th Warmest |

Precipitation

|  | Total | Depart. | Rank (1895-2017) |
| :--- | :---: | :---: | :--- |
| Month (Jan) | 2.52 in. | 0.96 in. | 13th Wettest |
| Season-to-Date <br> (Dec-Jan) | 3.35 in. | 0.21 in. | 50th Wettest |

Depart. $=$ departure from 30-year normal

Wind chill temperatures dropped into the minus teens to minus 20s over a broad region that morning. Forty-five of the Mesonet's 121 stations recorded lows below zero during that period and only one station, Tulsa, remained in double-digits with a low of 11 degrees. Several days later, many stations recorded highs in the 70s and 80s. Altus reached 84 degrees on the 11th, January's highest reading on the Mesonet. Overall, January was pleasantly mild with a statewide average of 40.6 degrees, nearly 3 degrees above normal to rank as the 17th warmest on record.

Before the mid-month deluge, drought had taken firm control over much of the state. Accounts of empty farm ponds, flagging reservoirs, wildfire outbreaks and destroyed wheat crops and grasslands were being reported from all areas of

Oklahoma. By January 10, the U.S. Drought Monitor had 88 percent of the state affected by drought, with 58 percent of that being severe-to-extreme. The Drought Monitor's intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst classification. The month's final map reflected a reduction in drought to about 80 percent of the state. The severe-to-extreme drought coverage had dropped from 58 percent to 31 percent. About 49 percent was considered "moderate" on the month's final map.

## JANUARY 2017 DAILY SUMMARIES

JANUARY 1-2: Temperatures were on the rise from a previously passing cold front on New Year's Eve. The highest maximum temperatures recorded in the state increased from 67 degrees in Burneyville and Waurika on the 1st to 72 degrees in Chandler on the 2nd. The lowest daily maximum temperatures increased from 49 degrees in Broken Bow to 54 degrees in Kenton. Minimum temperatures ranged from 17 degrees in Eva and Kenton to 50 degrees in Newport, Durant, and Waurika. Fog, rain, and isolated thunderstorms formed over the region as temperatures rose. While only trace amounts of rain fell in southeast Oklahoma on the 1st, as much as .88 inches was recorded in Pauls Valley the following day. Daily average wind speeds were generally less than 12 mph .

JANUARY 3-6: A strong cold front moved into the state and temperatures plummeted. The highest maximum temperatures fell from 60 degrees in Broken Bow on the 3rd to 28 degrees in Broken Bow by the 6th. The lowest maximum temperatures were in the upper 20s on the 3rd and 4th, and in the teens on the 5th and 6th. The highest minimum temperatures occurred in the southeast, and decreased from 34 degrees on the 3 rd to 14 degrees on the 6 th. The lowest daily minimum temperatures were observed in the panhandle and fell from 16 degrees to -10 degrees. Drizzle and light snow fell throughout the state leading up to January 6th, however, there was little to no accumulation. A second cold front moved in on the 5th which helped intensify snowfall the following day. On the 6th, snowfall amounts were anywhere from a tenth of an inch to 5.5 inches with the highest amount falling in Blaine County. Wind speeds were brisk on the 3rd, averaging 4-25 mph. Average wind speeds were less than 14 mph on the 4 th , less than 20 mph on the 5th, and less than 12 mph on the 6th. The highest wind gust during this period was 46 mph in Minco on the 3rd.

JANUARY 7-11: Temperatures were extremely chilly in some areas before a warming trend ensued. Maximum temperatures ranged from 21 degrees in Kenton to 40 degrees in Valliant, Idabel, and Broken Bow on the 7th. By the 11th, maximum temperatures were between 67 degrees in Lahoma and 84 degrees in Altus. Minimum temperatures were between -19 degrees (Kenton) and 11 degrees (Tulsa) on the 7th and increased each day until the 11th when they were between 19 degrees (Eva) and 57 degrees (Mt. Herman). Oklahoma City and McAlester both measured a minimum temperature
of -3 degrees on the 7th which tied Oklahoma City's daily low temperature record and broke McAlester's. Adversely, the same two cities broke their daily high temperature record on the 11th with 79 and 78 degrees, respectively. This period was relatively dry with the Mesonet primarily reporting melted precipitation in rain gauges around the panhandle. The highest amount of liquid precipitation measured was .36 inches in Kenton on the 8th. Daily average wind speeds were less than 11 mph on the 7th and generally less than 20 mph the following four days.

JANUARY 12-15: A cold front entered the region and precipitation returned to the area. The warmest recorded temperature in the state decreased from 76 degrees in Valliant and Idabel on the 12th to 58 degrees in Mt. Herman on the 14th. On the 15th, the highest maximum temperature was 62 degrees in Talihina. The lowest maximum temperature was 34 degrees in Beaver and Slapout on the 12th, 26 degrees in Watonga on the 13th, 30 degrees in Goodwell and Watonga on the 14th, and 31 degrees in Eva, Goodwell, and Slapout on the 15th. The highest minimum temperatures were between 53 degrees and 57 degrees and the lowest recorded temperature actually increased from 10 degrees in Eva on the 12th to 29 degrees in Goodwell, Eva, and Watonga by the 15th. Slow moving precipitation and cold temperatures created ideal conditions for an ice storm and freezing rain. The freezing line generally followed along the I-44 corridor from northeast Oklahoma down toward south-central/southeast Oklahoma. Freezing rain and ice formed north of the line while areas south of the line experienced light drizzle and rain. Ice totals were anywhere from a tenth of an inch just south of the I-44 corridor to an inch in the panhandle. Although the Mesonet can't measure frozen precipitation, the highest amounts of liquid precipitation measured each day were a miniscule .02 inches in Talihina and Wilburton on the 12th, .71 inches in Ada and Cloudy on the 13th, 1.21 inches in Jay on the 14th, and 2.95 inches in Fairview on the 15th. Oklahoma City broke its daily maximum rainfall record on the 15 th as well with 1.24 inches. Some of the rain was accompanied by thunderstorms in eastern Oklahoma on Sunday. The highest daily average wind speed decreased each consecutive day from 20 mph on the 12th to 11 mph on the 15th. The highest wind gust during this period was 51 mph in Ringling on the 15th.

JANUARY 16-17: Another cold front moved through the region and parts of the state were still grappling with winter precipitation remnants. Snow fell in parts of northwest Oklahoma while other areas in the north received light rain. As much as 3.0 inches of snow fell in Boise City and the highest amount of liquid precipitation in the Mesonet rain gauges was 1.87 inches in Watonga on the 16th and .32 inches in Walters the following day. High temperatures were between 35 degrees (Boise City) and 69 degrees (Wister and Broken Bow) on the 16th, and between 41 degrees (Jay) and 57 degrees (Camargo, Walters, and Butler) on the 17th. The highest minimum temperatures were in the low to mid-40s in the southeast and the lowest minimum temperatures were in the 20 s in the panhandle. Daily
average wind speeds were less than 14 mph on the 16 th and less than 11 mph on the 17 th .

JANUARY 18-20: Temperatures were on the rise as precipitation started to move out of the region. The highest maximum temperatures increased from 60 degrees in Beaver and Buffalo on the 18th to 74 degrees in southeast Oklahoma on the 20th. The lowest maximum temperatures fluctuated between 40 degrees and 51 degrees. The highest daily minimum temperatures increased from 47 degrees in Broken Bow to 52 degrees in Clayton and the lowest minimum temperatures were in the low to mid-20s. Light rain fell in the southeast half of Oklahoma on the 18th and dense fog formed in southern parts of the state on the 18th and 19th. The top three rainfall amounts on the 18th were .69 inches in Idabel, .55 inches in Valliant, and .39 inches in Cloudy. Rainfall was trivial the following two days. Daily average wind speeds were 2-13 mph on the 18th and 19th and 5-16 mph on the 20th.

JANUARY 21-22: A cold air mass moved into the region and brought isolated showers and thunderstorms along with it. The warmest temperature measured in the state fell from 71 degrees in Stigler on the 21st to 63 degrees in multiple southern towns on the 22nd. The lowest maximum temperature was 50 degrees in Kenton each day. Minimum temperatures were between 22 degrees in the panhandle and 47 degrees in southeast Oklahoma. The heaviest rain fell primarily in the panhandle on the 21st and in the northeast on the 22 nd. The highest rainfall amount each day was .36 inches in Eva and 1.90 inches in Tulsa on the 21st and 22nd, respectively. Surrounding areas saw less than a tenth of an inch of light rain. Peak wind gusts were in the 40s and average wind speeds were less than 12 mph on the 21st and less than 21 mph the following day.

JANUARY 23-24: Temperatures tried to recover from the previous cold front. Highs were between 51 degrees in Vinita and Miami and 73 degrees in Hollis on the 23rd. On the 24th, highs were between 55 degrees in Kenton and 80 degrees in Walters. The warmest minimum temperature in the state increased drastically over these two days from 35 degrees in parts of eastern Oklahoma to 50 degrees in McAlester. The coolest minimum temperatures were in the low to mid20s and occurred in the panhandle. The unseasonably warm temperatures allowed McAlester to tie its daily maximum temperature record at 77 degrees on the 24th. Skies were rainfree and average wind speeds were less than 16 mph on the 23 rd and less than 19 mph on the 24th. The highest wind gust each day occurred in Boise City and measured 44 mph on the 23 rd and 58 mph on the 24 th .

JANUARY 25-26: A cold front moved into the state overnight and temperatures experienced one last cool down for the month. The highest maximum temperatures dropped nearly 15 degrees from 65 degrees in Idabel on the 25th to 51 degrees in Broken Bow on the 26th. The panhandle measured the lowest maximum temperatures, having only warmed into the
mid-30s. The highest daily minimum temperature decreased from 39 degrees to 29 degrees and the lowest minimum temperature was 13 degrees on the 25th and 12 degrees on the 26th. Eva reported the coolest temperature both days. Despite some light sprinkles and snow on the 25th, there was no accumulation at the surface. Daily average wind speeds were less than 17 mph on the 25th and less than 11 mph on the 26th.

JANUARY 27-31: The end of January was dry and unseasonably warm as temperatures climbed. The highest maximum temperature recorded increased from 54 degrees in Valliant, Idabel, and Broken Bow on the 27th to 78 degrees in much of southeast Oklahoma on the 31st. The lowest maximum temperatures increased from 38 degrees in Kenton on the 27th to 66 degrees in Kenton on the 30th. A cold front moved in on the 31st and the lowest maximum temperature was 57 degrees in May Ranch. The highest daily minimum temperatures increased from 32 degrees in Medicine Park to 47 degrees in Ada. The lowest minimum temperatures were 11 degrees in Eva on the 27th, 15 degrees in Kenton on the 28th, 24 degrees in Boise City and Kenton on the 29th, 23 degrees in Beaver and Nowata on the 30th, and 23 degrees in Beaver again on the 31st. Oklahoma City tied its daily maximum temperature record on the 30th at 76 degrees and McAlester broke its daily maximum temperature record on the 30th and 31st with a high of 75 and 76 degrees, respectively. The highest daily average wind speed each consecutive day was $15 \mathrm{mph}, 14 \mathrm{mph}, 16$ $\mathrm{mph}, 13 \mathrm{mph}$, and 12 mph .

## JANUARY 2017 SEVERE WEATHER

|  | Flooding |  |
| :---: | :---: | :---: |
| EF-Rating | County (Start/End) | Day |
| None |  |  |

Wind Gusts (70 mph or Greater)
EF-Rating County (Start/End) Day

None

Hail (2 inches in Diameter or Greater)

| EF-Rating | County (Start/End) | Day |
| :---: | :---: | :---: |
| None |  |  |

Significant Tornadoes (EF2 or Greater)
EF-Rating County (Start/End) Day
None

## JANUARY 2017 OBSERVED PRECIPITATION



JANUARY 2017 DEPARTURE FROM NORMAL PRECIPITATION


## JANUARY 2017 PERCENT OF NORMAL PRECIPITATION



JANUARY 2017 AVERAGE SOIL MOISTURE AT 25CM


## JANUARY 2017 AVERAGE TEMPERATURE



## JANUARY 2017 DEPARTURE FROM NORMAL TEMPERATURE



## MESONET MONTHLY SUMMARY FOR JANUARY 2017

| NAME | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | $\begin{aligned} & \text { LOW } \\ & \text { TEMP } \end{aligned}$ | DAY | HDD | CDD | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | HIGH $24-H R$ | DAY | NAME | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | $\begin{aligned} & \text { LOW } \\ & \text { TEMP } \end{aligned}$ | DAY | HDD | CDD | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | $\begin{aligned} & \text { HIGH } \\ & 24-H R \end{aligned}$ | DAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PANHANDLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arnett | 37.6 | 74 | 30 | -6 | 7 | 849 | 0 | ***** | ***** | *** | Goodwe 11 | 35.1 | 75 | 11 | -7 | 7 | 926 | 0 | ***** | ***** | *** |
| Beaver | 35.9 | 74 | 11 | -8 | 7 | 903 | 0 | 3.25 | 2.39 | 15 | Hooker | 34.4 | 76 | 11 | -11 | 7 | 948 | 0 | 2.18 | 1.06 | 15 |
| Boise City | 34.1 | 71 | 11 | -8 | 6 | 959 | 0 | 1.51 | . 57 | 15 | Kenton | 32.8 | 69 | 11 | -19 | 7 | **** | **** | 1.39 | . 39 | 15 |
| Buffalo | 36.7 | 74 | 30 | 0 | 7 | 877 | 0 | 3.29 | 2.37 | 15 | Slapout | 36.4 | 73 | 11 | 2 | 7 | **** | **** | 3.34 | 2.49 | 15 |
| Eva | 33.5 | 74 | 11 | -7 | 7 | 975 | 0 | 1.85 | . 68 | 15 |  |  |  |  |  |  |  |  |  |  |  |
| NORTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alva | 37.6 | 77 | 30 | 3 | 6 | 848 | 0 | 2.88 | 2.20 | 15 | May Ranch | 37.3 | 74 | 30 | 5 | 7 | 859 | 0 | 3.67 | 1.97 | 15 |
| Blackwel1 | 38.2 | 73 | 24 | 1 | 7 | 830 | 0 | 2.04 | . 82 | 22 | Medford | 38.0 | 74 | 30 | 4 | 7 | 838 | 0 | 3.24 | 2.09 | 15 |
| Breckinridge | 38.5 | 77 | 30 | 0 | 7 | 820 | 0 | 2.02 | . 93 | 15 | Newkirk | 38.5 | 72 | 24 | 6 | 7 | 821 | 0 | 1.51 | . 62 | 15 |
| Cherokee | 38.0 | 76 | 30 | 4 | 7 | 836 | 0 | 2.96 | 2.19 | 15 | Red Rock | 39.3 | 75 | 30 | 3 | 7 | 796 | 0 | 2.24 | 1.61 | 15 |
| Fairview | 38.8 | 78 | 30 | 4 | 7 | **** | **** | 3.56 | 2.95 | 15 | Seiling | 37.9 | 76 | 30 | -4 | 7 | 841 | 0 | ***** | ***** | *** |
| Freedom | 37.2 | 76 | 30 | 1 | 7 | 861 | 0 | 2.23 | 1.31 | 15 | Woodward | 38.3 | 75 | 30 | 5 | 7 | 828 | 0 | ***** | ***** | *** |
| Lahoma | 38.2 | 77 | 30 | 2 | 6 | 830 | 0 | 2.38 | 1.78 | 15 |  |  |  |  |  |  |  |  |  |  |  |
| NORTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bixby | 41.4 | 77 | 11 | 0 | 7 | 733 | 0 | 1.90 | . 66 | 15 | Pawnee | 40.3 | 75 | 11 | 3 | 7 | 767 | 0 | 1.74 | . 75 | 15 |
| Burbank | 39.1 | 73 | 11 | 1 | 7 | 804 | 0 | 3.99 | 1.86 | 22 | Porter | 42.6 | 76 | 11 | 6 | 6 | **** | **** | 2.44 | . 86 | 14 |
| Copan | 39.1 | 76 | 11 | 6 | 7 | 802 | 0 | 2.79 | 1.28 | 22 | Pryor | 39.9 | 76 | 11 | 3 | 7 | 777 | 0 | 3.63 | 1.70 | 22 |
| Foraker | 38.5 | 75 | 11 | 6 | 7 | 823 | 0 | 3.22 | 1.89 | 15 | Skiatook | 41.1 | 76 | 11 | 8 | 7 | 741 | 0 | 4.05 | 1.73 | 15 |
| Inola | 40.7 | 76 | 11 | 3 | 7 | 755 | 0 | 2.92 | 1.17 | 22 | Talala | 39.7 | 78 | 11 | 3 | 7 | 785 | 0 | 3.49 | 1.74 | 22 |
| Jay | 41.2 | 74 | 11 | 2 | 7 | 738 | 0 | 3.70 | 1.27 | 22 | Tulsa | 42.3 | 78 | 11 | 11 | 7 | 704 | 0 | 4.02 | 1.90 | 22 |
| Miami | 40.1 | 75 | 11 | 4 | 7 | 773 | 0 | 3.19 | . 86 | 15 | Vinita | 38.7 | 77 | 11 | 3 | 7 | 816 | 0 | 3.39 | 1.54 | 15 |
| Nowata | 38.3 | 77 | 11 | 2 | 7 | 826 | 0 | 2.67 | 1.24 | 22 | Wynona | 40.0 | 75 | 11 | 5 | 7 | 775 | 0 | 3.22 | 1.48 | 15 |
| WEST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessie | 40.0 | 79 | 11 | -1 | 7 | **** | **** | 2.26 | 1.89 | 15 | Erick | 38.8 | 80 | 11 | -5 | 7 | 811 | 0 | 2.55 | 2.23 | 15 |
| Butler | 38.1 | 77 | 30 | -7 | 7 | **** | **** | 3.00 | 2.68 | 15 | Putnam | 38.3 | 76 | 30 | 3 | 7 | 829 | 0 | 3.64 | 2.85 | 15 |
| Camargo | 37.5 | 76 | 30 | -8 | 7 | 853 | 0 | 3.28 | 2.82 | 15 | Watonga | 38.7 | 74 | 30 | 0 | 6 | 815 | 0 | 2.45 | 1.87 | 16 |
| Cheyenne | 40.1 | 77 | 11 | 6 | 7 | 772 | 0 | 2.07 | 1.49 | 15 | Weatherford | 39.0 | 75 | 11 | -1 | 7 | 805 | 0 | ***** | ***** | *** |
| Elk City | 40.4 | 77 | 11 | 2 | 7 | 762 | 0 | 2.45 | 1.84 | 15 |  |  |  |  |  |  |  |  |  |  |  |
| CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acme | 41.8 | 78 | 11 | -7 | 7 | 720 | 0 | 2.27 | 1.80 | 15 | Ninnekah | 41.7 | 79 | 11 | -6 | 7 | 723 | 0 | ***** | ***** | *** |
| Bowlegs | 42.3 | 76 | 11 | -3 | 7 | 704 | 0 | 2.84 | 1.44 | 15 | Norman | 41.8 | 79 | 11 | -2 | 7 | 720 | 0 | 1.84 | 1.59 | 15 |
| Bristow | 40.5 | 77 | 11 | -9 | 7 | 760 | 0 | 2.37 | . 81 | 15 | 0ilton | 40.2 | 79 | 11 | -4 | 7 | 769 | 0 | 2.82 | 1.23 | 15 |
| Lake Carl B7ac | 38.8 | 76 | 30 | -5 | 7 | 811 | 0 | 2.44 | 1.89 | 15 | OKC East | 41.4 | 78 | 11 | 0 | 7 | 730 | 0 | 1.96 | 1.74 | 15 |
| Chandler | 42.4 | 78 | 11 | -3 | 7 | **** | **** | 1.67 | 1.00 | 15 | OKC North | 42.2 | 77 | 11 | 5 | 7 | 705 | 0 | 1.87 | 1.59 | 15 |
| Chickasha | 40.3 | 79 | 11 | -12 | 7 | 766 | 0 | 1.78 | 1.51 | 15 | Okemah | 41.5 | 77 | 11 | -6 | 7 | 728 | 0 | 1.77 | . 73 | 15 |
| E1 Reno | 38.6 | 76 | 11 | -4 | 7 | 819 | 0 | ***** | ***** | *** | Perkins | 40.9 | 75 | 11 | -2 | 7 | 747 | 0 | 2.65 | 1.90 | 15 |
| Guthrie | 40.6 | 76 | 30 | -1 | 7 | 755 | 0 | 2.11 | 1.61 | 15 | Shawnee | 42.0 | 77 | 11 | 1 | 7 | 715 | 0 | 1.79 | 1.29 | 15 |
| Kingfisher | 38.7 | 76 | 30 | -12 | 7 | 815 | 0 | 2.53 | 1.99 | 15 | Spencer | 42.1 | 77 | 11 | 6 | 6 | 711 | 0 | 1.91 | 1.61 | 15 |
| Marena | 40.4 | 76 | 30 | 1 | 7 | 762 | 0 | 2.72 | 2.24 | 15 | Stillwater | 40.4 | 75 | 30 | -1 | 7 | 764 | 0 | 2.56 | 2.10 | 15 |
| Minco | 41.3 | 78 | 11 | -4 | 7 | 735 | 0 | 1.61 | 1.22 | 15 | Washington | 42.5 | 80 | 11 | -3 | 7 | 699 | 0 | 2.26 | 1.82 | 15 |
| Marshal 1 | 38.9 | 76 | 30 | -4 | 7 | 810 | 0 | 2.36 | 1.49 | 15 |  |  |  |  |  |  |  |  |  |  |  |
| EAST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cookson | 42.5 | 75 | 11 | -3 | 7 | 698 | 0 | 2.29 | . 82 | 15 | Sallisaw | 42.8 | 77 | 31 | -2 | 7 | 687 | 0 | 1.69 | . 36 | 15 |
| Eufaula | 43.6 | 78 | 11 | 2 | 7 | 663 | 0 | 1.91 | . 64 | 15 | Stigler | 42.5 | 78 | 11 | 0 | 7 | 698 | 0 | 1.54 | . 52 | 15 |
| Haskel 1 | 41.1 | 76 | 11 | -3 | 7 | 741 | 0 | 2.88 | . 93 | 22 | Stuart | 44.3 | 76 | 11 | 3 | 7 | 641 | 0 | 2.30 | . 69 | 15 |
| Hectorville | 42.4 | 77 | 11 | 3 | 7 | 700 | 0 | 1.87 | . 58 | 15 | Tahlequah | 41.4 | 75 | 11 | -2 | 7 | 733 | 0 | 2.33 | 1.09 | 14 |
| Holdenville | 43.8 | 76 | 11 | 1 | 7 | 657 | 0 | 2.68 | 1.15 | 15 | Webbers Falls | 42.0 | 77 | 11 | -7 | 7 | 714 | 0 | 1.98 | . 71 | 22 |
| McAlester | 43.2 | 76 | 11 | -5 | 7 | 675 | 0 | 1.93 | . 72 | 15 | Westville | 42.2 | 74 | 31 | 2 | 7 | 708 | 0 | 3.31 | 1.00 | 15 |
| Okmulgee | 41.4 | 76 | 11 | -7 | 7 | 732 | 0 | 1.84 | . 68 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHWEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Altus | 41.6 | 84 | 11 | -6 | 7 | 724 | 0 | 1.42 | 1.09 | 15 | Holl is | 41.3 | 82 | 11 | 0 | 7 | 736 | 0 | 1.53 | 1.04 | 15 |
| Apache | 41.3 | 78 | 11 | 2 | 7 | 734 | 0 | 1.86 | 1.53 | 15 | Mangum | 40.3 | 83 | 11 | -3 | 7 | 767 | 0 | 2.51 | 2.06 | 15 |
| Fort Cobb | 40.1 | 78 | 11 | -6 | 7 | **** | **** | 2.59 | 2.30 | 15 | Medicine Park | 43.8 | 78 | 11 | 6 | 6 | 656 | 0 | 1.79 | 1.46 | 15 |
| Grandfield | 43.6 | 82 | 11 | 4 | 7 | 664 | 0 | 1.65 | 1.14 | 15 | Tipton | 42.1 | 82 | 11 | -4 | 7 | 709 | 0 | 1.38 | . 87 | 15 |
| Hinton | 39.1 | 77 | 11 | -4 | 7 | 802 | 0 | 2.30 | 1.93 | 15 | Walters | 43.5 | 80 | 11 | 0 | 7 | 666 | 0 | 2.30 | 1.50 | 15 |
| Hobart | 40.3 | 79 | 11 | -4 | 7 | 766 | 0 | . 84 | . 66 | 15 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ada | 43.4 | 77 | 11 | -2 | 7 | 669 | 0 | 3.17 | 1.59 | 15 | Lane | 44.4 | 77 | 31 | 2 | 7 | 637 | 0 | 2.14 | . 75 | 16 |
| Ardmore | 45.3 | 77 | 11 | 2 | 7 | 612 | 0 | 3.43 | 1.89 | 15 | Madill | 45.0 | 78 | 31 | 2 | 7 | 619 | 0 | 3.07 | 1.70 | 15 |
| Burneyville | 44.9 | 79 | 11 | 2 | 7 | 623 | 0 | 3.42 | 2.20 | 15 | Newport | 45.3 | 78 | 11 | 3 | 7 | 612 | 0 | 3.31 | 1.66 | 15 |
| Byars | 43.7 | 78 | 11 | 1 | 7 | 660 | 0 | 2.26 | 1.40 | 15 | Pauls Valley | 43.7 | 79 | 11 | -4 | 7 | 661 | 0 | 3.31 | 1.38 | 15 |
| Centrahoma | 42.9 | 75 | 30 | - 7 | 7 | 686 | 0 | 2.39 | 1.10 | 15 | Ringling | 44.3 | 79 | 11 | 2 | 7 | 643 | 0 | 2.41 | 1.13 | 15 |
| Durant | 46.1 | 78 | 31 | 4 | 7 | 584 | 0 | 2.59 | 1.59 | 15 | Sulphur | 42.2 | 77 | 24 | -7 | 7 | 707 | 0 | 3.49 | 1.82 | 15 |
| Fittstown | 43.2 | 75 | 11 | 2 | 7 | 675 | 0 | 3.06 | 1.64 | 15 | Tishomingo | 43.6 | 75 | 11 | 3 | 6 | 663 | 0 | 3.09 | 1.67 | 15 |
| Ketchum Ranch | 43.5 | 80 | 11 | -3 | 7 | 665 | 0 | 2.39 | 1.56 | 15 | Waurika | 44.8 | 82 | 11 | 4 | 7 | 625 | 0 | 2.04 | 1.21 | 15 |
| SOUTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Antlers | 44.5 | 78 | 31 | 1 | 7 | 637 | 0 | 2.86 | . 95 | 15 | Mt Herman | 46.0 | 74 | 31 | 2 | 7 | 589 | 0 | 2.98 | 1.28 | 16 |
| Broken Bow | 46.5 | 78 | 31 | 5 | 7 | 576 | 1 | 3.17 | 1.41 | 16 | Talihina | 43.8 | 75 | 11 | -3 | 7 | **** | **** | 1.89 | . 70 | 16 |
| Clayton | 44.5 | 76 | 31 | 1 | 7 | 635 | 0 | 2.31 | . 76 | 15 | Valliant | 46.7 | 78 | 31 | 3 | 7 | 567 | 0 | 3.09 | 1.12 | 16 |
| Cloudy | 46.2 | 76 | 31 | 2 | 7 | 581 | 0 | 3.15 | . 80 | 16 | Wilburton | 43.2 | 75 | 11 | -2 | 7 | 675 | 0 | 2.15 | . 80 | 15 |
| Hugo | 46.6 | 77 | 31 | 4 | 7 | 573 | 1 | 3.16 | . 88 | 16 | Wister | 42.4 | 78 | 31 | 0 | 7 | 699 | 0 | 1.74 | . 54 | 16 |
| Idabe 1 | 47.7 | 77 | 31 | 2 | 7 | 537 | 0 | 3.26 | 1.37 | 16 |  |  |  |  |  |  |  |  |  |  |  |

2017 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL


January 2017 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-16 <br> (inches) |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
| Panhandle | 2.40 | 1.86 | 1st Wettest | $1.78(2005)$ | $0.00(1923)$ | 0.18 |
| North Central | 2.61 | 1.64 | 4th Wettest | $4.16(1949)$ | $0.00(1986)$ | 0.23 |
| Northeast | 3.15 | 1.43 | 12th Wettest | $6.87(1916)$ | $0.01(1986)$ | 0.59 |
| West Central | 2.71 | 1.80 | 4th Wettest | $3.74(1949)$ | $0.00(1976)$ | 0.39 |
| Central | 2.20 | 0.76 | 21st Wettest | $5.58(1949)$ | $0.00(1986)$ | 0.34 |
| East Central | 2.20 | -0.22 | 53rd Wettest | $11.21(1916)$ | $0.04(1986)$ | 0.67 |
| Southwest | 1.83 | 0.71 | 14th Wettest | $4.48(1949)$ | $0.00(1912)$ | 0.42 |
| South Central | 2.85 | 0.85 | 19th Wettest | $7.70(1916)$ | $0.03(1986)$ | 0.72 |
| Southeast | 2.71 | -0.40 | 59th Driest | $11.13(1949)$ | $0.20(1943)$ | 1.15 |
| Statewide | 2.52 | 0.96 | 13th Wettest | $5.35(1949)$ | $0.03(1986)$ | 0.51 |



January 2017 Mesonet Temperature Comparison

| Climate Division | Average <br> Temp (F) | Departure from <br> Normal (F) | Rank since 1895 | Hottest on Record <br> (Year) | Coldest on <br> Record (Year) | Jan-16 (F) |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |$|$| Panhandle | 34.9 | 0.0 | 50th Warmest | $42.9(2006)$ | $19.7(1940)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| North Central | 38.1 | 3.0 | 18th Warmest | $45.0(2006)$ | $18.8(1940)$ |
| Northeast | 40.1 | 4.3 | 13th Warmest | $46.2(2006)$ | $20.6(1940)$ |
| West Central | 38.7 | 1.7 | 30th Warmest | $46.1(2006)$ | $21.3(1930)$ |
| Central | 40.8 | 2.9 | 21st Warmest | $47.7(2006)$ | $22.8(1930)$ |
| East Central | 42.5 | 3.9 | 16th Warmest | $48.0(1923)$ | $24.8(1918)$ |
| Southwest | 41.4 | 2.0 | 27th Warmest | $48.1(2006)$ | $23.6(1930)$ |
| South Central | 44.2 | 3.4 | 16th Warmest | $49.7(1923)$ | $27.5(1930)$ |
| Southeast | 45.2 | 4.8 | 11th Warmest | $48.7(1907)$ | $27.7(1918)$ |
| Statewide | 40.6 | 2.9 | 17th Warmest | $46.8(2006)$ | $23.7(1940)$ |

## RECORD EVENT REPORTS JANUARY 2017

| Description | Day | Location | Record | Previous <br> Record | Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Daily low temperature | 7 | Oklahoma City | -3 | -3 | 1912 |
| Daily low temperature | 7 | McAlester | -3 | -1 | 1970 |
| Daily high temperature | 11 | Oklahoma City | 79 | 77 | 1911 |
| Daily high temperature | 11 | McAlester | 78 | 75 | 1995 |
| Daily rainfall | 15 | Oklahoma City | 1.24 | 1.07 | 1932 |
| Daily high temperature | 24 | McAlester | 77 | 77 | 1967 |
| Daily high temperature | 30 | Oklahoma City | 76 | 76 | 2016 |
| Daily high temperature | 30 | McAlester | 75 | 73 | 1962,2016 |
| Daily high temperature | 31 | McAlester | 76 | 74 | 1989 |

MESONET EXTREMES FOR JANUARY 2017

| Climate Division | High Temp (F) | Day | Station | Low Temp (F) | Day | Station | High Monthly Rainfall (inches) | Station | High Daily Rainfall (inches) | Day | Station |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 76 | 11th | Hooker | -8 | 7th | Beaver | 3.34 | Slapout | 2.49 | 15th | Slapout |
| North Central | 78 | 30th | Fairview | -4 | 7th | Seiling | 3.67 | May Ranch | 2.95 | 15th | Fairview |
| Northeast | 78 | 11th | Tulsa | 0 | 7th | Bixby | 4.05 | Skiatook | 1.90 | 22nd | Tulsa |
| West Central | 80 | 11th | Erick | -8 | 7th | Camargo | 3.64 | Putnam | 2.85 | 15th | Putnam |
| Central | 80 | 11th | Washington | -9 | 7th | Bristow | 2.84 | Bowlegs | 2.24 | 15th | Marena |
| East Central | 78 | 11th | Stigler | -7 | 7th | Webbers Falls | 3.31 | Westville | 1.15 | 15th | Holdenville |
| Southwest | 84 | 11th | Altus | -6 | 7th | Altus | 2.59 | Fort Cobb | 2.30 | 15th | Fort Cobb |
| South Central | 82 | 11th | Waurika | -7 | 7th | Sulphur | 3.49 | Sulphur | 2.20 | 15th | Burneyville |
| Southeast | 78 | 31st | Valliant | -3 | 7th | Talihina | 3.26 | Idabel | 1.41 | 16th | Broken Bow |
| Statewide | 84 | 11th | Altus | -9 | 7th | Bristow | 4.05 | Skiatook | 2.95 | 15th | Fairview |

Oklahoma Climate Divisions


## U.S. Drought Monitor Oklahoma

## January 31, 2017

(Released Thursday, Feb. 2, 2017)
Valid 7 a.m. EST


|  | Orought Conditions (Percent Area) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 4.44 | 95.56 | 79.46 | 30.95 | 3.90 | 0.00 |
| Last Week <br> 124/2017 | 4.49 | 95.51 | 79.90 | 30.95 | 3.90 | 0.00 |
| 3 Months Ago <br> 11/12016 | 42.61 | 57.39 | 36.44 | 7.90 | 0.00 | 0.00 |
| Start of <br> Calenda Year <br> 12/2017 | 5.61 | 94.39 | 83.21 | 55.75 | 5.55 | 0.00 |
| Start of <br> whter Year <br> 9272016 | 57.82 | 42.18 | 19.04 | 3.05 | 0.00 | 0.00 |
| One Year Ago <br> 22/2016 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Intensity.

# D0 Abnom ally Dry D3 Extreme Drought <br> D1 Moderate Drought $\square$ D4 Exceptional Drought 

D2 Severe Drought
The Drought Monitor focuses on broac-scale condtions.
Local conditions may vary. See accompanying text summary for forecast statements.
Author:
David Simeral
Western Regional Climate Center

http://droughtmonitor.unl.edu/

## INTERPRETATION INFORMATION

mean daily temperature: Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points - typically the number of days in the month. Although this November 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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