September brought Oklahomans relief from the heat and October did its part with a bit of drought relief. The drought conditions remain quite severe across the state despite the rain, however. The statewide average rainfall total was 2.89 inches, about a half of an inch below normal and the 52nd wettest October since 1895. The month was also a bit on the warm side at more than a half a degree above normal. The statewide average temperature of 61.9 degrees ranks as the 53rd warmest October on record. The rains came at a very opportune time for Oklahoma's wheat crop, already in jeopardy due to the drought, and eased dangerous wildfire conditions. Combined with September, the fall's first two months fell 2.64 inches below normal to rank as the 36th driest on record. The season was also off to a cool start with a September-October statewide average of 66.4 degrees, the 46th coolest such period on record and about a half a degree below normal.

## October 2011 Statewide Extremes

| Description | Extreme | Station | Day |
| :--- | :--- | :--- | :---: |
| High Temperature | $96^{\circ} \mathrm{F}$ | Beaver | 3 |
| Low Temperature | $23^{\circ} \mathrm{F}$ | Nowata | 20 |
| High Precipitation | 7.08 in. | Ketchum Ranch |  |
| Low Precipitation | 0.17 in. | Kenton |  |

## PRECIPITATION

Data from the Oklahoma Mesonet show above normal rainfall amounts, substantial in some areas, from south central through central Oklahoma. Along that path, Oklahoma Mesonet stations reported 4-7 inches of rain with widespread totals of 3-4 inches radiating outward. The heaviest rains fell from Jefferson through eastern Kingfisher and western Logan counties. Unfortunately, some parts of the state remained significantly below normal after missing a couple of the month's rain chances. Much of the Panhandle had less than an inch of rain but did see a light dusting of snow during the month's last week. The Mesonet station at Ketchum Ranch near Duncan led the state with 7.08 inches of rain while Kenton came in with the least at 0.17 inches. Of the 120 Mesonet stations across the state, 61 recorded at least 3 inches of rain for the month. The January-October statewide average precipitation total finished at 18.84 inches, approximately 13 inches below normal.

## TEMPERATURE

October's highest temperature of 96 degrees was recorded at Beaver on the third and the lowest, 23 degrees, occurred at three different northeastern locations on the 20th. Nearly all of the state was warmer than normal but portions of central through northwestern Oklahoma were a notch above at 2-4 degrees above normal.

## OCTOBER DAILY HIGHLIGHTS

OCTOBER 1-4: The first four days of the month were quiet and tranquil. Lots of clear skies led to highs in the 80s for the most part, although a few 90s surfaced from time to time.

ОСтовеR 5-12: This eight-day period saw heavy rainfall from south central through north central Oklahoma. Close to 5 inches fell in Tillman County with 3-4 inches widespread up and down the I-35 corridor. Most of western Oklahoma saw between 1-2 inches. The rain was welcome relief for an area of the state plagued by severe drought for over a year. A cold front through the state on the 12th cleared the moisture out and highs still climbed into the 70 s and 80 s.

OCTOBER 13-16: A quiet and warm period, these four days saw highs in the 70s the 13th and 14th and into the 90s the final two days.

October 2011 Statewide Statistics
Temperature

|  | Average | Depart. | Rank (1895-2011) |
| :--- | :---: | :---: | :---: |
| Month <br> (0ctober) | $61.9^{\circ} \mathrm{F}$ | $0.6^{\circ} \mathrm{F}$ | 53rd Warmest |
| Season-to- <br> Date (Sep-Oct) | $66.4^{\circ} \mathrm{F}$ | $-0.4^{\circ} \mathrm{F}$ | 46th Coolest |
| Year-to-Date <br> (Jan-Oct) | $65.2^{\circ} \mathrm{F}$ | $2.3^{\circ} \mathrm{F}$ | 8th Warmest |

Precipitation

|  | Average | Depart. | Rank (1895-2011) |
| :--- | :---: | :---: | :---: |
| Month (October) | 2.89 in. | -0.49 in. | 52nd Wettest |
| Season-to-Date <br> (Sep-Oct) | 4.55 in. | -2.64 in. | 36th Driest |
| Year-to-Date <br> (Jan-0ct) | 18.84 in. | -13.01 in. | 3rd Driest |

Depart. $=$ departure from 30-year normal

OCTOBER 17-21: A stationary front on the 17th generated showers and storms. Some of the storms were severe with large hail and strong winds. The rainfall amounts were mostly under an inch, isolated in eastern Oklahoma. Following the front, the weather was quite cool with lows in the 30 s and 40 s the next couple of days. Surface high pressure and calm winds led to the first freeze for many sections of the state on the 20th. Lows were in the 20s and 30 s statewide. An increase in moisture kept low temperatures 10 degrees warmer on the 21 st , and highs rose into the 70 s.

OCTOBER 22-25: A warm front lifting along the Red River into Oklahoma provided the kick for lots of severe weather on the $22 n d$. Large hail was reported with several storms, including 2-3 inch diameter hail in central and east central Oklahoma. Following that excitement, the weather warmed up quite nicely for late October. Highs were in the 70s and 80s for the most part with a few 90 s recorded on the 25th.

OCTOBER 26-31: More rain on the 26th and 27th brought relief once again to southern Oklahoma. Following the front that helped produce the rain, lows for the remainder of the period were cool in the 20 s to 40 s. Highs finally warmed up by Halloween to the 70s.

## OCTOBER 2011 SEVERE WEATHER

| Size (in.) | Location | County | Day |
| :---: | :---: | :---: | :---: |
| 2.75 | 7 NW Ada | Pontotoc | 22 |
| 2.00 | Tuttle | Grady | 22 |
| 2.75 | 5 E Union City | Canadian | 22 |
| 2.75 | 3 NNW Ada | Pontotoc | 22 |
| 3.75 | 5 E Union City | Canadian | 22 |
| 2.50 | Addington | Jefferson | 22 |
| 2.75 | Cromwell | Seminole | 22 |
| 2.00 | 6 NW Mustang | Canadian | 22 |
| 2.75 | Byng | Pontotoc | 22 |
| 3.00 | 2 NE Ada | Pontotoc | 22 |
| 2.75 | 3 NNW Ada | Pontotoc | 22 |
| 2.75 | 5 ENE Terral | Jefferson | 22 |
| 2.75 | 3 W Boley | Okfuskee | 22 |
| 2.00 | 2 NNE Bearden | Okfuskee | 22 |
| 3.00 | 2 SE Okemah | Okfuskee | 22 |

Wind Gusts (70 mph or greater)

| Speed (m.p.h) | Location | County | Day |
| :---: | :---: | ---: | ---: |
| 71 | 4 W Hectorville | Okmulgee | 22 |

## OCTOBER 2011 OBSERVED PRECIPITATION



OCTOBER 2011 DEPARTURE FROM NORMAL PRECIPITATION


## OCTOBER 2011 PERCENT OF NORMAL PRECIPITATION



OCTOBER 2011 AVERAGE SOIL MOISTURE AT 25CM


## OCTOBER 2011 AVERAGE TEMPERATURE



OCTOBER 2011 DEPARTURE FROM NORMAL TEMPERATURE


## MESONET MONTHLY SUMMARY FOR OCTOBER 2011

| NAME | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | $\begin{aligned} & \text { LOW } \\ & \text { TEMP } \end{aligned}$ | DAY | HDD | CDD | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | $\begin{aligned} & \mathrm{HIGH} \\ & 24-\mathrm{HR} \end{aligned}$ | 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 | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | $\begin{aligned} & \text { HIGH } \\ & 24-\mathrm{HR} \end{aligned}$ | DAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PANHANDLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arnett | 60.3 | 91 | 3 | 28 | 28 | 189 | 42 | 1.96 | . 93 | 9 | Goodwel 1 | 58.4 | 91 | 2 | 29 | 28 | 242 | 38 | . 61 | . 32 | 8 |
| Beaver | 59.0 | 96 | 3 | 26 | 28 | 236 | 49 | . 93 | . 60 | 8 | Hooker | 58.6 | 93 | 2 | 29 | 28 | 237 | 37 | . 77 | . 43 | 8 |
| Boise City | 56.3 | 89 | 2 | 28 | 28 | 287 | 16 | 1.18 | . 64 | 7 | Kenton | 56.5 | 90 | 2 | 28 | 28 | 286 | 22 | . 17 | . 11 | 27 |
| Buffalo | 60.5 | 95 | 3 | 29 | 28 | 195 | 57 | 1.37 | . 68 | 9 | Slapout | 59.2 | 94 | 3 | 30 | 28 | 215 | 37 | 1.28 | . 63 | 8 |
| NORTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alva | 60.3 | 93 | 3 | 28 | 28 | 198 | 52 | 1.81 | 1.07 | 8 | May Ranch | 60.8 | 93 | 3 | 34 | 20 | 184 | 53 | 1.48 | . 78 | 8 |
| Blackwell | 60.5 | 87 | 3 | 27 | 20 | 191 | 52 | 2.73 | 1.21 | 22 | Medford | 60.8 | 90 | 3 | 30 | 28 | 182 | 51 | 3.50 | 1.73 | 9 |
| Breckinridge | 61.0 | 89 | 3 | 32 | 20 | 179 | 54 | 3.51 | 1.89 | 9 | Newkirk | 60.3 | 86 | 4 | 29 | 20 | 182 | 35 | 2.18 | 1.52 | 9 |
| Cherokee | 60.8 | 92 | 3 | 29 | 28 | 188 | 59 | 1.89 | . 98 | 8 | Red Rock | 61.0 | 88 | 4 | 28 | 20 | **** | *** | 1.66 | 1.11 | 9 |
| Fairview | 61.7 | 91 | 3 | 33 | 20 | 162 | 60 | 2.47 | 1.49 | 8 | Seiling | 60.5 | 90 | 3 | 29 | 28 | 193 | 53 | 2.36 | 1.42 | 8 |
| Freedom | 60.8 | 92 | 3 | 28 | 28 | 185 | 55 | 1.46 | . 81 | 8 | Woodward | 61.1 | 91 | 3 | 29 | 28 | 178 | 55 | 1.54 | . 74 | 8 |
| Lahoma | 61.1 | 91 | 3 | 32 | 28 | 179 | 59 | 2.37 | 1.28 | 8 |  |  |  |  |  |  |  |  |  |  |  |
| NORTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bixby | 61.8 | 91 | 16 | 26 | 20 | 161 | 62 | 2.11 | . 64 | 27 | Nowata | 60.2 | 90 | 16 | 23 | 20 | 210 | 61 | ***** | ***** | ** |
| Burbank | 60.6 | 86 | 4 | 26 | 20 | 189 | 52 | 2.43 | 1.74 | 9 | Pawnee | 61.6 | 86 | 4 | 27 | 20 | 168 | 62 | 3.34 | 1.55 | 9 |
| Claremore | 62.6 | 91 | 16 | 30 | 20 | 147 | 74 | 1.36 | . 65 | 22 | Porter | 62.7 | 91 | 16 | 27 | 20 | 149 | 77 | 1.80 | . 91 | 27 |
| Copan | 61.6 | 88 | 16 | 26 | 20 | 175 | 69 | . 79 | . 35 | 17 | Pryor | 60.6 | 89 | 16 | 23 | 20 | 190 | 55 | 1.23 | . 43 | 22 |
| Foraker | 61.4 | 87 | 4 | 28 | 20 | 169 | 58 | . 65 | . 23 | 22 | Skiatook | 63.0 | 89 | 16 | 29 | 20 | 131 | 69 | 1.64 | . 92 | 22 |
| Inola | 61.2 | 88 | 16 | 26 | 20 | 177 | 59 | 2.54 | . 97 | 22 | Vinita | 59.6 | 88 | 16 | 25 | 20 | 210 | 43 | . 93 | . 54 | 10 |
| Jay | 60.5 | 87 | 16 | 25 | 20 | 196 | 58 | 1.46 | . 40 | 10 | Wynona | 61.7 | 88 | 16 | 24 | 20 | 165 | 63 | 1.87 | 1.51 | 22 |
| Miami | 60.2 | 87 | 16 | 29 | 29 | 200 | 51 | . 99 | . 49 | 10 |  |  |  |  |  |  |  |  |  |  |  |
| WEST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessie | 62.7 | 90 | 3 | 37 | 28 | 145 | 73 | 3.09 | 1.64 | 8 | Putnam | 61.3 | 89 | 3 | 33 | 28 | 175 | 60 | 2.21 | 1.32 | 8 |
| Butler | 61.3 | 90 | 3 | 33 | 20 | 178 | 62 | 2.08 | 1.25 | 8 | Retrop | 62.6 | 90 | 16 | 35 | 28 | 145 | 71 | 2.89 | 1.45 | 8 |
| Camargo | 59.5 | 91 | 3 | 29 | 28 | 208 | 37 | 2.54 | 1.24 | 8 | Watonga | 62.3 | 90 | 3 | 37 | 28 | 157 | 73 | 3.08 | 1.68 | 8 |
| Cheyenne | 61.4 | 88 | 3 | 34 | 28 | 170 | 59 | 2.52 | 1.31 | 8 | Weatherford | 62.3 | 90 | , | 36 | 28 | 155 | 72 | 3.12 | 1.94 | 8 |
| Erick | 60.9 | 90 | 16 | 33 | 28 | 179 | 51 | 2.69 | 1.32 | 8 |  |  |  |  |  |  |  |  |  |  |  |
| CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acme | 62.8 | 88 | 3 | 33 | 20 | 149 | 80 | 3.66 | 1.90 | 8 | Ninnekah | 62.7 | 89 | 3 | 33 | 20 | 144 | 72 | 3.63 | 1.68 | 8 |
| Bowlegs | 62.8 | 88 | 16 | 28 | 20 | 145 | 77 | 3.58 | 1.86 | 9 | Norman | 62.8 | 87 | 3 | 34 | 20 | **** | **** | 4.92 | 2.45 | 9 |
| Bristow | 60.8 | 88 | 16 | 25 | 20 | 190 | 58 | 2.73 | . 76 | 27 | Oilton | 60.4 | 88 | 16 | 24 | 20 | 200 | 58 | 1.88 | . 68 | 9 |
| Lake Carl Blac | 60.5 | 89 | 3 | 28 | 20 | 192 | 53 | 3.04 | 1.38 | 9 | OKC East | 63.1 | 87 | 16 | 34 | 20 | 141 | 81 | 5.43 | 2.00 | 9 |
| Chandler | 62.9 | 89 | 16 | 30 | 20 | 142 | 78 | 3.45 | 1.71 | 9 | OKC North | 29.3 | 87 | 16 | *** | 25 | 126 | 81 | 4.99 | 2.05 | 9 |
| Chickasha | 61.9 | 89 | 3 | 32 | 29 | 155 | 60 | 4.08 | 1.43 | 8 | OKC West | 63.7 | 88 | 16 | 36 | 20 | 128 | 89 | 5.83 | 2.48 | 9 |
| El Reno | 61.3 | 90 | 16 | 30 | 20 | 176 | 60 | 3.19 | 1.02 | 9 | Okemah | 62.4 | 89 | 16 | 26 | 20 | 155 | 75 | 3.89 | 2.12 | 22 |
| Guthrie | 63.4 | 89 | 16 | 33 | 20 | 140 | 90 | 3.99 | 1.74 | 9 | Perkins | 62.5 | 88 | 16 | 31 | 20 | 151 | 73 | 2.88 | 1.81 | 9 |
| Kingfisher | 62.5 | 92 | 3 | 33 | 20 | 155 | 77 | 3.19 | 1.39 | 9 | Shawnee | 63.7 | 88 | 4 | 33 | 20 | 130 | 89 | 3.13 | 2.21 | 9 |
| Marena | 62.5 | 88 | 16 | 32 | 20 | 151 | 73 | 2.63 | 1.43 | 9 | Spencer | 63.5 | 87 | 16 | 34 | 20 | **** | *** | 4.67 | 2.22 | 9 |
| Minco | 62.6 | 87 | 3 | 35 | 29 | 139 | 65 | 4.03 | 1.23 | 8 | Stillwater | 61.7 | 88 | 4 | 30 | 20 | 169 | 66 | ***** | ***** | * |
| Marshal 1 | 61.7 | 88 | 3 | 32 | 20 | 167 | 65 | 5.17 | 2.26 | 8 | Washington | 63.2 | 87 | 4 | 35 | 20 | 130 | 72 | 5.23 | 2.41 | 9 |
| EAST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cookson | 61.2 | 89 | 16 | 24 | 20 | 179 | 62 | 2.63 | 1.14 | 27 | Sallisaw | 62.6 | 89 | 16 | 27 | 20 | 150 | 75 | 5.35 | 2.22 | 22 |
| Eufaula | 64.3 | 91 | 16 | 32 | 20 | 122 | 99 | 4.23 | 1.82 | 22 | Stigler | 62.3 | 89 | 16 | 28 | 20 | 150 | 66 | 4.76 | 2.66 | 22 |
| Haskell | 61.6 | 90 | 16 | 26 | 20 | 167 | 63 | 1.90 | . 85 | 27 | Stuart | 63.7 | 88 | 16 | 32 | 20 | 121 | 80 | 3.84 | 1.59 | 22 |
| Hectorville | 63.1 | 89 | 16 | 29 | 20 | 133 | 75 | 1.84 | . 76 | 27 | Tahlequah | 61.0 | 89 | 16 | 23 | 20 | 184 | 62 | 2.82 | . 82 | 27 |
| Holdenville | 64.4 | 89 | 16 | 33 | 20 | **** | *** | 2.94 | . 99 | 27 | Webbers Falls | 62.2 | 91 | 16 | 25 | 20 | 154 | 67 | 3.38 | 1.46 | 27 |
| McAlester | 63.4 | 89 | 16 | 28 | 20 | 141 | 92 | 2.68 | 1.20 | 27 | Westville | 60.9 | 86 | 16 | 28 | 20 | 182 | 54 | 4.19 | 1.54 | 22 |
| Okmulgee | 61.5 | 90 | 16 | 25 | 20 | 171 | 61 | 2.16 | . 93 | 27 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHWEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Altus | 63.9 | 92 | 7 | 36 | 28 | 126 | 93 | 3.05 | 1.73 | 8 | Holl is | 63.5 | 93 | 16 | 35 | 28 | 127 | 82 | 2.94 | 1.46 | 8 |
| Apache | 62.6 | 88 | 3 | 36 | 28 | 141 | 67 | 3.28 | 1.38 | 8 | Mangum | 62.3 | 92 | 16 | 33 | 29 | 150 | 68 | 3.34 | 1.54 | 8 |
| Fort Cobb | 61.8 | 89 | 16 | 34 | 29 | 152 | 53 | 3.91 | 1.33 | 27 | Medicine Park | 64.5 | 88 | 3 | 41 | 28 | 114 | 99 | 3.38 | 2.14 | 8 |
| Grandfield | 63.9 | 90 | 3 | 39 | 20 | 115 | 82 | 6.11 | 2.70 | 8 | Tipton | 64.3 | 91 | 7 | 35 | 19 | 120 | 99 | 3.17 | 1.84 | 8 |
| Hinton | 61.7 | 88 | 3 | 35 | 28 | 163 | 61 | 2.84 | 1.32 | 8 | Walters | 64.7 | 90 | 3 | 35 | 29 | 110 | 100 | 5.58 | 2.85 | 8 |
| Hobart | 62.9 | 90 | 3 | 36 | 29 | 143 | 79 | 4.42 | 2.04 | 8 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ada | 64.0 | 89 | 16 | 31 | 20 | 125 | 94 | 4.71 | 2.40 | 9 | Madill | 64.1 | 87 | 4 | 32 | 29 | 113 | 84 | 4.59 | 2.18 | 9 |
| Ardmore | 64.3 | 88 | 16 | 36 | 29 | 102 | 80 | 5.27 | 2.71 | 9 | Newport | 63.9 | 87 | 16 | 36 | 29 | 108 | 73 | 3.38 | 1.87 | 9 |
| Burneyville | 63.9 | 89 | 16 | 30 | 29 | 120 | 86 | 3.75 | 1.70 | 9 | Pauls Valley | 64.2 | 88 | 16 | 34 | 20 | 114 | 88 | 6.13 | 2.06 | 9 |
| Byars | 64.3 | 87 | 16 | 35 | 20 | 116 | 93 | 4.23 | 2.45 | 9 | Ringling | 64.5 | 87 | 3 | 35 | 29 | 106 | 90 | 6.17 | 2.43 | 8 |
| Centrahoma | 63.1 | 89 | 16 | 28 | 20 | 135 | 74 | 3.01 | 1.06 | 9 | Sulphur | 63.3 | 87 | 16 | 30 | 29 | 138 | 85 | 4.33 | 2.77 | 9 |
| Durant | 65.9 | 89 | 15 | 37 | 20 | 91 | 119 | 3.49 | 1.33 | 9 | Tishomingo | 63.3 | 87 | 16 | 33 | 29 | 126 | 74 | 3.82 | 1.61 | 9 |
| Fittstown | 63.3 | 87 | 16 | 32 | 20 | 128 | 74 | 4.62 | 2.36 | 9 | Vanoss | 63.3 | 89 | 16 | 31 | 20 | 136 | 85 | 4.81 | 2.78 | 9 |
| Ketchum Ranch | 64.1 | 88 | 3 | 35 | 29 | 112 | 85 | 7.08 | 2.22 | 8 | Waurika | 65.0 | 90 | 3 | 34 | 29 | 104 | 103 | 5.30 | 3.16 | 8 |
| Lane | 64.3 | 91 | 7 | 29 | 20 | 117 | 96 | 2.09 | . 79 | 27 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Antlers | 63.1 | 90 | 7 | 28 | 20 | 137 | 77 | 2.19 | . 89 | 22 | Idabe 7 | 64.4 | 89 | 16 | 31 | 20 | 114 | 96 | 2.41 | . 59 | 22 |
| Antlers | ***** | *** | *** | *** | *** | **** | *** | ***** | ***** | *** | Mt Herman | 63.4 | 87 | 16 | 28 | 20 | 133 | 85 | 3.01 | 1.30 | 22 |
| Broken Bow | 62.2 | 89 | 16 | 28 | 20 | 147 | 61 | 2.70 | . 89 | 17 | Talihina | 63.2 | 91 | 16 | 27 | 20 | 146 | 91 | 3.09 | 1.48 | 22 |
| Clayton | 63.8 | 91 | 16 | 30 | 20 | 136 | 100 | 3.00 | 1.28 | 17 | Wilburton | 63.2 | 91 | 16 | 27 | 20 | 144 | 89 | 3.19 | 1.21 | 22 |
| Cloudy | 64.1 | 88 | 16 | 30 | 20 | 123 | 95 | 1.79 | . 91 | 22 | Wister | 61.5 | 91 | 16 | 27 | 20 | 170 | 61 | 3.69 | 1.74 | 22 |
| Hugo | 65.6 | 89 | 16 | 35 | 29 | 93 | 111 | 1.90 | 1.03 | 22 |  |  |  |  |  |  |  |  |  |  |  |

2010 AND 2011 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL


October 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) |
| :--- | :---: | :---: | :--- | :--- | :--- |
| Oct-10 |  |  |  |  |  |
| Panhandle | 1.03 | -0.48 | 51st Driest | $6.41(2000)$ | $0.03(1952)$ |
| North Central | 2.23 | -0.43 | 52nd Wettest | $9.65(1998)$ | $0.00(1952)$ |
| Northeast | 1.65 | -1.98 | 30th Driest | $17.33(1941)$ | $0.05(1917)$ |
| West Central | 2.69 | 0.13 | 42nd Wettest | $9.41(1986)$ | $0.00(1910)$ |
| Central | 3.88 | 0.22 | 36th Wettest | $13.51(1941)$ | $0.00(1917)$ |
| East Central | 3.29 | -0.98 | 55th Driest | $14.75(1941)$ | $0.19(1904)$ |
| Southwest | 3.82 | 0.84 | 30th Wettest | $11.44(1983)$ | $0.00(1952)$ |
| South Central | 4.52 | 0.27 | 37th Wettest | $14.61(1981)$ | $0.00(1917)$ |
| Southeast | 2.70 | -2.26 | 43rd Driest | $13.21(2009)$ | $0.10(1921)$ |
| Statewide | 2.89 | -0.49 | 52nd Wettest | $11.32(1941)$ | $0.14(1952)$ |
|  |  |  |  |  | 1.92 |

2010 AND 2011 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL


October 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) | Oct-10 (F) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 58.6 | 0.8 | 46th Warmest | 66.4 (1963) | 50.9 (1925) | 60.8 |
| North Central | 60.8 | 0.4 | 56th Warmest | 69.6 (1963) | 52.1 (1925) | 61.7 |
| Northeast | 61.3 | 0.6 | 49th Warmest | 70.0 (1963) | 52.9 (1925) | 61.9 |
| West Central | 61.6 | 1.1 | 42nd Warmest | 69.0 (1963) | 53.2 (2009) | 62.9 |
| Central | 62.4 | 0.5 | 51st Warmest | 70.3 (1963) | 54.5 (1925) | 62.8 |
| East Central | 62.3 | 0.2 | 59th Coolest | 71.2 (1963) | 55.3 (2009) | 62.4 |
| Southwest | 63.3 | 0.8 | 45th Warmest | 70.5 (1963) | 55.4 (1925) | 64.0 |
| South Central | 64.0 | 0.5 | 54th Warmest | 71.5 (1963) | 56.4 (1976) | 62.9 |
| Southeast | 63.5 | 1.1 | 49th Warmest | 70.6 (1963) | 55.7 (1976) | 61.4 |
| Statewide | 61.9 | 0.6 | 53rd Warmest | 69.9 (1963) | 54.4 (1925) | 62.3 |

## RECORD EVENT REPORTS

| Description | Day | Location | Record | Previous Record | Year |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Low Temperature | 1 | Bartlesville | 35 | 36 | 2003 |
| Daily Maximum Rainfall | 9 | Oklahoma City | 2.71 inches | 2.35 | 2001 |
| Low Temperature | 20 | Tulsa | 30 | 30 | 1976 |

## MESONET EXTREMES FOR OCTOBER 2011

| Climate Division | High <br> Temp <br> (F) | Day | Station | Low Temp (F) | Day | Station | High Monthly Rainfall (inches) | Station | High Daily Rainfall (inches) | Day | Station |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 96 | 3rd | Beaver | 26 | 28th | Beaver | 1.96 | Arnett | 0.93 | 9th | Arnett |
| North Central | 93 | 3rd | Alva | 27 | 20th | Blackwell | 3.51 | Breckinridge | 1.89 | 9th | Breckinridge |
| Northeast | 91 | 16th | Porter | 23 | 20th | Nowata | 3.34 | Pawnee | 1.74 | 9th | Burbank |
| West Central | 91 | 3rd | Camargo | 29 | 28th | Camargo | 3.12 | Weatherford | 1.94 | 8th | Weatherford |
| Central | 92 | 3rd | Kingfisher | 24 | 20th | Oilton | 5.83 | Oklahoma City West | 2.48 | 9th | Oklahoma City West |
| East Central | 91 | 16th | Webbers Falls | 23 | 20th | Tahlequah | 5.35 | Sallisaw | 2.66 | 22nd | Stigler |
| Southwest | 93 | 16th | Hollis | 33 | 29th | Mangum | 6.11 | Grandfield | 2.85 | 8th | Walters |
| South Central | 91 | 7th | Lane | 28 | 20th | Centrahoma | 7.08 | Ketchum Ranch | 3.16 | 8th | Waurika |
| Southeast | 91 | 16th | Wilburton | 27 | 20th | Talihina | 3.69 | Wister | 1.74 | 22nd | Wister |
| Statewide | 96 | 3rd | Beaver | 23 | 20th | Nowata | 7.08 | Ketchum Ranch | 3.16 | 8th | Waurika |

Oklahoma's weather descends rather rapidly during November from the pleasantry of autumn into the chill of early winter. The state's normal temperature (averaged statewide) during the month, 49.0 degrees Fahrenheit, is the 4th lowest of any of the year's 12 months. Based on monthly averages across the state, November is 13 degrees cooler than October, easily Oklahoma's largest temperature difference between consecutive months. The increasingly frequent intrusions of cooler (and sometimes frigid) air, frequently accompanied by some dreary, dismal weather, are usually separated by interludes of gorgeous autumn days. The pleasant interludes provide farmers with an opportunity to complete the harvest of peanuts, cotton, and sorghum, or to finish drilling the

Temperature

| Mean | 49.0 degrees |
| :--- | :--- |
| Warmest November | 1989, 56.2 degrees |
| Coolest November | 1929, 42.6 degrees |
| Warmest location | Waurika, 53.4 degrees |
| Coolest location | Turpin, 42.8 degrees |
| Hottest recorded | 95 degrees, Waukomis, <br> November 1, 1914 <br> Coalgate, November 1, 1937 |
| Coldest recorded | -15 degrees, Kenton, <br> November 28, 1976 |

new wheat crop. The statewide-averaged November normal precipitation is 2.78 inches, making November the 6th wettest of the months in Oklahoma. Snow, sleet, and ice are frequent late-November visitors to the state, too often creating travel hazards during the long Thanksgiving weekend.

Statewide-averaged monthly temperature extremes for the Novembers since 1892 have varied between 56.0 degrees in 1999 and 41.3 degrees in 1929. The range of normal daily average temperatures across the state, as published by the National Climatic Data Center, is from 53.4 degrees at Waurika to 42.8 degrees at Turpin. Normal daily maximum temperatures fall between Waurika's 65.3 degrees and Newkirk's 56.6 degrees. Normal daily minimum temperatures range from 42.9 degrees at Okemah to 28.4 degrees at three panhandle reporting stations (Turpin, Boise City, and Beaver). Hot weather is rare, but not absent, during the month. Coalgate set a state record for November's highest temperature when the thermometer registered 95 degrees on November 1, 1937.

November's coldest day, according to the Oklahoma record book, occurred on November 28, 1976 when a temperature of 15 degrees below zero (-15) was reported at Kenton.

November precipitation is highly variable from year-to-year. The state's driest recorded November, a statewide averaged precipitation of 0.12 inches was attained three times in 1910, 1949, and 1989. The record high precipitation for November is 5.72 inches in 1909. During much of the state's history, November was thought of as a much drier month than it is today. During the period from 1931 through 1960, the statewide-averaged precipitation during November across

Precipitation

| Mean | 2.78 inches |
| :--- | :--- |
| Wettest year | $1909,5.72$ inches |
| Driest year | $1910,0.12$ inches |
| Wettest location | Carnasaw Fire Tower <br> 5.64 inches |
| Driest location | Goodwell and Regnier, <br> 0.61 inches |
| Most recorded | 17.01 inches, Idabel, 2000 |

## Tornadoes

| Average November Tornadoes | 1 |
| :--- | :--- |
| Most | $12(1958)$ |

Oklahoma was only 1.87 inches, nearly a full inch less than the currently established monthly normal (compiled from 1971 through 2000). Annual precipitation across Oklahoma compiled from the earlier was a full 3.25 inches less than the value currently in use. Increased precipitation during November has contributed more to the recent increases in annual precipitation than any other month. At individual locations within Oklahoma, November normal precipitation ranges 5.64 inches at the Carnasaw Fire Tower in McCurtain County to 0.61 inch at the panhandle's Goodwell and Regnier. Stilwell averages 9.6 days with measurable precipitation (at least 0.01 inch), whereas Leedey averages a mere 2.4 such days. Ponca City holds the record for most precipitation in one day at a recognized reporting site during November: 11.11 inches on November 20, 1979. Idabel recorded 17.01 inches of precipitation during November 2000 to establish the record for total precipitation during the month at a regular reporting station.

Severe and dangerous weather takes on a myriad of forms during November. There were 76 November tornadoes reported in the state from 1950 through 2003. Twelve of those were recorded on November 17, 1958 to establish the state record for most November tornadoes, both during a month and on a day. A tornado that struck Camel Creek School and the town of Bethany on November 19, 1930 killed 23 people. On November 4, 1922, a tornado between Shamrock and Drumright resulted in 11 deaths. The most recent November tornado fatalities occurred on November 19, 1973 when five people were killed in Blanchard. There were no tornadoes reported within the state during 32 of those 54 Novembers.

NOVEMBER NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)


NOVEMBER NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)


NOVEMBER NORMAL PRECIPITATION (1981-2010)


## NOVEMBER 1, 2011 SOIL MOISTURE CONDITIONS AT 25CM


U.S. Drought Monitor

## Oklahoma

|  | Drought Conditions (Percent Area) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | DO-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 0.00 | 100.00 | 100.00 | 99.28 | 85.48 | 42.87 |
| Last Week (10/25/2011 map) | 0.00 | 100.00 | 100.00 | 99.89 | 86.26 | 54.84 |
| 3 Months Ago (08/02/2011 map) | 0.00 | 100.00 | 100.00 | 100.00 | 88.10 | 64.30 |
| $\begin{array}{c\|} \hline \text { Start of } \\ \text { Calendar Year } \\ (12 / 28 / 2010 \mathrm{map}) \\ \hline \end{array}$ | 13.82 | 86.18 | 47.90 | 1.50 | 0.00 | 0.00 |
| $\begin{gathered} \text { Start of } \\ \text { Water Year } \\ \text { (08/27/2011 map) } \\ \hline \end{gathered}$ | 0.00 | 100.00 | 100.00 | 100.00 | 78.97 | 66.42 |
| One Year Ago (10/26/2010 map) | 72.01 | 27.99 | 0.00 | 0.00 | 0.00 | 0.00 |

Intensity:

```
D0 Abnormally Dry
D1 Drought - Moderate
D3 Drought - Extreme
D2 Drou
D4 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://droughtmonitor.unl.edu

## 



November 1, 2011
Valid 7 a.m. EST


NOVEMBER 2011 U.S. PRECIPITATION FORECAST


Percent Likelihood of Above or Below Average Precipitation*

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

NOVEMBER 2011 U.S. TEMPERATURE FORECAST


Percent Likelihood of Above or Below Average Temperatures*


## NOVEMBER CLIMATE NORMALS

| Climate <br> Division | Max. <br> Temperature $\left({ }^{\circ} \mathrm{F}\right)$ | Min. <br> Temperature $\left({ }^{\circ} \mathrm{F}\right)$ | Avg. <br> Temperature $\left({ }^{\circ} \mathrm{F}\right)$ | Precipitation <br> (inches) |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 58.8 | 30.2 | 44.6 | 1.0 |
| 2 | 58.1 | 33.4 | 45.8 | 2.1 |
| 3 | 60.0 | 37.5 | 48.8 | 3.6 |
| 4 | 59.0 | 34.3 | 46.7 | 1.7 |
| $\mathbf{5}$ | 60.3 | 37.2 | 48.8 | 2.7 |
| 6 | 60.9 | 39.0 | 50.0 | 4.2 |
| 7 | 61.7 | 36.3 | 49.0 | 1.7 |
| 8 | 62.7 | 39.2 | 51.0 | 3.1 |
| 9 | 63.0 | 39.0 | 51.0 | 5.0 |
| Statewide | 60.5 | 36.4 | 48.5 | 2.9 |

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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