Mother Nature turned off the spigot and cranked up the heat during the first 10 days of June, allowing swollen streams, rivers and reservoirs to slowly recede after the record May rains. The respite was short-lived, however, thanks to a tropical invasion from both the Pacific and Atlantic. First up was the remnant of hurricane Blanco from the Pacific that interacted with a stalled front and dumped 2-4 inches of rain over a wide swath of the state, including more than 10 inches near Hollis in far southwestern Oklahoma. Almost directly thereafter, the Gulf of Mexico offered up the remnant of tropical Storm Bill. That storm moved slowly to the north from the Texas Gulf Coast as it pumped moisture-laden Gulf air into the Southern Plains and Oklahoma. The state saw several rounds of rain before Bill, at that point downgraded to a tropical depression, actually arrived. The system slowed down and camped over south central Oklahoma. Totals of 6-12 inches were common from the Lake Texoma area up through central Oklahoma. Lesser totals of 2-4 inches occurred to the north and east as Bill eventually sped its way out of the state. The added moisture created widespread

## June 2015 Statewide Extremes

| Description | Extreme | Station | Day |
| :--- | :---: | :---: | :---: |
| High Temperature | $101^{\circ} \mathrm{F}$ | Multiple | Multiple |
| Low Temperature | $51^{\circ} \mathrm{F}$ | Oilton | 1 |
| High Precipitation | 10.49 in. | Newport | -- |
| Low Precipitation | 1.03 in. | Boise City | -- |

flooding once again. Lake Texoma, which had water surge over its spillway for only the fourth time in its history back in May, upped that count to five following Bill. A portion of I-35 in the Arbuckle Mountains was closed for several days due to a rockslide. Water nearly topped the bridge between Oklahoma and Texas when the Red River hit a historic crest of more than 42 feet. At least three deaths were attributed to the flooding, including the loss of a 2-year-old boy who was swept from his father's arms in floodwaters near Ardmore.

Thanks to the boost from the tropical systems, the statewide average precipitation total as measured by the Oklahoma Mesonet was 5.04 inches, 0.52 inches above normal and the 33 rd wettest June since records began in 1895. That
total would not accurately describe the precipitation pattern across the state, however. South central Oklahoma had an average of 10.13 inches, 5.40 inches above normal to rank as its third wettest June on record. In contrast, north central Oklahoma received an average of 2.45 inches, over 2 inches below normal to rank as the 31st driest. Newport led all Mesonet sites with 15.07 inches while the Panhandle

June 2015 Statewide Statistics
Temperature

|  | Average | Depart. | Rank (1895-2015) |
| :--- | :---: | :---: | :---: |
| Month (Jun) | $78.2^{\circ} \mathrm{F}$ | $1.7^{\circ} \mathrm{F}$ | 33rd Warmest |
| Year-to-Date <br> (Jan-Jun) | $55.6^{\circ} \mathrm{F}$ | $-0.2^{\circ} \mathrm{F}$ | 54th Warmest |


| Precipitation |  |  |  |  |
| :--- | ---: | ---: | :--- | :---: |
|  | Total | Depart. | Rank (1895-2015) |  |
| Month (Jun) | 28.73 <br> in. | 9.70 in. | 2nd Wettest |  |
| Year-to-Date <br> (Jan-Jun) | 28.73 <br> in. | 9.70 in. | 2nd Wettest |  |
| Depart. = departure from 30-year normal |  |  |  |  |

location of Boise City recorded the lowest total of 1.03 inches. The National Weather Service (NWS) observing site at Ardmore recorded 16.83 inches for its wettest June on record, dating back to 1901. Healdton did the same with 15.48 inches dating back to 1894. The January-June statewide average came in at 28.73 inches, nearly 10 inches above normal and the second wettest first six months of the year on record. Only 1957's 32.69 inches stands higher. For southwestern and south central Oklahoma, it was the wettest on record at 12.04 inches and 20.10 inches above normal, respectively. Oklahoma City recorded 5.77 inches during June to bring its January-June total to 34.43 inches. That tops 1908's total of 33.23 inches as the wettest such period on record.

The statewide average temperature for June was 78.2 degrees, 1.7 degrees above normal and ranked as the 33rd warmest June on record. Altus and Grandfield reached 101 degrees on June 10 while Boise City matched that high on the 22 nd for the highest temperature of the month. Several stations recorded 51 degrees on June 1 for the lowest
reading. The January-June statewide average stayed just below normal at 55.6 degrees, the 54th warmest such period on record.

The number of confirmed tornadoes during 2015 stood at 75 through June according to NWS data, although there were no reports during June. The total for May rose to 67. The Mesonet site at Minco recorded a wind gust of 96 mph on the 29th associated with a severe thunderstorm.

## JUNE 2015 DAILY SUMMARIES

JUNE 1-4: Despite brief sprinkles of rain in the northwest on the 1st, a high pressure system over the region resulted in mostly sunny skies and warming temperatures. The maximum temperature range increased from 75-87 degrees to a range of 86-96 degrees. Hooker and Altus took turns pulling in the hottest daily temperatures in the state. The highest minimum temperatures increased from 62 degrees (Tipton) to 72 degrees (Tulsa), and the lowest temperature recorded in the state increased from 51 degrees (Oilton, Bristow, and Foraker) to 59 degrees (Kenton). The highest daily average wind speeds in the state were 12 mph on the $1 \mathrm{st}, 18 \mathrm{mph}$ on the $2 \mathrm{nd}, 19 \mathrm{mph}$ on the 3 rd , and 18 mph again on the 4 th.

JUNE 5: Temperatures were a couple degrees cooler than the previous day, but skies were still rain-free. Highs were between 85 degrees in Kenton and Boise City and 94 degrees in Grandville. Lows were between 62 degrees in Kenton and Boise City and 71 degrees in Cherokee. Average wind speeds were less than 15 mph .

JUNE 6-7: Although the majority of the region stayed sunny on the 6 th, Kenton received an isolated .45 inches of rain. The following day, more areas around the state experienced rain and thunderstorms with some even becoming severe in the northwest. The top three precipitation measurements on the 7th were 1.32 inches in Alva, 1.00 inch in Arnett, and .91 inches in Freedom. High temperatures ranged between the mid-80s and mid-90s. Lows were between 58 degrees in Boise City and 75 degrees in Tulsa. Average wind speeds were less than 16 mph on the 6th and less than 13 mph on the 7th. The highest peak wind gusts were 55 mph in Kenton (June 6) and 62mph in Slapout (June 7).

JUNE 8-10: Precipitation was negligible during this period with only as much as .18 inches falling in Kenton on the 10th. The highest maximum temperatures were on the rise, jumping from 95 degrees on the 8th to a blistering 101 degrees in Grandville and Altus on the 10th. Kenton reported the lowest maximum temperature each day, with highs fluctuating in the 80s. The highest minimum temperatures were in the mid-70s and the lowest minimum temperatures were between 55 degrees (Kenton) and 61 degrees (Boise City).

Average wind speeds increased as well with the highest daily average wind speed measuring 8 mph on the 8 th, 10 mph on the 9th, and 18 mph on the 10th. Goodwell had the highest average wind speeds out of any other Mesonet site in the state during this three-day stretch.

JUNE 11-16: This six-day period was marked with cooling temperatures, severe weather, and rain. Thunderstorms advanced behind a cold front on the 11th, moving eastward from the panhandle. The following days, the storms had moved further east into the state over western and central OK. A mid-level disturbance kept the development of storms going throughout the remainder of this period over much of Oklahoma. Among the storm reports was a 2 inch hail report in Guymon on the 11th, and flooding in Oklahoma and Nowata County on the 13th; Washita County on the 14th; and in Harmon, Cleveland, Okmulgee and Tulsa County on the 15th. The highest daily rainfall amounts were 1.61 inches in Hooker (June 11), 3.46 inches in El Reno (June 12), 3.63 inches in Hollis (June 13), 4.02 inches in Hollis (June 14), 4.60 inches in Tishomingo (June 15), and 2.44 inches in Centrahoma (June 16). On the 13th, Tulsa and McAlester managed to break their daily rainfall records with 1.17 inches and 2.64 inches, respectively. The highest maximum temperature recorded each day dropped from 99 degrees in Altus on the 11th to 88 degrees in Talihina on the 16th. The lowest maximum temperature started at 86 degrees on the 11th and then fluctuated in the 70s from the 12th through the 16th. The highest minimum temperature dropped from 78 to 72 degrees and the lowest minimum temperatures were in the mid-upper 50s. The highest daily average wind speeds in sequential order were $18 \mathrm{mph}, 14 \mathrm{mph}$, $11 \mathrm{mph}, 12 \mathrm{mph}, 9 \mathrm{mph}$, and 11 mph . There were some fairly significant wind speed gusts with Slapout hitting 54 mph on the 11th, Goodwell hitting 60 mph on the 12 th, and Bessie hitting 56 mph on the 14 th .

JUNE 17-22: Temperatures were on a major upswing. High temperatures climbed from a range of 73 degrees in south-central OK to 92 degrees in Hooker on the 17th, to a range of 87 degrees in Cheyenne and Mt. Herman to 101 degrees in Boise City on the 22nd. The warmest minimum temperatures were in the low-mid 70s and the coolest minimum temperatures increased from 54 degrees to 66 degrees. Remnants of Tropical Storm Bill entered the state which gave a good soaking to many areas around Oklahoma on the 17th and 18th. Following Bill's grand exit from the state, a few showers and thunderstorms lingered on 19th $\neg$. While the 20 th and 22 nd remained rain-free, showers and thunderstorms stalled in south-central OK which lead to additional flooding. The list of counties that reported flooding was extensive. On the 17th, Carter, Jefferson, Murray, Okmulgee, and Stephens County reported flooding. On the 18th, Cherokee, Craig, Creek, Garvin, Mayes, McIntosh, Murray, Okfuskee, Okmulgee, Pittsburg, Pontotoc, Seminole, Sequoyah, Stephens, and Tulsa County reported
flooding. On the 21st, Bryan and Marshall County reported flooding. Even though Tulsa broke a daily rainfall record of 1.67 inches on the 18th, that site was nowhere near the upper end of what some Mesonet rain gauges measured during this period. The top two highest daily rainfall amounts were 10.49 (Newport) and 6.83 inches (Ringling) on the 17th, 3.90 (Cookson) and 3.88 inches (Tahlequah) on the 18th, 32 (Mangum) and .24 inches (Cheyenne) on the 19th, and 2.07 (Durant) and 1.37 inches (Madill) on the 21 st. The highest daily average wind speeds ranged from 15 mph to 21 mph .

JUNE 23-24: Oklahoma took a break from the rain for a couple days. Highs ranged from 87 degrees in Cheyenne to 97 degrees in Kingfisher. Lows ranged from 63 degrees in Kenton to 78 degrees in Tulsa. Average wind speeds were $5-20 \mathrm{mph}$ on the 23 rd and $5-21 \mathrm{mph}$ on the 24 th .

JUNE 25-27: Storms approached from the north on the 25th ahead of a cold front. The showers and precipitation moved south through southern and south-central Oklahoma on the 26th before they moved completely out of the state on the 27 th. Although the highest amount of daily rainfall was only .54 inches in Boise City on the 25th, Beaver managed 3.32 inches on the 26th, followed by Idabel at 2.64 inches and Wilburton at 2.41 inches. As rain fell, temperatures also cooled. The highest maximum temperatures decreased from 98 to 91 degrees and the lowest maximum temperatures decreased from 89 to 81 degrees. In a similar grade, the highest minimum temperatures decreased from 77 to 70 degrees. The lowest minimum temperatures fell from 63 degrees to 56 degrees. The highest daily average wind speed in the state slowed from 17 mph on the 25 th to 15 mph on the 26 th and then to 9 mph on the 27 th.

JUNE 28-30: June ended on the warm side with high maximum temperatures between 98 and 100 degrees. The coolest maximum temperatures recorded were still warm, measuring in the mid-upper 80s. High minimum temperatures were in the upper 60s and low 70s, and the lowest minimum temperatures were between 58 and 61 degrees. Although trivial amounts of rain fell on the 28th and the 30th, there was a break-in of significant rainfall on the 29th. On that Monday, showers and strong storms developed along an outflow boundary. Those storms caused as much as 1.5 inches of rain in Fittstown and Minco, as well as a 96 mph wind gust in Minco and 2.5 inch hail in Kiowa. Average daily wind speeds were generally less than 12 mph .

## JUNE 2015 SEVERE WEATHER

Flooding

| Location | County | Day |
| :---: | :---: | :---: |
| 4 NW Oklahoma City | Oklahoma | 13 |
| 3 N Oklahoma City | Oklahoma | 13 |
| 9 W Nowata | Nowata | 13 |
| 5 E Burns Flat | Washita | 14 |
| 2 W Hollis | Harmon | 15 |
| 1 E Norman | Cleveland | 15 |
| Beggs | Okmulgee | 15 |
| 2 SSE Bixby | Tulsa | 15 |
| 1 N Ardmore | Carter | 17 |
| Duncan | Stephens | 17 |
| Lone Grove | Carter | 17 |
| W Ardmore | Carter | 17 |
| Davis | Murray | 17 |
| Healdton | Carter | 17 |
| Ratliff City | Carter | 17 |
| Ardmore | Carter | 17 |
| 3 S Ringling | Jefferson | 17 |
| 5 S Hectorville | Okmulgee | 17 |
| Pauls Valley | Garvin | 18 |
| Davis | Murray | 18 |
| 6 WSW Ada | Pontotoc | 18 |
| 7 NNE Konawa | Seminole | 18 |
| 5 SW Sasakwa | Seminole | 18 |
| 2 S Loco | Stephens | 18 |
| 14 E Duncan | Stephens | 18 |
| 15 E Duncan | Stephens | 18 |
| 2 ESE Velma | Stephens | 18 |
| 3 E Hectorville | Okmulgee | 18 |
| Tulsa | Tulsa | 18 |
| 5 S Bixby | Tulsa | 18 |
| 4 SW Okemah | Okfuskee | 18 |
| Sand Springs | Tulsa | 18 |
| Checotah | McIntosh | 18 |
| Glenpool | Tulsa | 18 |
| Tahlequah | Cherokee | 18 |
| 4 S Eufaula | Pittsburg | 18 |
| Sapulpa | Creek | 18 |
| Okmulgee | Okmulgee | 18 |
| Welch | Craig | 18 |
| Owasso | Tulsa | 18 |

Flooding (cont.)

| Location | County | Day |
| :--- | :--- | ---: |
| Sallisaw | Sequoyah | 18 |
| 1 S Sand Springs | Tulsa | 18 |
| Bixby | Tulsa | 18 |
| Adair | Mayes | 18 |
| Hendrix | Bryan | 21 |
| 1 S Colbert | Bryan | 21 |
| Madill | Marshall | 21 |
| 1 S Hendrix | Bryan | 21 |

Hail (2 inches in diameter or greater)

| Size (in.) | Location | County | Day |
| :---: | :--- | :--- | :--- |
| 2.00 | 4 N Guymon | Texas | 11 |
| 2.50 | Kiowa | Pittsburg | 29 |

Wind Gusts (70 mph or greater)

| Speed <br> (m.p.h) | Location | County | Day |
| :---: | :---: | :---: | :---: |
| 96.00 | 2 SSW Minco | Grady | 29 |

JUNE 2015 OBSERVED PRECIPITATION


## JUNE 2015 DEPARTURE FROM NORMAL PRECIPITATION



## JUNE 2015 PERCENT OF NORMAL PRECIPITATION



JUNE 2015 AVERAGE SOIL MOISTURE AT 25CM


## JUNE 2015 AVERAGE TEMPERATURE



JUNE 2015 DEPARTURE FROM NORMAL TEMPERATURE


## MESONET MONTHLY SUMMARY FOR JUNE 2015

| NAME | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | LOW TEMP | DAY | HDD | CDD | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | $\begin{aligned} & \mathrm{HIGH} \\ & 24-\mathrm{HR} \end{aligned}$ | DAY | NAME | MEAN TEMP | $\begin{aligned} & \text { HIGH } \\ & \text { TEMP } \end{aligned}$ | DAY | LOW TEMP | DAY | HDD | CDD | $\begin{aligned} & \text { TOT } \\ & \text { PPT } \end{aligned}$ | $\begin{aligned} & \text { HIGH } \\ & 24-H R \end{aligned}$ | DAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PANHANDLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arnett | 76.8 | 94 | 28 | 59 | 1 | 0 | 353 | 4.38 | 3.33 | 12 | Goodwe 11 | 75.9 | 99 | 22 | 57 | 2 | 0 | 327 | 1.83 | . 77 | 7 |
| Beaver | 77.5 | 97 | 10 | 58 | 1 | 0 | 376 | 5.91 | 3.32 | 26 | Hooker | 77.3 | 99 | 22 | 59 | 27 | 0 | 370 | 3.11 | 1.61 | 11 |
| Boise City | 74.2 | 101 | 22 | 54 | 17 | 0 | 277 | 1.03 | . 54 | 25 | Kenton | 73.7 | 99 | 22 | 55 | 11 | 0 | 260 | 1.56 | . 55 | 11 |
| Buffalo | 79.7 | 98 | 30 | 59 | 1 | 0 | 441 | 3.19 | 2.84 | 12 | Slapout | ***** | *** | *** | *** | *** | **** | **** | 4.38 | 2.50 | 12 |
| NORTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alva | 79.1 | 98 | 30 | 59 | 1 | 0 | 424 | 3.92 | 1.32 | 7 | May Ranch | 78.3 | 98 | 30 | 57 | 1 | 0 | 398 | 2.37 | 1.77 | 12 |
| Blackwel1 | 79.2 | 99 | 30 | 54 | 1 | 0 | 427 | 1.52 | 1.45 | 12 | Medford | 80.0 | 100 | 30 | 57 | 1 | 0 | 449 | 1.54 | 1.33 | 12 |
| Breckinridge | 79.4 | 98 | 30 | 55 | 1 | 0 | 432 | 2.01 | 1.96 | 12 | Newkirk | 78.0 | 96 | 30 | 52 | 1 | 1 | 390 | 1.26 | . 83 | 12 |
| Cherokee | 80.1 | 100 | 30 | 60 | 1 | 0 | 452 | 2.18 | 1.69 | 12 | Red Rock | 78.6 | 97 | 10 | 52 | 1 | 0 | 408 | 2.95 | 1.11 | 12 |
| Fairview | 79.6 | 98 | 10 | 58 | 1 | 0 | 438 | 1.84 | 1.06 | 12 | Seiling | 78.4 | 96 | 30 | 59 | 1 | 0 | 401 | 3.39 | 2.43 | 12 |
| Freedom | 78.1 | 98 | 30 | 58 | 1 | 0 | 394 | 2.77 | 1.53 | 12 | Woodward | 77.8 | 94 | 30 | 59 | 1 | 0 | 384 | 3.75 | 3.02 | 12 |
| Lahoma | 79.1 | 98 | 10 | 57 | 1 | 0 | 423 | 2.30 | 2.16 | 12 |  |  |  |  |  |  |  |  |  |  |  |
| NORTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bixby | 79.3 | 97 | 10 | 54 | 1 | 0 | 428 | 6.62 | 2.31 | 18 | Pawnee | 78.8 | 97 | 10 | 54 | 1 | 0 | 414 | 2.79 | 1.28 | 18 |
| Burbank | 77.5 | 95 | 10 | 53 | 1 | 0 | 376 | 3.67 | 1.55 | 12 | Porter | 78.6 | 95 | 10 | 56 | 1 | 0 | 409 | 5.02 | 1.61 | 18 |
| Copan | 78.2 | 95 | 10 | 53 | 1 | 1 | 397 | 5.74 | 1.92 | 12 | Pryor | 78.2 | 95 | 30 | 54 | 1 | 0 | 396 | 5.17 | 2.27 | 18 |
| Foraker | 76.9 | 93 | 30 | 51 | 1 | 1 | 358 | 2.45 | 1.42 | 12 | Skiatook | 78.0 | 93 | 10 | 56 | 1 | 0 | 390 | 7.59 | 2.32 | 12 |
| Inola | 78.2 | 95 | 30 | 55 | 1 | 0 | 395 | 4.93 | 1.40 | 18 | Talala | 77.9 | 94 | 10 | 54 | 1 | 0 | 388 | 7.20 | 1.97 | 18 |
| Jay | 76.3 | 91 | 24 | 53 | 1 | 1 | 341 | 3.18 | 1.64 | 18 | Tulsa | 79.8 | 96 | 10 | 56 | 1 | 0 | 444 | 5.83 | 1.91 | 18 |
| Miami | 77.6 | 93 | 23 | 57 | 2 | 0 | 377 | 4.88 | 2.05 | 18 | Vinita | 76.8 | 92 | 30 | 55 | 1 | 0 | 355 | 6.20 | 2.70 | 18 |
| Nowata | 77.7 | 94 | 30 | 53 | 1 | 1 | 383 | 5.52 | 1.72 | 18 | Wynona | 78.2 | 95 | 30 | 54 | 1 | 0 | 397 | 3.91 | 1.39 | 12 |
| WEST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bessie | 78.2 | 97 | 29 | 58 | 1 | 0 | 396 | 5.21 | 3.42 | 14 | Erick | 77.2 | 96 | 29 | 60 | 1 | 0 | 367 | 2.43 | 1.36 | 12 |
| Butler | 77.5 | 95 | 29 | 58 | 1 | 0 | 375 | 2.48 | 1.44 | 12 | Putnam | ***** | *** | *** | *** | * | ** | **** | 3.11 | 2.20 | 12 |
| Camargo | 76.8 | 94 | 29 | 58 | 1 | 0 | 353 | 3.50 | 2.55 | 12 | Retrop | ***** | *** | *** | *** | *** | **** | **** | ***** | ***** | *** |
| Cheyenne | 76.3 | 92 | 29 | 59 | 1 | 0 | 338 | 4.05 | 3.14 | 12 | Watonga | 78.5 | 96 | 10 | 56 | 1 | 0 | 405 | 4.11 | 3.09 | 12 |
| Elk City | ***** | *** | *** | *** | *** | **** | **** | ***** | ***** | *** | Weatherford | 78.5 | 98 | 29 | 59 | 1 | 0 | 405 | 2.04 | . 55 | 12 |
| CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acme | 78.0 | 95 | 10 | 57 | 1 | 0 | 391 | 4.50 | 1.70 | 17 | Ninnekah | 78.7 | 96 | 10 | 56 | 1 | 0 | 411 | 4.73 | 2.33 | 12 |
| Bowlegs | 78.1 | 94 | 10 | 52 | 1 | 0 | 393 | 9.20 | 3.95 | 17 | Norman | 79.2 | 96 | 10 | 55 | 1 | 0 | 425 | 5.95 | 1.67 | 17 |
| Bristow | 77.5 | 94 | 10 | 51 | 1 | 0 | 375 | 7.61 | 3.48 | 18 | 0ilton | 78.2 | 95 | 10 | 51 | 1 | 0 | 397 | 6.23 | 1.86 | 18 |
| Lake Carl Blac | 78.6 | 97 | 10 | 53 | 1 | 0 | 408 | 3.84 | 2.59 | 12 | OKC East | 79.3 | 96 | 10 | 55 | 1 | 0 | 428 | 3.88 | 1.10 | 13 |
| Chandler | 78.3 | 95 | 10 | 53 | 1 | 0 | 398 | 6.54 | 2.23 | 13 | OKC North | 79.9 | 97 | 10 | 55 | 1 | 0 | 446 | 4.94 | 2.37 | 12 |
| Chickasha | 79.2 | 98 | 10 | 55 | 1 | 0 | 427 | 4.92 | 2.66 | 12 | OKC West | ***** | *** | *** | *** | *** | **** | **** | ***** | ***** | *** |
| E1 Reno | 77.4 | 94 | 10 | 55 | 1 | 0 | 372 | 5.11 | 3.46 | 12 | Okemah | 78.5 | 96 | 10 | 55 | 1 | 0 | 405 | 8.18 | 3.41 | 17 |
| Guthrie | 79.1 | 97 | 10 | 56 | 1 | 0 | 423 | 4.15 | 2.76 | 12 | Perkins | 79.3 | 98 | 10 | 54 | 1 | 0 | 428 | 3.12 | 1.00 | 13 |
| Kingfisher | 80.1 | 98 | 10 | 57 | 1 | 0 | 453 | 4.83 | 2.07 | 12 | Shawnee | 78.8 | 96 | 10 | 54 | 1 | 0 | 413 | 9.21 | 3.49 | 17 |
| Marena | 78.2 | 96 | 10 | 55 | 1 | 0 | 397 | 2.90 | 1.32 | 12 | Spencer | 79.1 | 95 | 10 | 65 | 2 | *** | **** | 4.22 | 1.17 | 12 |
| Minco | 78.1 | 95 | 10 | 58 | 1 | 0 | 394 | 3.76 | 1.50 | 29 | Stillwater | 79.2 | 97 | 10 | 54 | 1 | 0 | 426 | 3.18 | 1.03 | 12 |
| Marshal 1 | 79.4 | 97 | 10 | 55 | 1 | 0 | 431 | 3.81 | 2.13 | 12 | Washington | 77.9 | 96 | 10 | 53 | 1 | 0 | 387 | 6.15 | 2.53 | 17 |
| EAST CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cookson | 76.5 | 92 | 24 | 57 | 1 | 0 | 344 | 7.94 | 3.90 | 18 | Sallisaw | 78.6 | 93 | 10 | 61 | 1 | 0 | 408 | 8.35 | 2.79 | 13 |
| Eufaula | 79.0 | 93 | 10 | 56 | 1 | 0 | 421 | 7.74 | 1.48 | 26 | Stigler | 78.7 | 94 | 10 | 58 | 1 | 0 | 411 | 6.60 | 1.74 | 16 |
| Haskel 1 | 78.3 | 94 | 10 | 55 | 1 | 0 | 399 | 5.46 | 1.51 | 18 | Stuart | 78.1 | 94 | 9 | 55 | 1 | 0 | 392 | 5.85 | 1.96 | 17 |
| Hectorville | 78.5 | 93 | 10 | 56 | 1 | 0 | 406 | 8.90 | 3.23 | 15 | Tahlequah | 76.6 | 91 | 10 | 55 | 1 | 0 | 347 | 7.99 | 3.88 | 18 |
| Holdenville | 78.4 | 94 | 10 | 54 | 1 | 0 | 403 | 8.30 | 2.65 | 18 | Webbers Falls | 79.7 | 96 | 11 | 60 | 1 | 0 | 440 | 4.37 | 1.56 | 26 |
| McAlester | 78.1 | 94 | 29 | 53 | 1 | 0 | 392 | 9.05 | 2.78 | 13 | Westville | 76.4 | 90 | 24 | 59 | 1 | 0 | 343 | 7.51 | 2.85 | 18 |
| Okmulgee | 78.5 | 95 | 10 | 53 | 1 | 0 | 406 | 5.63 | 1.97 | 17 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTHWEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Altus | 80.7 | 101 | 10 | 61 | 1 | 0 | 471 | 3.52 | 1.47 | 13 | Hollis | 79.4 | 98 | 29 | 61 | 1 | 0 | 432 | 10.43 | 4.02 | 14 |
| Apache | 77.6 | 95 | 10 | 56 | 1 | 0 | 379 | 3.57 | 1.69 | 15 | Mangum | 79.0 | 99 | 10 | 61 | 28 | 0 | 421 | 7.03 | 2.26 | 12 |
| Fort Cobb | 79.0 | 98 | 10 | 57 | 1 | 0 | 420 | 4.58 | 3.19 | 12 | Medicine Park | 78.1 | 94 | 10 | 59 | 1 | 0 | 394 | 1.84 | . 57 | 12 |
| Grandfield | 80.8 | 101 | 10 | 61 | 1 | 0 | 474 | 3.12 | 1.46 | 12 | Tipton | 80.3 | 98 | 10 | 62 | 1 | 0 | 458 | 3.34 | 1.46 | 13 |
| Hinton | 78.2 | 96 | 10 | 58 | 1 | 0 | 397 | 2.20 | . 99 | 12 | Walters | 79.1 | 96 | 10 | 60 | 1 | 0 | 424 | 2.46 | . 85 | 17 |
| Hobart | 79.1 | 98 | 10 | 60 | 1 | 0 | 423 | 5.33 | 2.09 | 14 |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ada | 78.5 | 94 | 10 | 52 | 1 | 0 | 404 | 10.65 | 3.63 | 17 | Lane | 78.5 | 94 | 10 | 55 | 1 | 0 | 405 | 5.83 | 1.87 | 16 |
| Ardmore | 79.5 | 96 | 10 | 54 | 1 | 0 | 436 | 12.62 | 5.48 | 17 | Madil1 | 78.8 | 94 | 10 | 54 | 1 | 0 | 413 | 9.96 | 5.90 | 17 |
| Burneyville | 79.3 | 96 | 10 | 54 | 1 | 0 | 428 | 12.19 | 6.67 | 17 | Newport | 78.7 | 94 | 10 | 56 | 1 | 0 | 411 | 15.07 | 10.49 | 17 |
| Byars | 78.5 | 95 | 10 | 53 | 1 | 0 | 405 | 9.11 | 4.33 | 17 | Pauls Valley | 78.7 | 96 | 10 | 54 | 1 | 0 | 412 | 11.05 | 4.74 | 17 |
| Centrahoma | 78.0 | 94 | 10 | 52 | 1 | 0 | 391 | 10.07 | 2.44 | 16 | Ringling | 79.1 | 97 | 10 | 57 | 1 | 0 | 424 | 10.74 | 6.83 | 17 |
| Durant | 79.3 | 95 | 10 | 58 | 1 | 0 | 428 | 7.63 | 2.82 | 17 | Sulphur | 78.1 | 95 | 10 | 53 | 1 | 0 | 394 | 9.93 | 5.20 | 17 |
| Fittstown | 76.9 | 93 | 10 | 52 | 1 | 0 | 357 | 10.68 | 3.43 | 17 | Tishomingo | 78.0 | 95 | 10 | 54 | 1 | 0 | 391 | 13.15 | 4.87 | 17 |
| Ketchum Ranch | 78.5 | 97 | 10 | 57 | 1 | 0 | 406 | 4.73 | 2.89 | 17 | Waurika | 79.2 | 97 | 10 | 58 | 1 | 0 | 427 | 8.68 | 2.40 | 13 |
| SOUTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Antlers | 77.4 | 94 | 9 | 53 | 1 | 0 | 373 | 4.14 | 1.02 | 17 | Idabe 1 | 80.0 | 95 | 10 | 61 | 1 | 0 | 450 | 5.59 | 2.64 | 26 |
| Broken Bow | 78.0 | 94 | 10 | 60 | 2 | 0 | 391 | 4.05 | 1.18 | 16 | Mt Herman | 77.4 | 92 | 9 | 56 | 1 | 0 | 373 | 3.06 | . 92 | 17 |
| Clayton | 78.4 | 94 | 10 | 55 | 1 | 0 | 403 | 4.73 | 1.92 | 16 | Talihina | 78.2 | 94 | 10 | 55 | 1 | 0 | 395 | 2.26 | . 77 | 16 |
| Cloudy | 77.7 | 93 | 10 | 59 | 1 | 0 | 380 | 4.92 | 2.02 | 17 | Wilburton | 78.4 | 93 | 10 | 56 | 1 | 0 | 402 | 5.37 | 2.41 | 26 |
| Hugo | 79.2 | 94 | 10 | 58 | 1 | 0 | 427 | 3.23 | 1.37 | 17 | Wister | 78.2 | 94 | 24 | 56 | 1 | 0 | 395 | 1.87 | 1.07 | 16 |

2013, 2014 AND 2015 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL


June 2015 Mesonet Precipitation Comparison

| Climate Division | Precipitation (inches) | Departure from <br> Normal (inches) | Rank since 1895 | Wettest on Record (Year) | Driest on Record (Year) | Jun-14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 3.17 | 0.00 | 41st Wettest | 7.09 (1962) | 0.29 (1911) | 4.21 |
| North Central | 2.45 | -2.08 | 31st Driest | 10.87 (2007) | 0.40 (1933) | 8.29 |
| Northeast | 5.04 | -0.19 | 53rd Wettest | 12.64 (2007) | 0.28 (1933) | 5.82 |
| West Central | 2.99 | -1.16 | 51st Driest | 8.90 (1962) | 0.30 (1933) | 6.40 |
| Central | 5.29 | 0.37 | 34th Wettest | 12.63 (2007) | 0.41 (1933) | 6.46 |
| East Central | 7.21 | 2.41 | 17th Wettest | 12.47 (1935) | 0.69 (2011) | 4.34 |
| Southwest | 4.31 | 0.04 | 36th Wettest | 9.96 (2007) | 0.43 (1911) | 4.97 |
| South Central | 10.13 | 5.40 | 3rd Wettest | 11.30 (1908) | 0.25 (1933) | 5.74 |
| Southeast | 3.92 | -0.73 | 60th Wettest | 11.51 (1935) | 0.77 (1933) | 4.64 |
| Statewide | 5.04 | 0.52 | 33rd Wettest | 9.52 (2007) | 0.44 (1933) | 5.71 |

2013, 2014 AND 2015 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL


June 2015 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) | Jun-14 (F) |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |
| Panhandle | 76.4 | 2.2 | 29th Warmest | $82.9(1953)$ | $67.0(1903)$ | 74.8 |
| North Central | 78.9 | 2.3 | t-27th Warmest | $85.2(1953)$ | $69.1(1903)$ | 76.8 |
| Northeast | 78.0 | 2.2 | 27th Warmest | $84.4(1911)$ | $70.3(1903)$ | 76.0 |
| West Central | 77.7 | 1.0 | 45th Warmest | $85.7(1953)$ | $70.0(1903)$ | 77.2 |
| Central | 78.6 | 1.8 | 32nd Warmest | $85.2(1911)$ | $71.1(1903)$ | 77.3 |
| East Central | 78.1 | 1.7 | 35th Warmest | $84.5(1953)$ | $70.3(1903)$ | 77.3 |
| Southwest | 79.2 | 0.9 | 48th Warmest | $87.3(2011)$ | $72.4(1903)$ | 79.3 |
| South Central | 78.6 | 0.7 | 53rd Warmest | $85.7(1911)$ | $72.1(1903)$ | 78.8 |
| Southeast | 78.3 | 2.2 | 26th Warmest | $83.5(1953)$ | $70.6(1903)$ | 77.4 |
| Statewide | 78.2 | 1.7 | 33rd Warmest | $84.8(1953)$ | $70.3(1903)$ | 77.2 |

## RECORD EVENT REPORTS JUNE 2015



## MESONET EXTREMES FOR JUNE 2015

| Climate Division | High Temp (F) | Day | Station | Low Temp <br> (F) | Day | Station | High Monthly Rainfall (inches) | Station |  | Day | Station |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panhandle | 101 | 22nd | Boise City | 54 | 17th | Boise City | 5.91 | Beaver | 3.33 | 12th | Arnett |
| North Central | 100 | 30th | Cherokee | 52 | 1st | Newkirk | 3.92 | Alva | 3.02 | 12th | Woodward |
| Northeast | 97 | 10th | Pawnee | 51 | 1st | Foraker | 7.59 | Skiatook | 2.70 | 18th | Vinita |
| West Central | 98 | 29th | Weatherford | 56 | 1st | Watonga | 5.21 | Bessie | 3.42 | 14th | Bessie |
| Central | 98 | 10th | Kingfisher | 51 | 1st | Oilton | 9.21 | Shawnee | 3.95 | 17th | Bowlegs |
| East Central | 96 | 11th | Webbers Falls | 53 | 1st | McAlester | 9.05 | McAlester | 3.90 | 18th | Cookson |
| Southwest | 101 | 10th | Grandfield | 56 | 1st | Apache | 10.43 | Hollis | 4.02 | 14th | Hollis |
| South Central | 97 | 10th | Ringling | 52 | 1st | Fittstown | 15.07 | Newport | 10.49 | 17th | Newport |
| Southeast | 95 | 10th | Idabel | 53 | 1st | Antlers | 5.59 | Idabel | 2.64 | 26th | Idabel |
| Statewide | 101 | 10th | Grandfield | 51 | 1st | Oilton | 15.07 | Newport | 10.49 | 17th | Newport |

Oklahoma Climate Divisions


## U.S. Drought Monitor Oklahoma



June 30, 2015
(Released Thursday, Jul. 2, 2015)
Valid 8 a.m. EDT
Drought Conditions (Percent Area)

|  | Drought Conditions (Percent Area) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 98.28 | 1.72 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Week 623/2015 | 98.28 | 1.72 | 0.00 | 0.00 | 0.00 | 0.00 |
| $3 \text { Months Ago } 3312015$ | 14.36 | 85.64 | 68.62 | 50.68 | 37.38 | 8.41 |
| $\begin{gathered} \text { Start of } \\ \text { Calendar Year } \\ \text { 12302014 } \\ \hline \end{gathered}$ | 25.63 | 74.37 | 62.03 | 40.84 | 21.74 | 5.70 |
| $\begin{gathered} \text { Start of } \\ \text { Whter Year } \\ 930 / 2014 \\ \hline \end{gathered}$ | 8.55 | 91.45 | 73.31 | 58.13 | 20.92 | 4.64 |
| One Year Ago 7月/2014 | 5.50 | 94.50 | 80.12 | 65.61 | 30.07 | 6.67 |
| Intensity. |  |  |  |  |  |  |
| D0 Abnom D1 Moder D2 Severe | ally Dry | ght | $\square_{D}$ | 3 Extrem <br> Exceptio | e Drough <br> ional Dro | ugh |
| The Drought Monitor focuses on broac-scale conditions. Local conditions may vary. See accompanying text summany for forecast statements. |  |  |  |  |  |  |
| Author: <br> Brian Fuchs |  |  |  |  |  |  |

## USDA <br> USDA


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

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Kevin Kloesel Director
Dr. Chris Fiebrich Associate Director

EDITOR
Gary D. McManus State Climatologist

## CONTRIBUTORS

Gary D. McManus State Climatologist
Dr. Mark A. Shafer Associate State Climatologist
Monica Deming Service Climatologist

DESIGN
Ada Shih Creative Director

For more information, contact:
Oklahoma Climatological Survey
The University of Oklahoma
120 David L. Boren Blvd., Suite 2900
Norman, OK 73072-7305

TEL: 405-325-2541
FAX: 405-325-7282
E-MAIL: ocs@ou.edu
WEBSITE: http://climate.ok.gov

