

Flash drought continued to spread across southern Oklahoma during a dry, hot September, and had enveloped nearly 17 percent of the state by month's end. According to preliminary data from the Oklahoma Mesonet, the statewide average rainfall total was 1.43 inches below normal at 2.1 inches, the 33rd driest September since records began in 1895. It was particularly dry across south central and southeastern Oklahoma, areas that had seen record rainfall from April through July. The Mesonet site at Idabel recorded a measly 0.38 inches of rainfall for the

normal October-December precipitation total for Oklahoma is 8.11 inches.

Despite a few cool spells, the majority of September was warmer than normal, and emphatically hot at times. Those periods of intense heat further worsened moisture stress on the state and invigorated the flash drought. The statewide average temperature according to preliminary Mesonet data was 76.3 degrees, 4 degrees above normal to rank this September as the 15th warmest on record. The Mesonet

September 2015 Statewide Extremes

| Description | Extreme | Station | Day |
|--------------------|----------|---------|-----|
| High Temperature | 108°F | Freedom | 7 |
| Low Temperature | 42°F | Kenton | 19 |
| High Precipitation | 7.49 in. | Oilton | -- |
| Low Precipitation | 0.38 in. | Idabel | -- |

month, nearly 4 inches below normal and the lowest total in the state. Eighteen of the 119 Mesonet sites recorded less than an inch of rain during September, concentrated mostly in southern Oklahoma. Fifty-seven stations received less than 2 inches. There were a few isolated areas that had good moisture, however. Oilton reported 7.5 inches, and seven other stations recorded at least 4 inches of rain.

The dry September combined with a dry August to enable the flash drought to develop and intensify. The August-September statewide average of 4.54 inches was over 2 inches below normal and the 33rd driest on record. In some cases, the deficits stretch even farther back. Madill in south central Oklahoma recorded nearly 43 inches of rain between April 13 and July 8, but only 1.16 inches since. Idabel, so dry during September, has seen less than an inch dating back to July 9. The drier than normal months also took a bite out of the 2015's chances to eclipse 1957 as the wettest year on record for Oklahoma. The January-September statewide average rainfall total of 38.84 inches is still 10.45 inches above normal, but fell to fourth place in the rankings behind 1957's top mark of 41.3 inches. The record-setting total that year was 47.88 inches. In order to surpass 1957's total, 2015 has a mere three months to add another 9 inches. The

September 2015 Statewide Statistics

Temperature

| | Average | Depart. | Rank (1895-2015) |
|-------------------------|---------|---------|------------------|
| Month (September) | 76.3°F | 4.0°F | 15th Warmest |
| Year-to-Date (Jan-Sept) | 63.6°F | 0.2°F | 47th Warmest |

Precipitation

| | Total | Depart. | Rank (1895-2015) |
|-------------------------|-----------|-----------|------------------|
| Month (September) | 2.10 in. | -1.43 in. | 33rd Driest |
| Year-to-Date (Jan-Sept) | 38.84 in. | 10.45 in. | 4th Wettest |

Depart. = departure from 30-year normal

recorded its last triple-digit temperature for the year, barring any unusual October occurrences, on Sept. 17 with readings of 103 degrees at Freedom and Buffalo. September's highest temperature was 108 degrees at Freedom on the seventh while the lowest was a chilly 42 degrees at Kenton on the 19th. September boosted the year-to-date average temperature to 63.6 degrees, 0.2 degrees above normal, to rank the January-September ranking to 47th warmest.

Although most of the state remains drought free, the latest U.S. Drought Monitor report does show over 30 percent of the state in "abnormally dry" conditions. While that designation is not considered drought by the Drought Monitor, it can be considered a pre-cursor to further drought development. Of the 16.79 percent of the state in drought, 10.42 percent was considered "moderate," 5.4 percent "severe" and 0.97 percent "extreme." The Drought Monitor's intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst classification.

SEPTEMBER 2015 DAILY SUMMARIES

SEPTEMBER 1-3: Despite .79 inches of rain falling on Boise City on the 1st, the month started off with consistently warm and dry weather. The maximum high each day was 101 degrees in Freedom. The lowest maximum occurred at the Vinita Mesonet site each day with it only reaching 87 degrees on the 1st and 2nd and 88 degrees on the 3rd. Minimum temperatures were between 59 degrees and 76 degrees. Average wind speeds were generally 5-15mph.

SEPTEMBER 4-7: Temperatures were unseasonably warm as the maximum highs increased from 100 degrees to 108 degrees with Freedom being the warmest Mesonet site each day. The lowest maximum temperature increased from 89 degrees in Vinita to 93 degrees in Westville from the 4th through the 7th. The highest minimums were primarily in the upper 70s and the lowest minimums ranged from 55 to 65 degrees. Rain fell with passing thunderstorms each day except the 6th. Showers fell in southeast Oklahoma on the 4th and 5th, and northwest Oklahoma on the 7th. The highest rainfall measurements on each of those days were .35 inches at Clayton, 1.17 inches at Mt. Herman, and .41 inches at May Ranch, respectively. Daily average wind speeds were less than 16mph on the 4th and 5th, less than 13mph on the 6th, and less than 12mph on the 7th.

SEPTEMBER 8-11: A cold front approached the state, creating cool and wet conditions. Showers and thunderstorms developed in northern and central OK on the 8th before pushing southeast into south-central and southeast OK on the 9th. Showers and storms started entering the state at the Kansas border on the 10th and continued further into northern Oklahoma on the 11th. Daily maximum rainfall amounts were a hefty 4.82 inches in Eufaula on the 8th, 2.96 inches in Hugo on the 9th, 1.28 inches in Newkirk on the 10th, and 1.75 inches in Stillwater on the 11th. Stillwater also experienced 70mph wind speeds on the 11th. The rain and frontal passage cooled the state enough that the highest maximum temperatures were in the low-mid 90s every day except on the 8th which measured 103 degrees in Grandfield. Low maximum temperatures ranged from 73 degrees to 87 degrees. The highest minimum temperature dropped from 75 degrees in Tipton and Burneyville (Sep. 8) to 67 degrees in the southeast (Sep. 11). The lowest minimum temperature in Oklahoma dropped from 62 degrees in Goodwell to 52 degrees in Vinita. Wind speed gusts were in the 60s on the 8th (Chickasha), 10th (Goodwell), and 11th (Marshall). Daily average wind speeds were less than 14mph each day except on the 9th when they were less than 10mph.

SEPTEMBER 12-14: The 12th was rain free, but as the days warmed, rainfall became more prevalent. Scattered showers fell over the western half of the state on the 13th with a southward trajectory. By the 14th, showers and

thunderstorms were spread over northwest, north-central, and central Oklahoma. Freedom measured the most rainfall on the 13th with .25 inches and Red Rock measured the most rainfall the following day with .74 inches. The warmest highs climbed from 90 degrees in Freedom to 101 degrees in Hooker during this period. The coolest highs were 72 degrees on the 12th and 13th and 78 degrees on the 14th. The warmest low temperatures increased from 63 degrees in Altus to 71 degrees in Tipton. The coolest temperatures increased as well from 46 degrees in Jay and Nowata to 52 degrees in Broken Bow. Daily average wind speeds were less than 14mph on the 12th. The 13th and 14th were pretty gusty with daily average wind speeds between 5-22mph and 5-26mph, respectively.

SEPTEMBER 15-17: A warming trend ensued during this period with clear skies overhead. The highest maximum temperatures increased from 97 degrees to 103 degrees and the lowest maximum temperatures increased from 83 degrees to 88 degrees. Lows were between the 50s and 70s. The highest temperature of 103 degrees measured during this three-day stretch occurred in Freedom and Buffalo and the coolest temperature of 53 degrees occurred in Broken Bow and Wister. Daily average wind speeds were less than 21mph on the 15th and less than 23mph on the 16th and 17th.

SEPTEMBER 18-20: A strong cold front pushed into Oklahoma, bringing showers and thunderstorms with it. Some storms were severe with a 72mph wind gust reported in Cherokee on the 18th. Central, north-central, and southeast OK got the brunt of the rain with the highest daily rainfall totals measuring 3.61 inches in Oilton on the 18th, 1.10 inches in Ft Cobb on the 19th, and 2.21 inches in Ada on the 20th. The warmest maximum temperatures dropped from 98 degrees to 89 degrees; the coolest maximum temperatures decreased from 78 degrees to 66 degrees. The warmest minimum temperatures also decreased, falling from 75 degrees to 67 degrees during this three-day stretch. The coolest temperatures, however, increased from 49 degrees to 51 degrees. Daily average wind speeds were less than 18mph on the 18th, less than 14mph on the 19th, and less than 13mph on the 20th.

SEPTEMBER 21-22: Temperatures warmed on the 21st and the 22nd with maximum highs measuring 96 degrees both days. Although the lowest maximum temperatures were overall warmer, they still managed to fall from 81 degrees in Webbers Falls to 74 degrees in Boise City from Monday to Tuesday. The highest minimum temperatures increased from 68 degrees in Woodward to 75 degrees in Buffalo. The coolest temperatures were in the low 50s in Kenton. Fog was common in many areas with visibility less than one mile. Rain was negligible on the 21st, but made a comeback

to the panhandle on the 22nd. That day, Goodwell measured the most rain with .49 inches. The highest daily average wind speeds were 13mph in Cheyenne on the 21st and 16mph in Boise City on the 22nd.

SEPTEMBER 23-26: Oklahoma was getting used to flip flopping temperatures by the time September 23rd came around. The warmest temperatures only made it to the low 90s. The coolest maximum temperatures were between 73 and 80 degrees. The warmest low temperatures dropped from 72 degrees to 66 degrees and the coolest minimums ranged from 49 degrees to 57 degrees. This period was not only cooler, but also wetter with scattered showers over much of the state. The maximum 24-hr rainfall amounts never peaked over an inch. Mesonet rain gauges only measured as much as .89 inches in Boise City on the 23rd, .93 inches in Freedom on the 24th, .47 inches in Perkins on the 25th, and .97 inches in Putnam on the 26th. The highest daily average wind speeds diminished from 16mph to 8mph during this four day period. The highest wind gust reported was 42mph in Goodwell and Kenton on the 23rd.

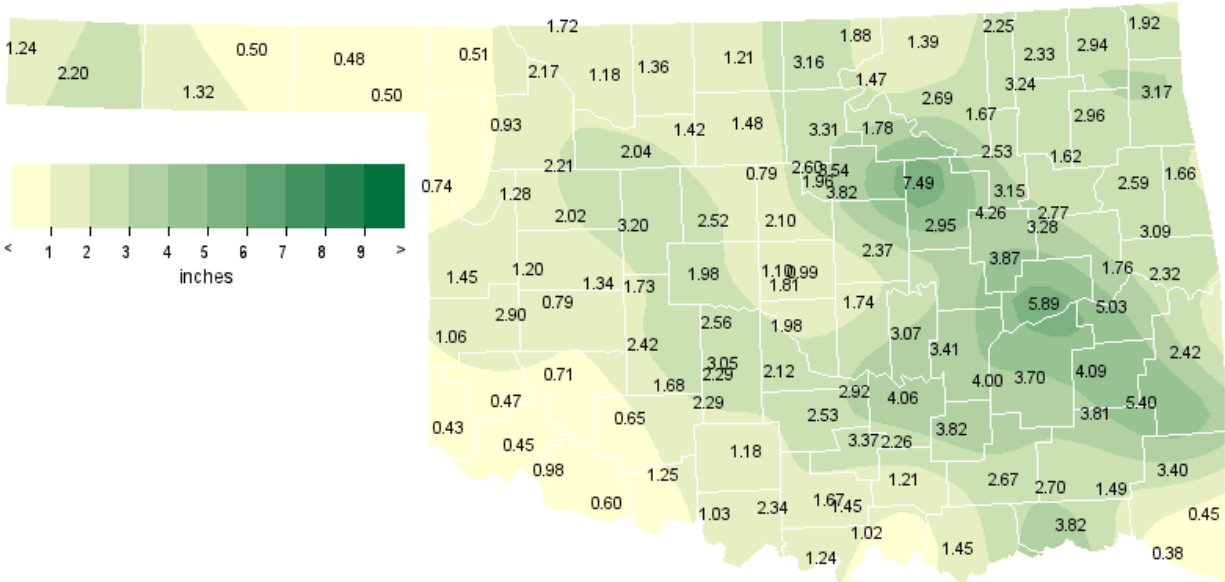
SEPTEMBER 27-30: The weather was rather pleasant at the end of September, despite a weak cold front on the 30th and a few sprinkles. Overall, rainfall was trivial. The highest maximum temperatures were fairly consistent, measuring in the low 90s. The coolest maximum temperatures, however, dropped from the low 80s to 69 degrees by the 30th. The highest minimum temperatures were in the mid-upper 60s and the coolest minimum temperatures were in the low 50s. Daily average wind speeds were less than 10mph on the 27th and 30th, and less than 12mph on the 28th and 29th.

SEPTEMBER 2015 SEVERE WEATHER

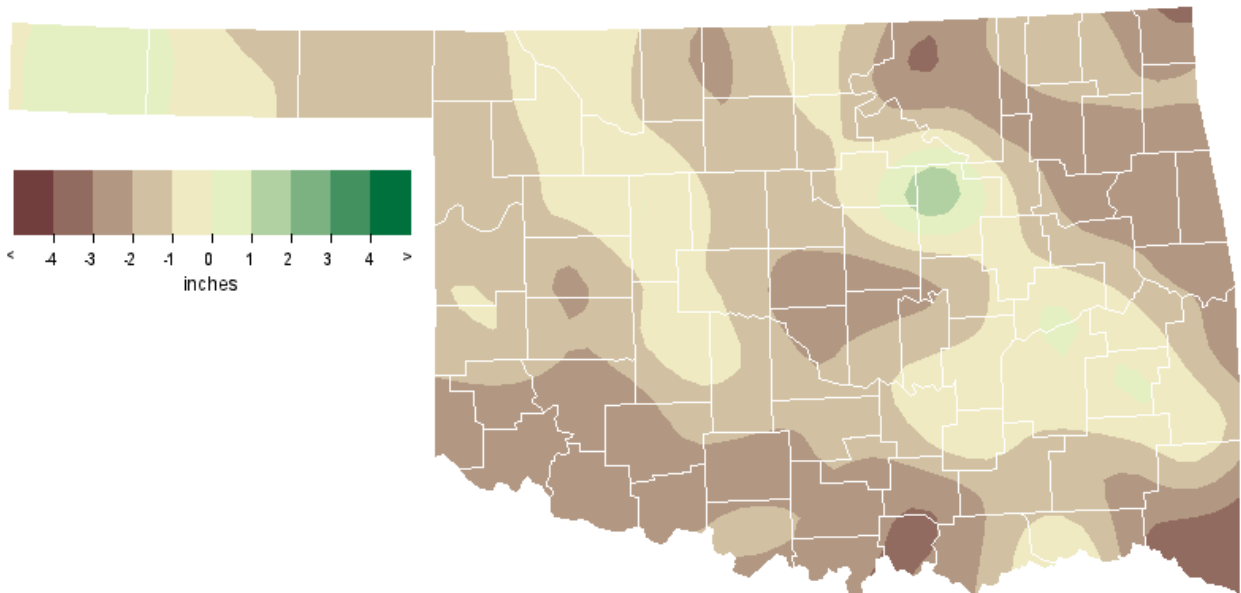
Wind Gusts (70 mph or greater)

| Speed (m.p.h) | Location | County | Day |
|---------------|------------------|---------|-----|
| 70.00 | 3 NNW Stillwater | Payne | 11 |
| 72.00 | 1 SW Cherokee | Alfalfa | 18 |

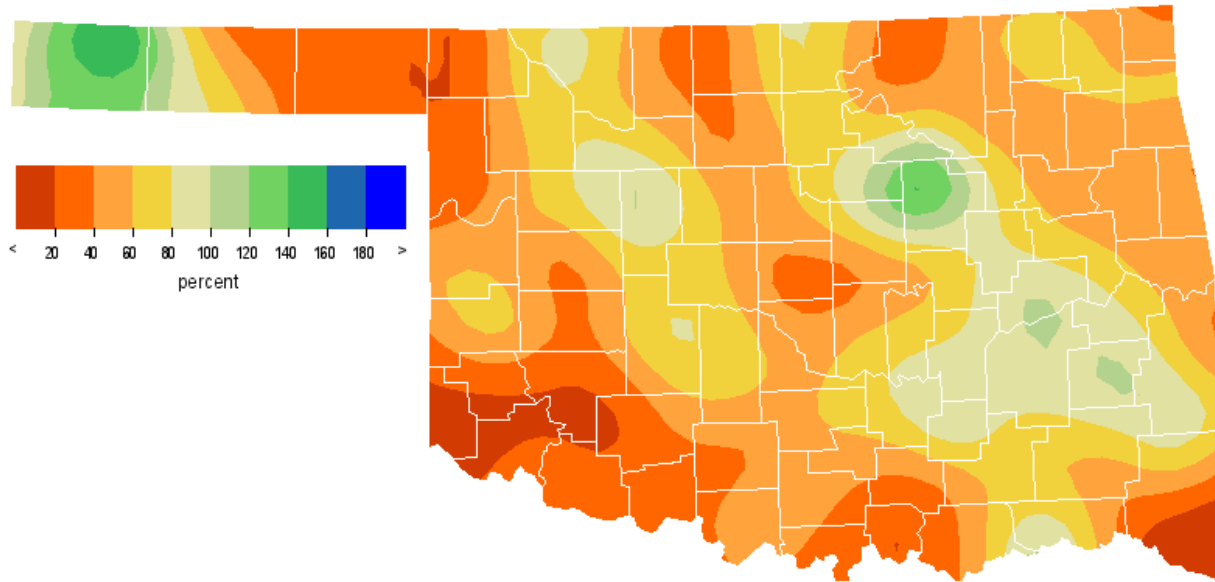
SEPTEMBER 2015 OBSERVED PRECIPITATION



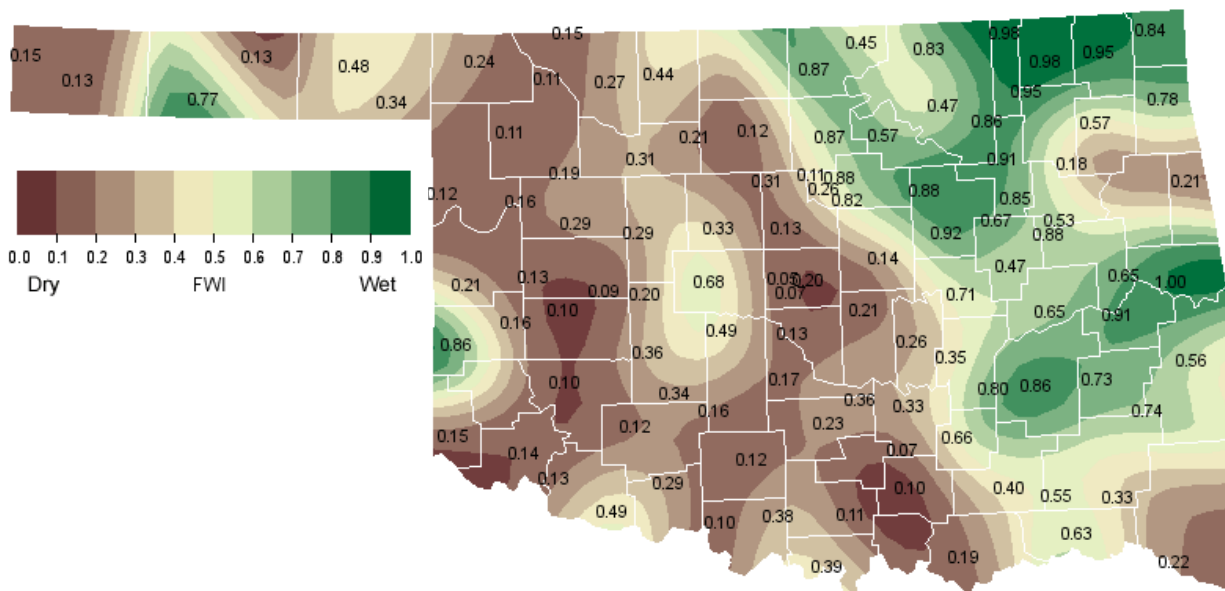
SEPTEMBER 2015 DEPARTURE FROM NORMAL PRECIPITATION



SEPTEMBER 2015 PERCENT OF NORMAL PRECIPITATION



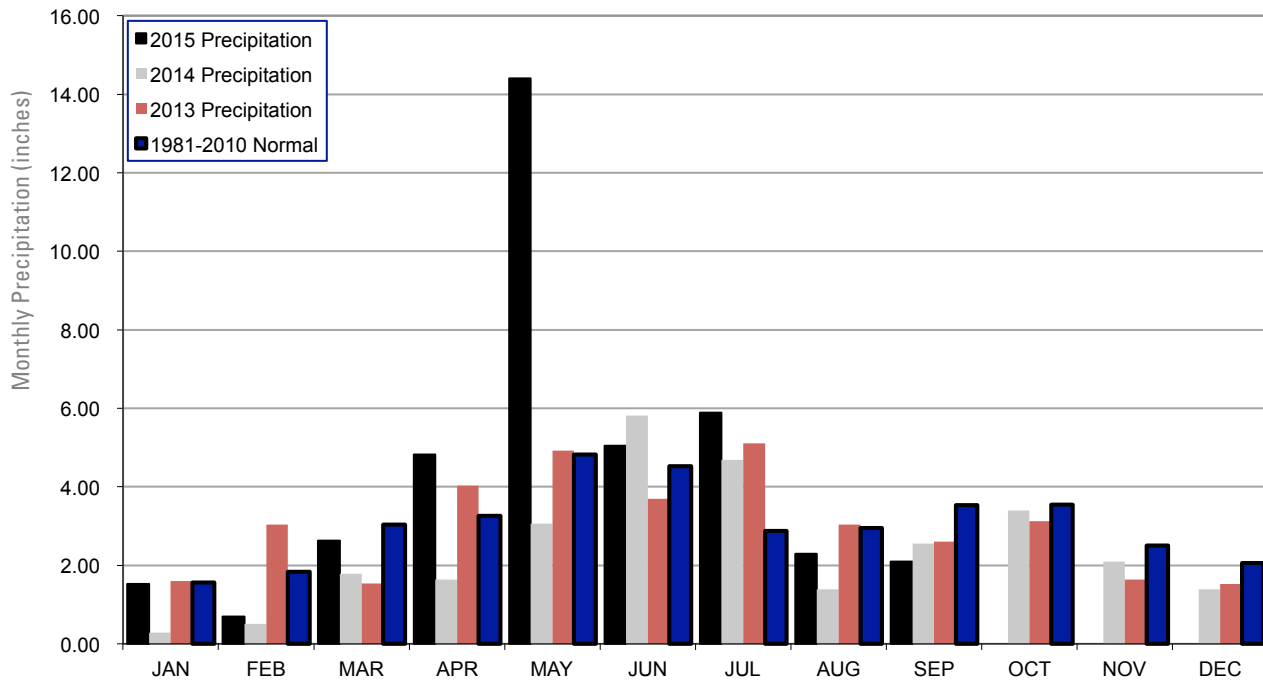
SEPTEMBER 2015 AVERAGE SOIL MOISTURE AT 25CM



MESONET MONTHLY SUMMARY FOR SEPTEMBER 2015

| NAME | MEAN TEMP | HIGH TEMP | LOW TEMP | DAY | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY | NAME | MEAN TEMP | HIGH TEMP | LOW TEMP | DAY | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY | |
|----------------------|-----------|-----------|----------|-----|-----|------|------|---------|------------|-----|---------------|-----------|-----------|----------|-----|-----|------|------|---------|------------|-----|--|
| PANHANDLE | | | | | | | | | | | | | | | | | | | | | | |
| Arnett | 76.2 | 102 | 7 | 55 | 19 | 0 | 336 | .74 | .32 | 14 | Goodwell | 74.2 | 100 | 14 | 48 | 19 | **** | **** | 1.32 | .58 | 10 | |
| Beaver | 76.3 | 100 | 7 | 49 | 19 | 1 | 340 | .48 | .27 | 11 | Hooker | 75.6 | 101 | 7 | 48 | 19 | 2 | 322 | .50 | .17 | 10 | |
| Boise City | 71.7 | 98 | 14 | 46 | 19 | 9 | 209 | 2.20 | .89 | 23 | Kenton | 72.2 | 98 | 14 | 42 | 19 | 12 | 226 | 1.24 | .72 | 23 | |
| Buffalo | 78.7 | 104 | 7 | 51 | 19 | 0 | 412 | .51 | .23 | 23 | Slapout | 76.4 | 101 | 6 | 50 | 19 | 1 | 342 | .50 | .20 | 11 | |
| NORTH CENTRAL | | | | | | | | | | | | | | | | | | | | | | |
| Alva | 77.7 | 105 | 7 | 54 | 19 | 0 | 380 | 1.18 | .35 | 14 | May Ranch | 76.7 | 104 | 7 | 50 | 19 | 1 | 351 | 1.72 | .61 | 24 | |
| Blackwell | 75.0 | 100 | 7 | 51 | 12 | 1 | 301 | 3.16 | 1.69 | 8 | Medford | 76.6 | 103 | 7 | 54 | 12 | 0 | 349 | 1.21 | .60 | 18 | |
| Breckinridge | 76.8 | 103 | 7 | 51 | 12 | 0 | 355 | 1.48 | .74 | 11 | Newkirk | 74.7 | 98 | 7 | 51 | 12 | 2 | 292 | 1.88 | 1.28 | 10 | |
| Cherokee | 78.1 | 104 | 7 | 54 | 19 | 0 | 393 | 1.36 | .38 | 18 | Red Rock | 75.6 | 100 | 7 | 51 | 12 | 1 | 319 | 3.31 | 1.53 | 11 | |
| Fairview | 77.6 | 103 | 7 | 57 | 19 | 0 | 378 | 2.04 | .69 | 20 | Seiling | 77.3 | 103 | 7 | 56 | 19 | 0 | 368 | 2.21 | .81 | 26 | |
| Freedom | 78.4 | 108 | 7 | 49 | 19 | 1 | 402 | 2.17 | .93 | 24 | Woodward | 77.8 | 103 | 7 | 52 | 19 | 1 | 385 | .93 | .64 | 8 | |
| Lahoma | 77.2 | 103 | 7 | 55 | 12 | 0 | 367 | 1.42 | .83 | 18 | | | | | | | | | | | | |
| NORTHEAST | | | | | | | | | | | | | | | | | | | | | | |
| Bixby | 75.6 | 100 | 7 | 52 | 12 | 2 | 321 | 3.15 | 2.20 | 8 | Pawnee | 75.2 | 97 | 7 | 51 | 12 | 2 | 307 | 1.78 | 1.13 | 8 | |
| Burbank | 74.2 | 97 | 7 | 49 | 12 | 3 | 278 | 1.47 | .63 | 8 | Porter | 75.2 | 98 | 7 | 52 | 12 | 3 | 309 | 2.77 | 1.92 | 8 | |
| Copan | 73.8 | 95 | 7 | 49 | 12 | 4 | 267 | 2.25 | 1.47 | 8 | Pryor | 73.8 | 96 | 7 | 48 | 12 | 7 | 271 | 2.96 | 1.69 | 8 | |
| Foraker | 73.9 | 98 | 7 | 48 | 12 | 5 | 273 | 1.39 | .91 | 8 | Skiatook | 74.5 | 95 | 7 | 50 | 12 | 6 | 292 | 1.67 | 1.12 | 8 | |
| Inola | 74.3 | 96 | 7 | 49 | 12 | 5 | 285 | 1.62 | 1.31 | 8 | Talala | 73.9 | 95 | 7 | 50 | 12 | 7 | 272 | 3.24 | 1.43 | 8 | |
| Jay | 73.3 | 93 | 7 | 46 | 12 | 11 | 260 | 3.17 | 2.76 | 8 | Tulsa | 75.9 | 97 | 7 | 52 | 12 | 3 | 328 | 2.53 | 1.16 | 8 | |
| Miami | 73.2 | 93 | 7 | 47 | 12 | 10 | 256 | 1.92 | 1.24 | 8 | Vinita | 72.2 | 93 | 7 | 47 | 12 | 12 | 228 | 2.94 | 2.29 | 8 | |
| Nowata | 73.7 | 95 | 7 | 46 | 12 | **** | **** | 2.33 | 1.23 | 8 | Wynona | 74.3 | 97 | 7 | 50 | 12 | 5 | 283 | 2.69 | 1.43 | 8 | |
| WEST CENTRAL | | | | | | | | | | | | | | | | | | | | | | |
| Bessie | 78.4 | 103 | 7 | 57 | 19 | 0 | 401 | .79 | .29 | 19 | Erick | 76.7 | 101 | 7 | 54 | 28 | 0 | 352 | 1.06 | .62 | 19 | |
| Butler | 77.6 | 103 | 7 | 55 | 12 | 0 | 377 | 1.20 | .50 | 20 | Putnam | 77.1 | 101 | 7 | 56 | 12 | 0 | 362 | 2.02 | .97 | 26 | |
| Camargo | 76.3 | 101 | 7 | 54 | 25 | 0 | 339 | 1.28 | .47 | 20 | Watonga | 77.3 | 102 | 7 | 58 | 19 | 0 | 368 | 3.20 | 1.04 | 20 | |
| Cheyenne | 76.2 | 99 | 7 | 56 | 19 | 0 | 336 | 1.45 | .74 | 18 | Weatherford | 77.9 | 101 | 7 | 58 | 19 | 0 | 387 | 1.34 | .70 | 26 | |
| Elk City | 77.1 | 102 | 7 | 55 | 19 | 0 | 363 | 2.90 | .88 | 8 | | | | | | | | | | | | |
| CENTRAL | | | | | | | | | | | | | | | | | | | | | | |
| Acme | 77.7 | 101 | 7 | 55 | 29 | 0 | 381 | 2.29 | 2.10 | 20 | Ninnekah | 77.1 | 100 | 7 | 57 | 29 | 0 | 363 | 2.29 | 1.84 | 20 | |
| Bowlegs | 75.9 | 100 | 7 | 54 | 13 | 0 | 327 | 3.07 | 1.33 | 8 | Norman | 77.2 | 100 | 7 | 56 | 12 | 0 | 366 | 1.98 | 1.32 | 20 | |
| Bristow | 73.9 | 96 | 8 | 49 | 12 | 5 | 272 | 2.95 | 1.24 | 8 | Oilton | 74.5 | 97 | 7 | 49 | 12 | 5 | 290 | 7.49 | 3.61 | 18 | |
| Lake Carl Blac | 76.0 | 101 | 7 | 50 | 12 | 1 | 330 | 2.60 | 1.69 | 11 | OKC East | 77.4 | 99 | 7 | 53 | 12 | 0 | 372 | 1.81 | .96 | 20 | |
| Chandler | 75.9 | 99 | 7 | 53 | 12 | 0 | 327 | 2.37 | .70 | 8 | OKC North | 78.3 | 100 | 7 | 56 | 12 | 0 | 400 | 1.10 | .82 | 20 | |
| Chickasha | 77.5 | 103 | 8 | 57 | 28 | 0 | 375 | 3.05 | 1.74 | 20 | Okemah | 75.7 | 99 | 7 | 53 | 12 | 1 | 322 | 2.81 | 1.28 | 8 | |
| El Reno | 75.4 | 99 | 8 | 50 | 12 | 0 | 312 | 1.98 | .89 | 20 | Perkins | 76.6 | 103 | 7 | 54 | 12 | 0 | 348 | 3.82 | 1.30 | 11 | |
| Guthrie | 77.7 | 101 | 7 | 53 | 12 | 0 | 380 | 2.10 | 1.14 | 20 | Shawnee | 77.0 | 101 | 7 | 52 | 12 | 0 | 360 | 1.74 | .96 | 20 | |
| Kingfisher | 78.3 | 103 | 7 | 53 | 12 | 0 | 399 | 2.52 | 2.20 | 20 | Spencer | 77.1 | 99 | 7 | 51 | 12 | 0 | 363 | .99 | .58 | 20 | |
| Marena | 76.7 | 102 | 7 | 52 | 12 | 0 | 352 | 1.96 | 1.45 | 11 | Stillwater | 76.4 | 101 | 7 | 53 | 12 | 0 | 343 | 3.54 | 1.75 | 11 | |
| Minco | 76.5 | 99 | 7 | 56 | 13 | 0 | 344 | 2.56 | 1.84 | 20 | Washington | 76.7 | 101 | 7 | 55 | 13 | 0 | 352 | 2.12 | 1.50 | 20 | |
| Marshall | 77.2 | 101 | 7 | 49 | 12 | 0 | 365 | .79 | .49 | 20 | | | | | | | | | | | | |
| EAST CENTRAL | | | | | | | | | | | | | | | | | | | | | | |
| Cookson | 73.4 | 94 | 7 | 47 | 12 | 10 | 261 | 3.09 | 2.10 | 8 | Sallisaw | 75.4 | 96 | 7 | 51 | 12 | 2 | 316 | 2.32 | 1.52 | 8 | |
| Eufaula | 76.1 | 97 | 7 | 54 | 12 | 0 | 332 | 5.89 | 4.82 | 8 | Stigler | 74.4 | 95 | 7 | 52 | 12 | 2 | 284 | 5.03 | 4.19 | 8 | |
| Haskell | 74.7 | 97 | 7 | 50 | 12 | 5 | 295 | 3.28 | 2.28 | 8 | Stuart | 76.1 | 99 | 7 | 53 | 12 | 0 | 333 | 4.00 | 1.83 | 8 | |
| Hectorville | 75.8 | 99 | 7 | 54 | 12 | 1 | 324 | 4.26 | 2.56 | 8 | Tahlequah | **** | *** | *** | *** | *** | **** | **** | 2.59 | 1.10 | 8 | |
| Holdenville | 76.0 | 99 | 8 | 52 | 12 | 1 | 331 | 3.41 | 1.99 | 8 | Webbers Falls | **** | *** | *** | *** | *** | **** | **** | 1.76 | 1.08 | 8 | |
| McAlester | 75.7 | 97 | 7 | 54 | 12 | 0 | 322 | 3.70 | 2.01 | 8 | Westville | 73.4 | 93 | 8 | 50 | 12 | 9 | 262 | 1.66 | .98 | 8 | |
| Okmulgee | 74.9 | 98 | 7 | 50 | 12 | 2 | 299 | 3.87 | 1.29 | 8 | | | | | | | | | | | | |
| SOUTHWEST | | | | | | | | | | | | | | | | | | | | | | |
| Altus | 79.1 | 101 | 7 | 58 | 29 | 0 | 422 | .45 | .15 | 19 | Hollis | 78.9 | 102 | 7 | 59 | 12 | 0 | 418 | .43 | .32 | 26 | |
| Apache | 77.2 | 100 | 7 | 58 | 13 | 0 | 365 | 1.68 | 1.28 | 20 | Mangum | 77.5 | 100 | 7 | 55 | 25 | 0 | 374 | .47 | .32 | 26 | |
| Fort Cobb | 77.3 | 102 | 7 | 58 | 13 | 0 | 369 | 2.42 | 1.10 | 19 | Medicine Park | 78.9 | 102 | 8 | 62 | 12 | 0 | 418 | .65 | .45 | 20 | |
| Grandfield | 80.1 | 103 | 8 | 59 | 29 | 0 | 454 | .60 | .15 | 18 | Tipton | 80.0 | 103 | 7 | 57 | 29 | 0 | 451 | .98 | .70 | 18 | |
| Hinton | 77.2 | 103 | 7 | 57 | 12 | 0 | 366 | 1.73 | .57 | 20 | Walters | 79.1 | 103 | 8 | 59 | 13 | 0 | 423 | 1.25 | 1.14 | 20 | |
| Hobart | 78.9 | 102 | 8 | 58 | 28 | **** | **** | .71 | .34 | 8 | | | | | | | | | | | | |
| SOUTH CENTRAL | | | | | | | | | | | | | | | | | | | | | | |
| Ada | 76.3 | 101 | 8 | 53 | 12 | 1 | 340 | 4.06 | 2.21 | 20 | Lane | 76.7 | 100 | 7 | 55 | 26 | 0 | 351 | 2.67 | 2.13 | 9 | |
| Ardmore | 78.4 | 99 | 8 | 56 | 13 | 0 | 401 | 1.45 | .70 | 20 | Madiill | 78.9 | 100 | 7 | 58 | 28 | 0 | 416 | 1.02 | .59 | 20 | |
| Burneyville | 78.7 | 101 | 7 | 56 | 27 | 0 | 410 | 1.24 | .68 | 20 | Newport | 78.8 | 101 | 7 | 55 | 13 | 0 | 414 | 1.67 | .87 | 20 | |
| Byars | 77.0 | 99 | 7 | 54 | 12 | 0 | 361 | 2.92 | 2.08 | 20 | Pauls Valley | 77.7 | 100 | 6 | 57 | 13 | 0 | 380 | 2.53 | 1.46 | 20 | |
| Centrahoma | 76.3 | 100 | 7 | 53 | 13 | 1 | 338 | 3.82 | 1.86 | 8 | Ringling | 78.4 | 101 | 8 | 59 | 12 | 0 | 402 | 2.34 | .91 | 20 | |
| Durant | 78.4 | 100 | 7 | 58 | 13 | 0 | 403 | 1.45 | .62 | 19 | Sulphur | 76.9 | 99 | 8 | 57 | 12 | 0 | 358 | 3.37 | 1.22 | 8 | |
| Fittstown | 76.0 | 99 | 7 | 55 | 13 | 0 | 331 | 2.26 | .84 | 8 | Tishomingo | 77.1 | 100 | 8 | 55 | 13 | 0 | 362 | 1.21 | .37 | 9 | |
| Ketchum Ranch | 78.4 | 100 | 7 | 58 | 28 | 0 | 402 | 1.18 | .77 | 20 | Waurika | 79.2 | 102 | 8 | 58 | 28 | 0 | 425 | 1.03 | 1.00 | 20 | |
| SOUTHEAST | | | | | | | | | | | | | | | | | | | | | | |
| Antlers | 75.9 | 99 | 7 | 53 | 12 | 0 | 326 | 2.70 | 2.04 | 9 | Idabel | 77.8 | 99 | 7 | 53 | 13 | 0 | 384 | .38 | .37 | 9 | |
| Broken Bow | 76.5 | 98 | 7 | 51 | 13 | 0 | 345 | .45 | .34 | 9 | Mt Herman | 75.9 | 95 | 5 | 53 | 12 | 0 | 328 | 3.40 | 1.26 | 9 | |
| Clayton | 75.7 | 97 | 6 | 52 | 12 | 0 | 320 | 3.81 | 1.51 | 8 | Talihina | 75.7 | 99 | 6 | 52 | 12 | 1 | 321 | 5.40 | 3.10 | 8 | |
| Cloudy | 77.2 | 100 | 6 | 54 | 13 | 0 | 365 | 1.49 | .83 | 9 | Wilburton | 75.3 | 96 | 7 | 52 | 12 | 1 | 310 | 4.09 | 2.54 | 8 | |
| Hugo | 77.8 | 98 | 6 | 57 | 13 | 0 | 385 | 3.82 | 2.96 | 9 | Wister | 74.0 | 96 | 5 | 50 | 12 | 2 | 274 | 2.42 | 1.72 | 8 | |

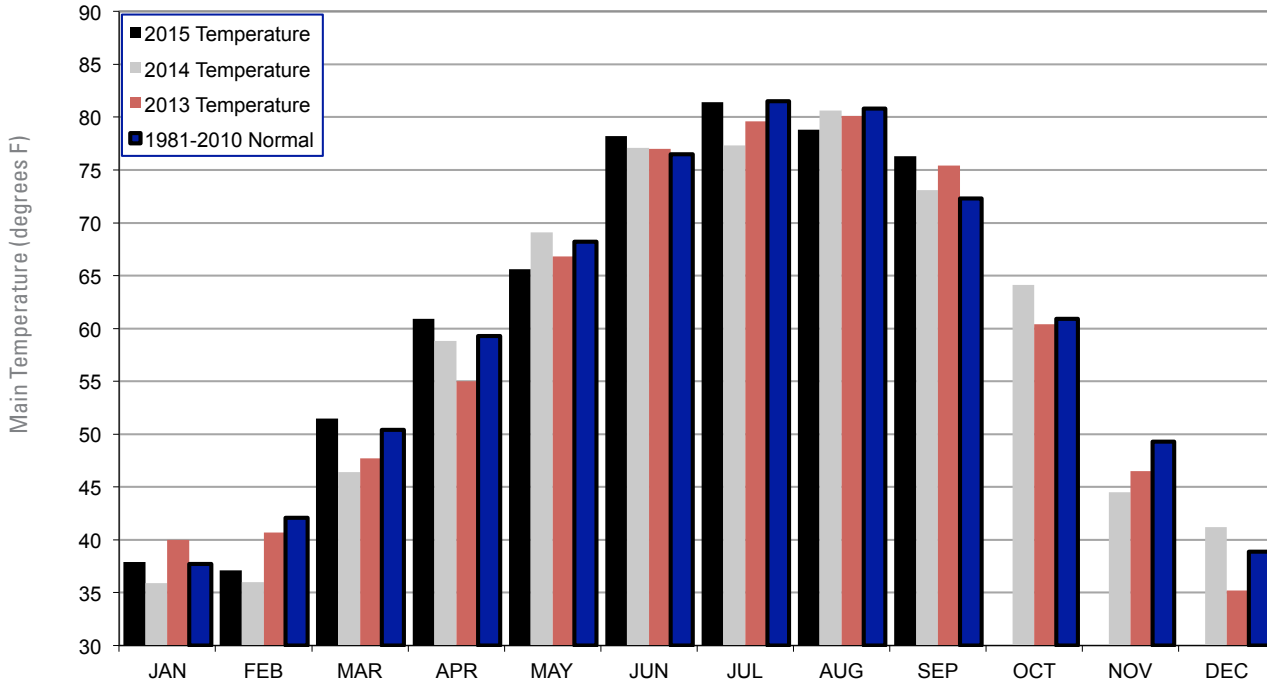
2013, 2014 AND 2015 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



September 2015 Mesonet Precipitation Comparison

| Climate Division | Precipitation (inches) | Departure from Normal (inches) | Rank since 1895 | Wettest on Record (Year) | Driest on Record (Year) | Sep-14 |
|------------------|------------------------|--------------------------------|-----------------|--------------------------|-------------------------|--------|
| Panhandle | 0.94 | -0.88 | 28th Driest | 5.03 (1925) | 0.04 (1956) | 1.70 |
| North Central | 1.85 | -0.99 | 37th Driest | 7.43 (1923) | 0.07 (2000) | 1.67 |
| Northeast | 2.41 | -2.09 | 35th Driest | 12.12 (1986) | 0.29 (1948) | 3.76 |
| West Central | 1.69 | -1.06 | 38th Driest | 8.68 (1923) | 0.06 (1956) | 1.79 |
| Central | 2.52 | -1.34 | 48th Driest | 9.81 (1945) | 0.21 (1956) | 2.49 |
| East Central | 3.45 | -1.22 | 53rd Driest | 10.16 (1993) | 0.24 (1948) | 3.80 |
| Southwest | 1.03 | -1.95 | 21st Driest | 8.48 (1936) | 0.04 (1939) | 1.40 |
| South Central | 2.13 | -1.80 | 40th Driest | 9.69 (1936) | 0.13 (1956) | 2.32 |
| Southeast | 2.80 | -1.47 | 44th Driest | 11.97 (1974) | 0.57 (1931) | 4.31 |
| Statewide | 2.10 | -1.43 | 33rd Driest | 7.77 (1945) | 0.25 (1956) | 2.57 |

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



September 2015 Mesonet Temperature Comparison

| Climate Division | Average Temp (F) | Departure from Normal (F) | Rank since 1895 | Hottest on Record (Year) | Coldest on Record (Year) | Sep-14 (F) |
|------------------|------------------|---------------------------|-----------------|--------------------------|--------------------------|------------|
| Panhandle | 74.9 | 5.5 | 6th Warmest | 76.9 (1931) | 62.3 (1974) | 69.8 |
| North Central | 76.9 | 5.0 | 9th Warmest | 80.7 (1931) | 63.6 (1974) | 72.8 |
| Northeast | 74.1 | 2.5 | 37th Warmest | 79.8 (1939) | 63.9 (1974) | 71.9 |
| West Central | 77.2 | 5.2 | 7th Warmest | 80.2 (1931) | 64.5 (1974) | 73.3 |
| Central | 76.6 | 3.8 | 17th Warmest | 81.7 (1931) | 64.9 (1974) | 74.2 |
| East Central | 75.1 | 2.5 | 40th Warmest | 81.8 (1939) | 65.1 (1974) | 72.8 |
| Southwest | 78.3 | 4.4 | 13th Warmest | 81.6 (1931) | 66.2 (1974) | 75.4 |
| South Central | 77.6 | 3.5 | 22nd Warmest | 81.8 (1939) | 66.6 (1974) | 75.1 |
| Southeast | 76.2 | 3.5 | 21st Warmest | 81.1 (1939) | 65.8 (1974) | 73.9 |
| Statewide | 76.3 | 4.0 | 15th Warmest | 80.2 (1931) | 64.7 (1974) | 73.2 |

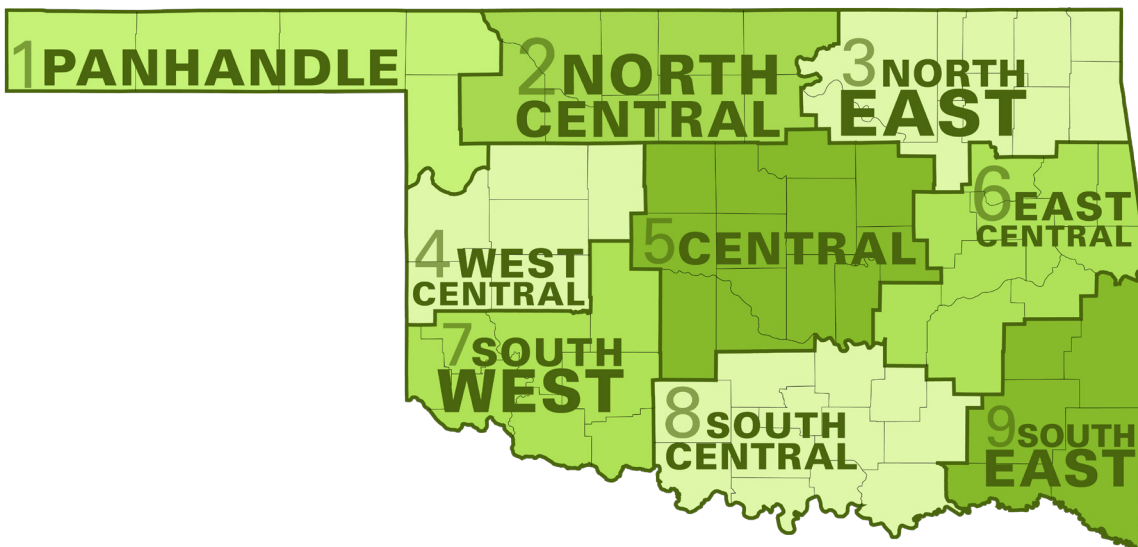
RECORD EVENT REPORTS AUGUST 2015

No record events.

MESONET EXTREMES FOR SEPTEMBER 2015

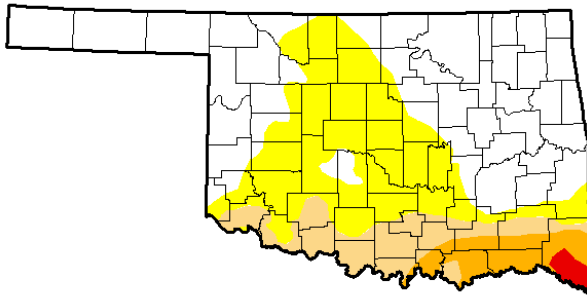
| Climate Division | High Temp (F) | Day | Station | Low Temp (F) | Day | Station | High Monthly Rainfall (inches) | Station | High Daily Rainfall (inches) | Day | Station |
|------------------|---------------|-----|-------------|--------------|------|---------|--------------------------------|------------|------------------------------|------|------------|
| Panhandle | 104 | 7th | Buffalo | 42 | 19th | Kenton | 2.20 | Boise City | 0.89 | 23rd | Boise City |
| North Central | 108 | 7th | Freedom | 49 | 19th | Freedom | 3.31 | Red Rock | 1.69 | 8th | Blackwell |
| Northeast | 100 | 7th | Bixby | 46 | 12th | Jay | 3.24 | Talala | 2.76 | 8th | Jay |
| West Central | 103 | 7th | Bessie | 54 | 28th | Erick | 3.20 | Watonga | 1.04 | 20th | Watonga |
| Central | 103 | 7th | Kingfisher | 49 | 12th | Bristow | 7.49 | Oilton | 3.61 | 18th | Oilton |
| East Central | 99 | 8th | Holdenville | 47 | 12th | Cookson | 5.89 | Eufaula | 4.82 | 8th | Eufaula |
| Southwest | 103 | 8th | Grandfield | 55 | 25th | Mangum | 2.42 | Fort Cobb | 1.28 | 20th | Apache |
| South Central | 102 | 8th | Waurika | 53 | 12th | Ada | 4.06 | Ada | 2.21 | 20th | Ada |
| Southeast | 100 | 6th | Cloudy | 50 | 12th | Wister | 5.40 | Talihina | 3.10 | 8th | Talihina |
| Statewide | 108 | 7th | Freedom | 42 | 19th | Kenton | 7.49 | Oilton | 4.82 | 8th | Eufaula |

Oklahoma Climate Divisions



SEPTEMBER 2015 DROUGHT MONITOR

U.S. Drought Monitor Oklahoma



September 29, 2015

(Released Thursday, Oct. 1, 2015)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--|-------|-------|-------|-------|-------|------|
| Current | 52.60 | 47.40 | 16.79 | 6.37 | 0.97 | 0.00 |
| Last Week 9/22/2015 | 52.80 | 47.20 | 10.85 | 3.30 | 0.69 | 0.00 |
| 3 Months Ago 6/30/2015 | 98.28 | 1.72 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 1/29/2014 | 25.63 | 74.37 | 62.03 | 40.84 | 21.74 | 5.70 |
| Start of Water Year 9/30/2014 | 8.55 | 91.45 | 73.31 | 58.13 | 20.92 | 4.64 |
| One Year Ago 9/30/2014 | 8.55 | 91.45 | 73.31 | 58.13 | 20.92 | 4.64 |

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Eric Luebehusen

U.S. Department of Agriculture



<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 differs 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/wwwcgi.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/>



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