

# OKLAHOMA MONTHLY CLIMATE SUMMARY

## NOVEMBER 2005



November was nearly devoid of precipitation – the 4th driest on record, yet also either cursed or blessed with an abundance of warmth. Warm weather is nearly always welcome during the cool months, but when it combines with droughty conditions and winds gusting to over 40 mph, it becomes a bit less popular. Dangerous wildfire conditions existed for a significant duration during November due to the combination of warmth, dryness and wind. Thirteen records for warmth were tied or broken, enabling the month to finish as the 11th warmest on record. The lack of severe weather was definitely a blessing, however; while the precipitation from thunderstorms would have been welcome, the lightning-ignited fires would not. Still, a few bouts of severe weather did occur, but were few and far between.

### Precipitation

November rains are not known for relinquishing many droughts, and the 2005 version did its best to make the arid conditions worse. Thirty-nine of 116 Oklahoma Mesonet sited recorded a trace or less of precipitation for the month, while not a drop of rain was reported from the southwest. Only three sites managed to record more than an inch of rainfall – Clayton, Talihina, and Wister, otherwise the statewide-averaged precipitation total would be far less than the 0.18 inches which occurred. Both the southwest and east central sections of the state suffered through their driest November on record, while four other regions ranked within the top-10 driest. Most disastrous was the southeast’s four-inch deficit, which compounded an already severe drought situation. The 9th driest fall in that area helped the year-to-date deficit to bulge to nearly 20 inches, the 3rd driest such period on record for the southeast. East central Oklahoma has fared little better at nearly 14 inches below normal.

### Temperature

November’s warmth was not much of a surprise considering the wealth of southerly winds and dearth of precipitation. Most of the state hovered somewhere around four degrees above normal, with the statewide-averaged temperature following suit. The 93 degrees recorded at both Butler and Mangum on the 3rd falls just two degrees short of the highest temperature ever recorded during November, which occurred at Coalgate on November 1st, 1937. November’s heat allowed the

year-to-date statewide-averaged temperature to remain nearly one and one-half degrees above normal, the 17th warmest such period on record.

| <b>November 2005 Statewide Extremes</b> |          |                   |          |
|---|----------|-------------------|----------|
| Description                             | Extreme  | Station           | Date     |
| High Temperature                        | 93°F     | Butler, Mangum    | Nov 3rd  |
| Low Temperature                         | 10°F     | Vinita            | Nov 30th |
| High Precipitation                      | 2.33 in. | Talihina          |          |
| Low Precipitation                       | 0.00 in. | Numerous Stations |          |

### November Daily Highlights

**November 1-4:** The month’s first four days were dominated by spring-like conditions. Unseasonably warm temperatures and sunny skies were marred only by the strong southerly winds gusting over 40 mph throughout the period. Oklahoma City eclipsed records for both maximum high and maximum low temperatures on the 4th with readings of 86 degrees and 60 degrees, respectively. Parts of southern Oklahoma eclipsed 90 degrees as well.

**November 5-11:** A cold front moved into northern Oklahoma overnight on the 5th, cooling temperatures and calming winds in that area. High temperatures behind the front remained above normal however, with areas south of the front reaching near-record levels. After the frontal passage, high pressure settled in once again on the 6th, providing more pleasant weather. The strong winds and warm weather returned on the 7th. Near record highs, low humidities, and winds gusting over 40 for the next several days created extreme fire danger conditions. A strong cold front on the 9th dropped temperatures to more reasonable levels for a couple of days before strong southerly winds returned on the 11th, allowing temperatures to soar once again into the 80s. Eight record high temperatures were set in the state from the 5th through the 8th.

**November 12-15:** A strong upper-level low pressure system moving eastward across Colorado provided the impulse needed for a few showers and thunderstorms. Most of the rainfall fell in eastern Oklahoma with the Oklahoma Mesonet site at Talihina leading the way, recording over an inch. Precipitation totals dropped dramatically after that, however, with the Mesonet site at Clayton reporting just over one-half of an inch. There were various reports of severe winds and hail with the storms, but nothing widespread. A cold front trailing the upper-level system then swept through the state on the 13th with gusty north winds and high temperatures 10-20 degrees cooler than the 12th. Another cold front passed through the state on the 15th, generating more thunderstorms. Rainfall amounts were once again on the order of on-half of an inch. Temperatures dropped into the 40s and 50s after the front's passage, and non-thunderstorm winds gusted up to 60 mph.

**November 16-25:** The next 10 days were generally dry and warm, punctuated by occasional cold frontal passages. The warm weather and low humidities combined with those strong winds to create extreme fire danger throughout the period. High temperatures fluctuated with the fronts from 60s to 80s.

**November 26-30:** An upper-level storm moving though south Texas helped to generate a few light showers in the rain-parched southeast on the 26th while also kicking winds up to over 40 mph. A deep low pressure system moved across central Kansas on the 27th which increased the winds further. Damaging wind gusts of over 60 mph were reported in western Oklahoma, along with blowing dust. A few thunderstorms struck in the north, but rainfall amounts were once again on the meager side. A front being dragged along by the upper-level low raced through the state on the 28th, swinging winds around to the northwest at over 35 mph, with gusts to 50 mph. The winds combined with temperatures in the 30s and 40s to create wind chill values in the teens early on the 29th. The month ended with familiar conditions as gusty winds and low humidities combined to create extreme fire conditions across the state.

| <b>November 2005 Statewide Statistics</b> |                |                |                         |
|---|----------------|----------------|-------------------------|
| <b>Temperature</b>                        |                |                |                         |
|   | <b>Average</b> | <b>Depart.</b> | <b>Rank (1892-2005)</b> |
| Month (Nov)                               | 52.4°F         | 4.1°F          | 11th Warmest            |
| Season-to-Date (Sep-Nov)                  | 63.4°F         | 2.8°F          | 10th Warmest            |
| Year-to-Date (Jan-Nov)                    | 63.0°F         | 1.4°F          | 17th Warmest            |
| <b>Precipitation</b>                      |                |                |                         |
|   | <b>Total</b>   | <b>Depart.</b> | <b>Rank (1892-2005)</b> |
| Month (Nov)                               | 0.18 in.       | -2.64 in.      | 4th Driest              |
| Season-to-Date (Sep-Nov)                  | 4.42 in.       | -5.59 in.      | 13th Driest             |
| Year-to-Date (Jan-Nov)                    | 26.68 in.      | -7.99 in.      | 20th Driest             |
| Depart. = Departure from 30-year normal   |                |                |                         |

## ***November 2005 Severe Weather***

### ***Significant Tornadoes (F2 or greater)***

No significant tornadoes reported in the state.

### ***Hail (2 inches in diameter or greater)***

No hail greater than 2 inches in diameter reported in the state.

### ***Wind Gusts (70 mph or greater)***

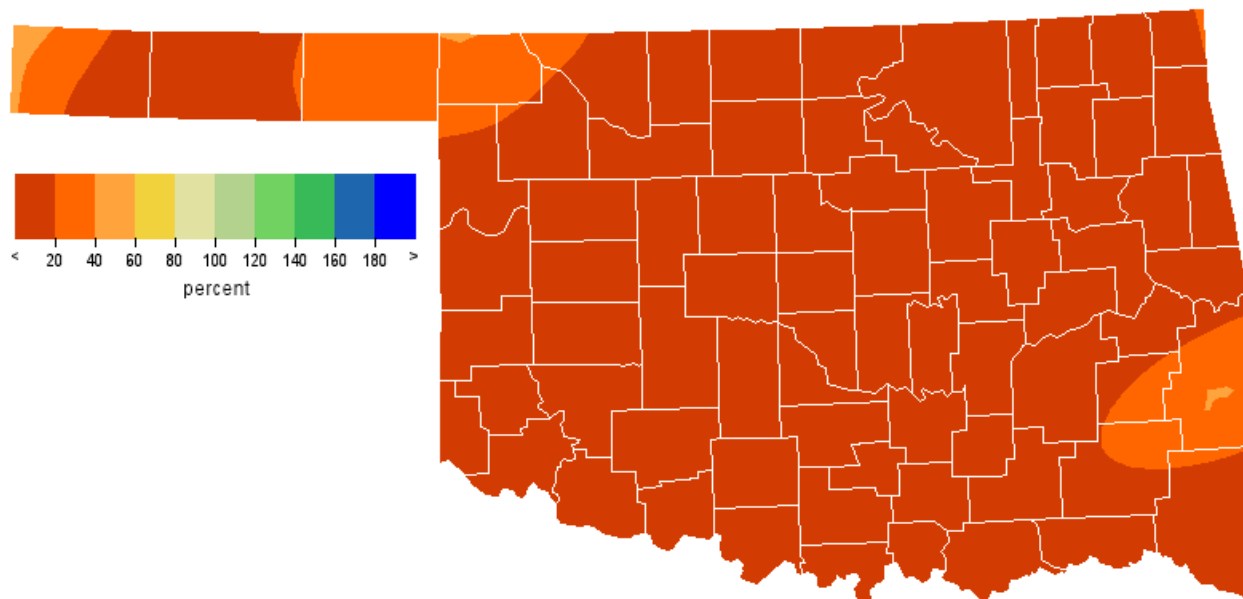
No wind gusts 70 mph or greater reported in the state.

### ***Flooding***

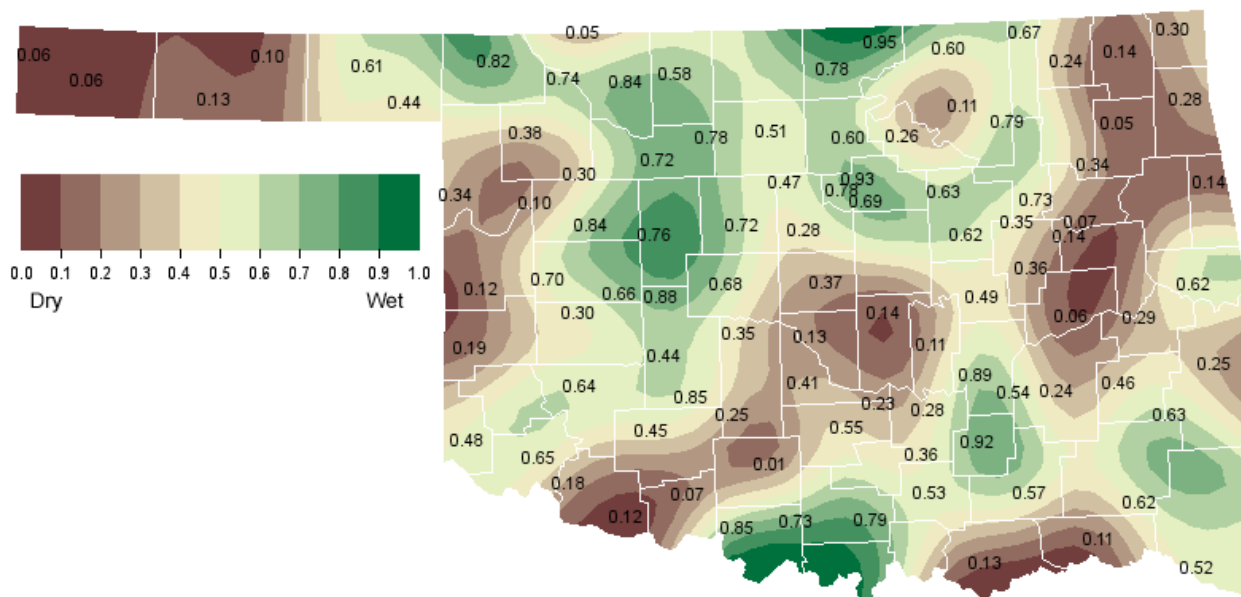
No flooding events reported in the state.



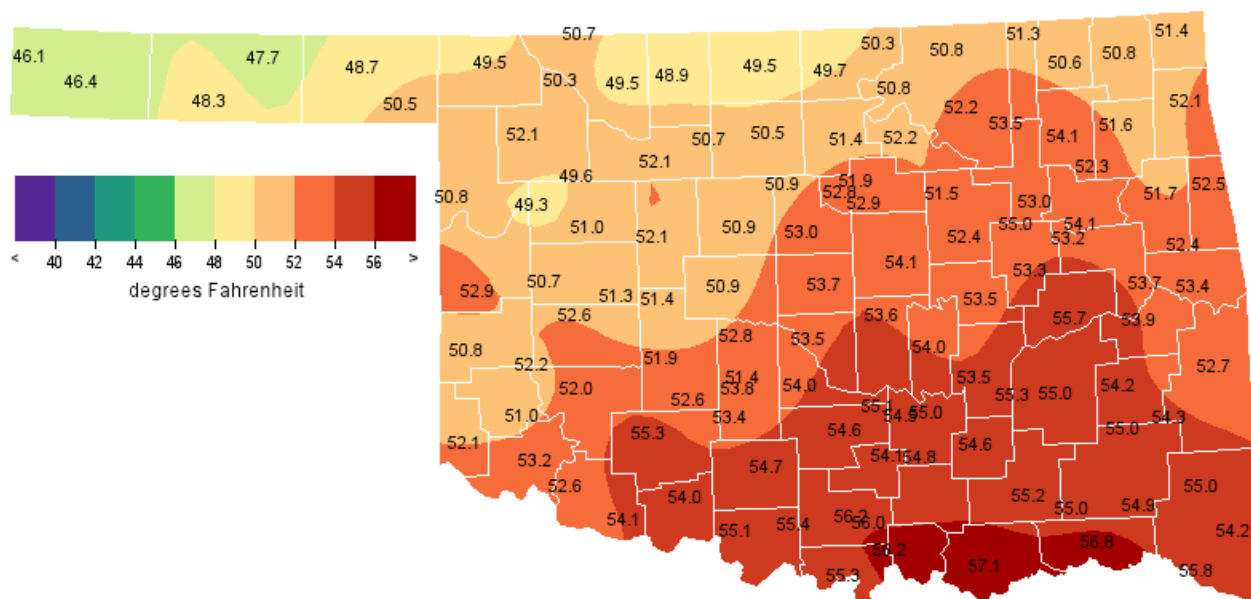
## November 2005 Percent of Normal Precipitation



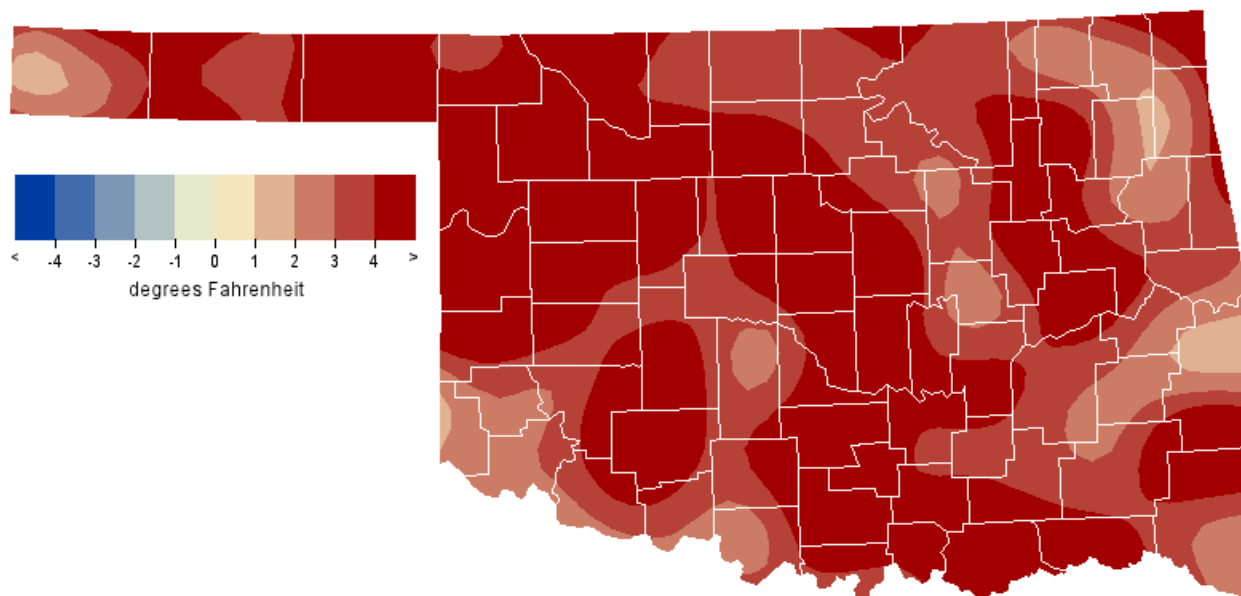
## November 2005 Average Soil Moisture at 25cm



## November 2005 Average Temperature



## November 2005 Departure from Normal Temperature



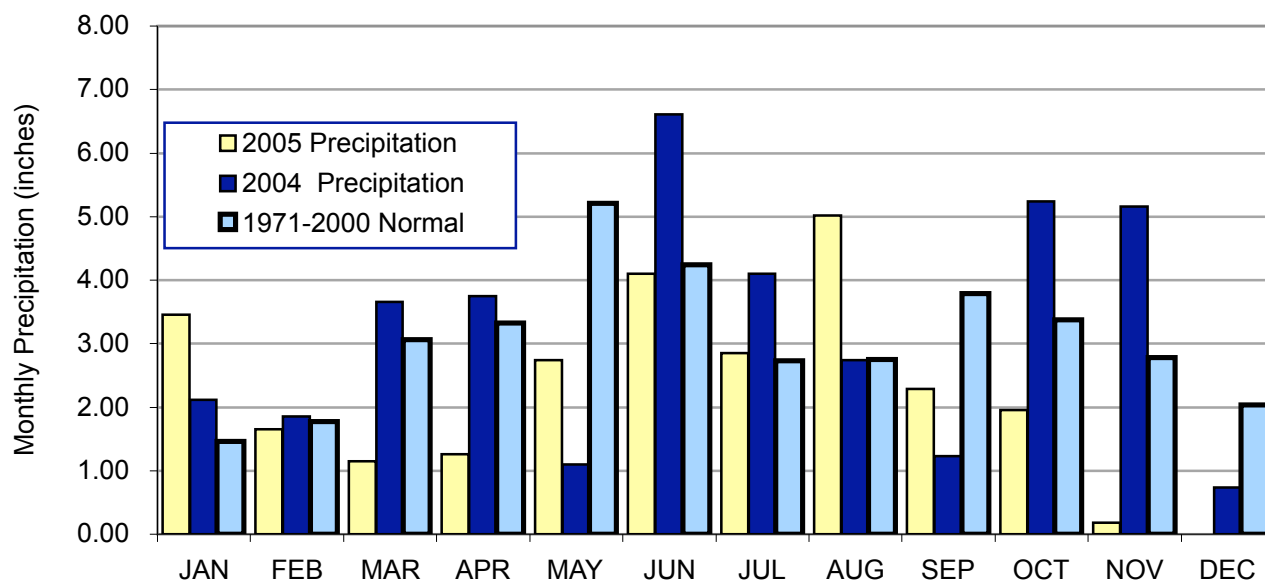
# Mesonet Monthly Summary for November 2005

| NAME                 | MEAN |      | HIGH |      | LOW |      | TOT  |      | HIGH | DAY | NAME          | MEAN  |       | HIGH |      | LOW  |      | TOT  |      | HIGH | DAY |
|----------------------|------|------|------|------|-----|------|------|------|------|-----|---------------|-------|-------|------|------|------|------|------|------|------|-----|
|                      | TEMP | TEMP | TEMP | TEMP | DAY | DAY  | HDD  | CDD  |      |     |               | PPT   | 24-HR | TEMP | TEMP | TEMP | TEMP | DAY  | DAY  |      |     |
| <b>PANHANDLE</b>     |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Arnett               | 51.1 | 90   | 3    | 19   | 16  | **** | **** | .11  | .10  | 27  | Goodwell      | 48.3  | 85    | 2    | 13   | 16   | 504  | 3    | .12  | .12  | 27  |
| Beaver               | 48.8 | 87   | 3    | 14   | 16  | 495  | 8    | .27  | .25  | 27  | Hooker        | 47.7  | 85    | 11   | 13   | 16   | 521  | 1    | .12  | .12  | 27  |
| Boise City           | 46.4 | 84   | 2    | 11   | 16  | 557  | 0    | .13  | .13  | 27  | Kenton        | 46.1  | 83    | 11   | 11   | 16   | 567  | 0    | .29  | .29  | 27  |
| Buffalo              | 49.5 | 85   | 11   | 19   | 16  | 470  | 5    | .53  | .53  | 27  | Slapout       | 50.7  | 89    | 3    | 20   | 16   | **** | **** | .31  | .30  | 27  |
| <b>NORTH CENTRAL</b> |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Blackwell            | 49.7 | 83   | 4    | 16   | 30  | 467  | 7    | .00  | .00  | 1   | Medford       | 49.4  | 82    | 4    | 18   | 30   | 474  | 6    | .16  | .16  | 27  |
| Breckinridge         | 50.4 | 85   | 4    | 18   | 30  | 450  | 13   | .00  | .00  | 1   | Newkirk       | 50.3  | 83    | 7    | 16   | 30   | 455  | 13   | .00  | .00  | 1   |
| Cherokee             | 48.9 | 82   | 3    | 16   | 30  | 488  | 4    | .01  | .01  | 27  | Red Rock      | 51.4  | 87    | 4    | 17   | 30   | 432  | 22   | .02  | .01  | 1   |
| Fairview             | 52.1 | 90   | 4    | 21   | 30  | 409  | 22   | .00  | .00  | 1   | Seiling       | 50.0  | 91    | 3    | 17   | 16   | **** | **** | .05  | .05  | 27  |
| Freedom              | 50.3 | 90   | 3    | 19   | 16  | 448  | 7    | .30  | .30  | 27  | Woodward      | 52.1  | 91    | 3    | 19   | 16   | 417  | 30   | .20  | .20  | 27  |
| Lahoma               | 50.6 | 85   | 4    | 19   | 30  | 441  | 10   | .07  | .06  | 28  | Alva          | ***** | ***   | ***  | ***  | ***  | **** | **** | .13  | .12  | 27  |
| May Ranch            | 50.7 | 87   | 3    | 21   | 17  | 440  | 10   | .32  | .31  | 27  |               |       |       |      |      |      |      |      |      |      |     |
| <b>NORTHEAST</b>     |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Bixby                | 53.0 | 85   | 7    | 16   | 30  | 382  | 21   | .01  | .01  | 2   | Pryor         | 51.6  | 84    | 7    | 11   | 30   | 425  | 24   | .20  | .18  | 14  |
| Burbank              | 50.2 | 85   | 7    | 15   | 30  | **** | **** | .00  | .00  | 4   | Skiatook      | 53.5  | 86    | 7    | 21   | 30   | 371  | 28   | .80  | .58  | 14  |
| Copan                | 51.2 | 85   | 7    | 17   | 30  | 429  | 16   | .32  | .25  | 27  | Vinita        | 50.8  | 85    | 7    | 10   | 30   | 446  | 20   | .46  | .23  | 15  |
| Foraker              | 50.8 | 85   | 7    | 14   | 30  | 447  | 19   | **** | .05  | 15  | Wynona        | 52.2  | 86    | 7    | 15   | 30   | 407  | 24   | .08  | .07  | 15  |
| Jay                  | 52.1 | 83   | 7    | 15   | 30  | 410  | 22   | .78  | .45  | 15  | Porter        | 54.0  | 84    | 8    | 17   | 30   | 353  | 24   | .01  | .01  | 20  |
| Miami                | 51.4 | 83   | 7    | 15   | 30  | 430  | 22   | .77  | .55  | 15  | Inola         | 52.3  | 85    | 7    | 14   | 30   | 399  | 18   | .01  | .01  | 19  |
| Nowata               | 50.6 | 85   | 7    | 11   | 30  | 452  | 19   | .53  | .39  | 14  | Claremore     | 54.1  | 87    | 7    | 20   | 30   | 357  | 29   | .62  | .52  | 14  |
| Pawnee               | 52.2 | 85   | 4    | 17   | 30  | 407  | 21   | .10  | .10  | 14  |               |       |       |      |      |      |      |      |      |      |     |
| <b>WEST CENTRAL</b>  |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Bessie               | 52.5 | 92   | 3    | 21   | 16  | 399  | 24   | .02  | .02  | 27  | Putnam        | 51.0  | 91    | 3    | 21   | 16   | 435  | 14   | .07  | .07  | 27  |
| Butler               | 50.6 | 93   | 3    | 18   | 16  | 452  | 21   | .04  | .04  | 27  | Retrop        | 52.2  | 92    | 3    | 20   | 16   | 406  | 23   | .02  | .02  | 27  |
| Camargo              | 49.7 | 93   | 3    | 18   | 16  | **** | **** | .09  | .09  | 27  | Watonga       | 52.1  | 85    | 4    | 22   | 30   | 403  | 16   | .00  | .00  | 1   |
| Cheyenne             | 52.9 | 90   | 3    | 22   | 16  | 386  | 23   | .10  | .10  | 27  | Weatherford   | 51.3  | 87    | 3    | 21   | 16   | 424  | 12   | .00  | .00  | 1   |
| Erick                | 50.8 | 93   | 3    | 17   | 16  | 441  | 16   | .04  | .04  | 27  |               |       |       |      |      |      |      |      |      |      |     |
| <b>CENTRAL</b>       |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Bowlegs              | 54.0 | 84   | 8    | 17   | 30  | 350  | 20   | .03  | .03  | 12  | Okemah        | 53.5  | 83    | 8    | 18   | 30   | 362  | 18   | .12  | .08  | 12  |
| Bristow              | 52.4 | 85   | 7    | 13   | 30  | 399  | 21   | **** | **** | *** | Perkins       | 52.9  | 84    | 4    | 21   | 30   | 384  | 21   | .01  | .01  | 1   |
| Chandler             | 54.0 | 85   | 7    | 20   | 30  | 359  | 30   | .01  | .01  | 14  | Shawnee       | 53.6  | 83    | 7    | 23   | 30   | 366  | 23   | .01  | .01  | 12  |
| Chickasha            | 51.4 | 84   | 4    | 15   | 30  | 425  | 18   | .00  | .00  | 1   | Spencer       | 54.4  | 84    | 4    | 20   | 16   | **** | **** | .03  | .03  | 12  |
| El Reno              | 50.3 | 88   | 4    | 14   | 30  | **** | **** | .00  | .00  | 1   | Stillwater    | 51.9  | 86    | 4    | 16   | 30   | 415  | 23   | .00  | .00  | 1   |
| Guthrie              | 53.0 | 86   | 4    | 22   | 16  | 385  | 26   | .00  | .00  | 1   | Washington    | 54.0  | 84    | 7    | 21   | 30   | 352  | 22   | .00  | .00  | 1   |
| Kingfisher           | 50.9 | 87   | 4    | 17   | 30  | 439  | 16   | .00  | .00  | 1   | Ninnekah      | 52.9  | 86    | 4    | 18   | 30   | **** | **** | **** | .00  | 3   |
| Marena               | 52.7 | 86   | 4    | 19   | 30  | 391  | 23   | .00  | .00  | 1   | Acme          | 53.4  | 85    | 4    | 23   | 16   | 372  | 23   | .00  | .00  | 1   |
| Minco                | 52.7 | 85   | 4    | 23   | 16  | 386  | 16   | .00  | .00  | 1   | Norman        | 53.5  | 83    | 7    | 22   | 30   | 368  | 22   | .00  | .00  | 1   |
| Oilton               | 51.5 | 86   | 7    | 14   | 30  | 427  | 21   | .04  | .04  | 14  | Marshall      | 51.0  | 87    | 4    | 18   | 30   | 442  | 21   | .03  | .03  | 28  |
| <b>EAST CENTRAL</b>  |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Calvin               | 53.5 | 83   | 7    | 15   | 30  | 364  | 18   | .04  | .03  | 26  | Stigler       | 53.8  | 84    | 8    | 15   | 30   | 365  | 29   | .09  | .07  | 26  |
| Cookson              | 52.3 | 82   | 7    | 15   | 30  | 401  | 20   | .10  | .04  | 14  | Stuart        | 55.3  | 83    | 8    | 18   | 30   | 321  | 29   | .02  | .02  | 26  |
| Eufaula              | 55.6 | 85   | 8    | 20   | 30  | 315  | 33   | .18  | .16  | 26  | Tahlequah     | 51.7  | 82    | 8    | 14   | 30   | 418  | 18   | .14  | .06  | 14  |
| Haskell              | 53.2 | 84   | 8    | 16   | 30  | 375  | 20   | .04  | .02  | 15  | Webbers Falls | 53.7  | 86    | 8    | 15   | 30   | 367  | 29   | .01  | .01  | 26  |
| McAlester            | 54.9 | 83   | 7    | 19   | 30  | 333  | 30   | .08  | .05  | 26  | Westville     | 52.4  | 80    | 7    | 19   | 30   | 392  | 14   | .25  | .13  | 15  |
| Okmulgee             | 53.3 | 84   | 8    | 13   | 30  | 378  | 26   | .01  | .01  | 19  | Hectorville   | 55.0  | 85    | 7    | 20   | 30   | 330  | 32   | .07  | .05  | 12  |
| Sallisaw             | 53.4 | 84   | 7    | 17   | 30  | 368  | 21   | .30  | .13  | 12  |               |       |       |      |      |      |      |      |      |      |     |
| <b>SOUTHWEST</b>     |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Altus                | 53.2 | 91   | 3    | 22   | 16  | 374  | 21   | .00  | .00  | 1   | Medicine Park | 55.3  | 87    | 4    | 27   | 16   | 313  | 23   | .00  | .00  | 1   |
| Fort Cobb            | 51.9 | 86   | 4    | 21   | 16  | 405  | 11   | .00  | .00  | 1   | Tipton        | 52.5  | 87    | 4    | 21   | 29   | 388  | 14   | .00  | .00  | 1   |
| Hinton               | 51.4 | 86   | 4    | 20   | 16  | 422  | 15   | **** | .00  | 1   | Walters       | 54.0  | 87    | 4    | 22   | 30   | 349  | 19   | .00  | .00  | 1   |
| Hobart               | 52.0 | 90   | 3    | 21   | 16  | 407  | 18   | .00  | .00  | 1   | Apache        | 52.6  | 85    | 4    | 22   | 30   | 388  | 16   | .00  | .00  | 1   |
| Hollis               | 52.2 | 92   | 3    | 20   | 29  | 402  | 17   | .00  | .00  | 1   | Grandfield    | 54.1  | 88    | 8    | 23   | 16   | 348  | 22   | .00  | .00  | 1   |
| Mangum               | 51.0 | 93   | 3    | 18   | 16  | 430  | 10   | .00  | .00  | 1   |               |       |       |      |      |      |      |      |      |      |     |
| <b>SOUTH CENTRAL</b> |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Ada                  | 55.0 | 84   | 8    | 20   | 30  | 331  | 30   | .10  | .08  | 12  | Ringling      | 55.4  | 86    | 7    | 24   | 16   | 318  | 29   | **** | **** | *** |
| Burneyville          | 55.3 | 87   | 5    | 18   | 30  | 331  | 39   | .00  | .00  | 1   | Sulphur       | 54.1  | 83    | 8    | 17   | 30   | 355  | 27   | .10  | .10  | 12  |
| Byars                | 55.2 | 84   | 8    | 24   | 16  | 326  | 31   | .08  | .08  | 12  | Tishomingo    | ***** | ***   | ***  | ***  | ***  | **** | **** | .16  | .12  | 26  |
| Centrahoma           | 54.6 | 84   | 7    | 16   | 30  | 341  | 29   | .37  | .33  | 12  | Waurika       | 55.0  | 87    | 7    | 23   | 30   | 325  | 26   | .00  | .00  | 1   |
| Durant               | 57.1 | 85   | 7    | 24   | 30  | 277  | 40   | .15  | .13  | 26  | Vanoss        | 54.4  | 84    | 8    | 17   | 30   | 345  | 28   | .18  | .18  | 12  |
| Ketchum Ranch        | 54.7 | 85   | 8    | 21   | 30  | 331  | 22   | .00  | .00  | 1   | Newport       | 56.2  | 86    | 8    | 23   | 30   | 297  | 33   | .12  | .11  | 12  |
| Lane                 | 55.3 | 84   | 7    | 19   | 30  | 320  | 28   | .08  | .07  | 26  | Ardmore       | 56.0  | 85    | 5    | 23   | 30   | 303  | 33   | .02  | .02  | 12  |
| Madill               | 56.2 | 86   | 5    | 22   | 17  | 304  | 39   | .10  | .04  | 12  | Fittstown     | 54.7  | 83    | 5    | 20   | 30   | 334  | 25   | .11  | .08  | 26  |
| Pauls Valley         | 54.6 | 85   | 8    | 21   | 30  | 337  | 26   | .01  | .01  | 12  |               |       |       |      |      |      |      |      |      |      |     |
| <b>SOUTHEAST</b>     |      |      |      |      |     |      |      |      |      |     |               |       |       |      |      |      |      |      |      |      |     |
| Antlers              | 55.0 | 85   | 7    | 16   | 30  | 330  | 31   | .60  | .50  | 14  | Mt Herman     | 55.0  | 83    | 9    | 21   | 30   | 329  | 28   | .46  | .19  | 14  |
| Clayton              | 55.0 | 84   | 8    | 19   | 30  | 330  | 29   | 1.35 | .58  | 12  | Talihina      | 54.3  | 82    | 8    | 17   | 30   | 350  | 30   | 2.33 | 1.64 | 12  |
| Cloudy               | 54.8 | 83   | 5    | 18   | 30  | 332  | 27   | .32  | .18  | 26  | Wilburton     | 54.2  | 83    | 8    | 17   | 30   | 352  | 27   | .27  | .15  | 12  |
| Hugo                 | 56.8 | 84   | 5    | 23   | 30  | 281  | 37   | .32  | .24  | 14  | Wister        | 52.7  | 83    | 8    | 14   | 30   | 390  | 22   | 1.49 | 1.03 | 14  |
| Idabel               | 55.9 | 85   | 9    | 16   | 30  | 321  | 48   | .19  | .13  | 14  | Broken Bow    | 54.2  | 85    | 9    | 18   | 30   | 351  | 27   | .65  | .31  | 27  |

## November 2005 Mesonet Precipitation Comparison

| Climate Division | Precipitation (inches) | Departure from Normal (inches) | Rank since 1895 | Wettest on Record (Year) | Driest on Record (Year) | Nov-04 |
|------------------|------------------------|--------------------------------|-----------------|--------------------------|-------------------------|--------|
| Panhandle        | 0.24                   | -0.80                          | 33rd Driest     | 4.07 (1909)              | 0.00 (1897)             | 3.53   |
| North Central    | 0.09                   | -1.99                          | 14th Driest     | 6.48 (1964)              | 0.00 (1910)             | 4.92   |
| Northeast        | 0.34                   | -3.28                          | 11th Driest     | 7.37 (1994)              | 0.00 (1904)             | 5.78   |
| West Central     | 0.04                   | -1.69                          | 13th Driest     | 6.62 (1964)              | 0.00 (1897)             | 5.86   |
| Central          | 0.02                   | -2.79                          | 4th Driest      | 6.88 (1931)              | 0.00 (1910)             | 6.02   |
| East Central     | 0.10                   | -4.20                          | 1st Driest      | 10.16 (1996)             | 0.20 (1914)             | 7.08   |
| Southwest        | 0.00                   | -1.73                          | 1st Driest      | 6.61 (2004)              | 0.00 (1897)             | 6.61   |
| South Central    | 0.10                   | -3.00                          | 4th Driest      | 7.62 (1902)              | 0.00 (1903)             | 7.46   |
| Southeast        | 0.80                   | -4.27                          | 7th Driest      | 13.16 (1946)             | 0.00 (1903)             | 8.39   |
| Statewide        | 0.18                   | -2.64                          | 4th Driest      | 6.12 (2004)              | 0.14 (1910)             | 6.12   |

## 2004 and 2005 Statewide Precipitation Monthly Totals vs. Normal

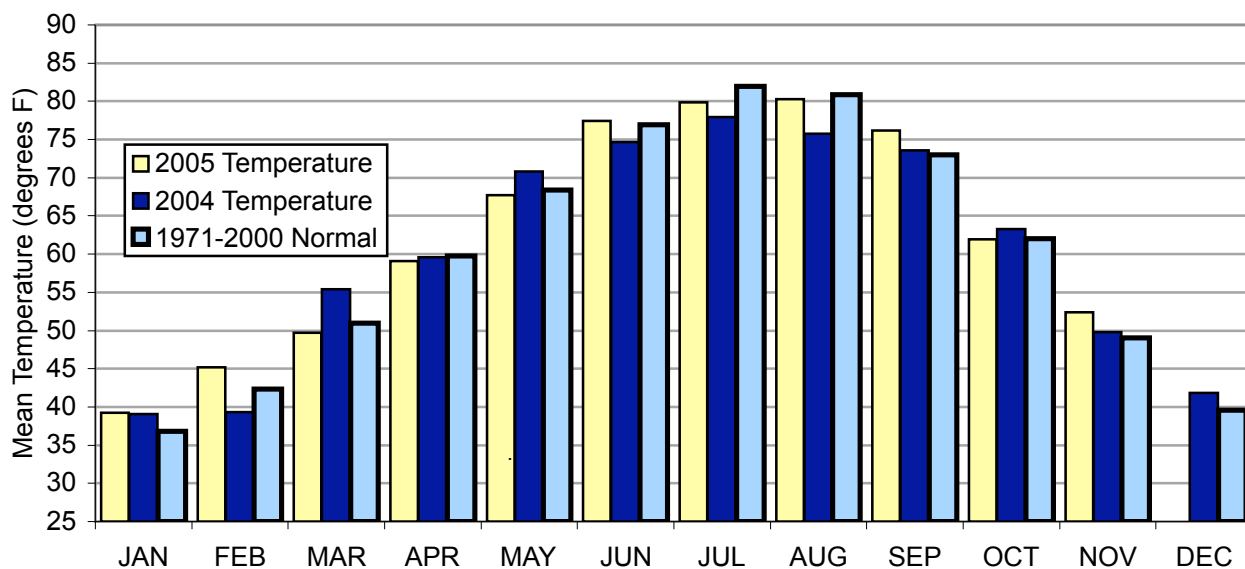




## November 2005 Mesonet Temperature Comparison

| Climate Division | Average Temp (F) | Departure from Normal (F) | Rank since 1895 | Hottest on Record (Year) | Coldest on Record (Year) | Nov-04 (F) |
|------------------|------------------|---------------------------|-----------------|--------------------------|--------------------------|------------|
| Panhandle        | 48.5             | 4.5                       | 10th Warmest    | 51.4 (1999)              | 36.0 (1929)              | 43.8       |
| North Central    | 50.4             | 4.1                       | 16th Warmest    | 54.5 (1999)              | 39.0 (1929)              | 48.0       |
| Northeast        | 52.1             | 4.1                       | 14th Warmest    | 56.4 (1999)              | 40.9 (1929)              | 50.3       |
| West Central     | 51.4             | 4.6                       | 11th Warmest    | 54.7 (1999)              | 39.7 (1929)              | 48.5       |
| Central          | 52.8             | 4.0                       | 12th Warmest    | 56.8 (1999)              | 41.3 (1929)              | 50.4       |
| East Central     | 53.7             | 3.8                       | 13th Warmest    | 57.8 (1999)              | 43.4 (1929)              | 52.4       |
| Southwest        | 52.7             | 3.5                       | 14th Warmest    | 56.3 (1999)              | 42.1 (1929)              | 51.0       |
| South Central    | 55.2             | 4.2                       | 12th Warmest    | 58.3 (1927)              | 44.1 (1929)              | 52.9       |
| Southeast        | 54.8             | 4.1                       | 18th Warmest    | 58.9 (1909)              | 44.1 (1976)              | 54.2       |
| Statewide        | 52.4             | 4.1                       | 11th Warmest    | 56.0 (1999)              | 41.3 (1929)              | 50.1       |

## 2004 and 2005 Statewide Temperature Monthly Averages vs. Normal



## Mesonet Extremes for November 2005

| Climate Division | High Temp |     |               | Low Temp |      |            | High Monthly Rainfall |            | High Daily Rainfall |      |            |
|------------------|-----------|-----|---------------|----------|------|------------|-----------------------|------------|---------------------|------|------------|
|                  | (F)       | Day | Station       | (F)      | Day  | Station    | (inches)              | Station    | (inches)            | Day  | Station    |
| Panhandle        | 90        | 3rd | Arnett        | 11       | 16th | Boise City | 0.53                  | Buffalo    | 0.53                | 27th | Buffalo    |
| North Central    | 91        | 3rd | Seiling       | 16       | 30th | Blackwell  | 0.32                  | May Ranch  | 0.31                | 27th | May Ranch  |
| Northeast        | 87        | 7th | Claremore     | 10       | 30th | Vinita     | 0.80                  | Skiatook   | 0.58                | 14th | Skiatook   |
| West Central     | 93        | 3rd | Butler        | 17       | 16th | Erick      | 0.10                  | Cheyenne   | 0.10                | 27th | Cheyenne   |
| Central          | 88        | 4th | El Reno       | 13       | 30th | Bristow    | 0.12                  | Okemah     | 0.08                | 12th | Okemah     |
| East Central     | 86        | 8th | Webbers Falls | 13       | 30th | Okmulgee   | 0.30                  | Sallisaw   | 0.16                | 26th | Eufaula    |
| Southwest        | 93        | 3rd | Mangum        | 18       | 16th | Mangum     | 0.00                  | Tipton     | 0.00                | 1st  | Tipton     |
| South Central    | 87        | 5th | Burneyville   | 16       | 30th | Centrahoma | 0.37                  | Centrahoma | 0.33                | 12th | Centrahoma |
| Southeast        | 85        | 9th | Idabel        | 14       | 30th | Wister     | 2.33                  | Talihina   | 1.64                | 12th | Talihina   |
| Statewide        | 93        | 3rd | Mangum        | 10       | 30th | Vinita     | 2.33                  | Talihina   | 1.64                | 12th | Talihina   |

## December Climatological Outlook

The winter month of December is Oklahoma's second coldest and third driest month. Overnight freezes are the rule, particularly in northern portions of the state, and winter storms often provide the state with snow and ice that create more havoc than the precipitation totals they provide are worth.

### Temperature

Mean: 39.6 degrees  
Warmest December: 1933 and 1965, 46.5 degrees  
Coolest December: 1983, 26.5 degrees  
Warmest location: Waurika, 44.2 degrees  
Coolest location: Turpin, 33.5 degrees  
Hottest recorded: 92 degrees, Ardmore, December 30, 1951  
Coldest recorded: -19 degrees, Goodwell, December 12, 1932

The statewide-averaged monthly mean temperature in December is 39.6 degrees. The range of mean temperature from south-to-north is greater than 10 degrees Fahrenheit, ranging from 44.2 degrees at Waurika to 33.5 degrees at Turpin. Since 1892, the historical range of December statewide-averaged mean temperature is from a low of 25.8 degrees in 1983 to a high of 45.4 degrees, achieved in 1965. Normal daily maximum temperatures for the month range from 45.2 degrees at Newkirk to 56.0 degrees at Waurika. Normals of daily minimum temperatures vary from 19.7 degrees at Beaver to 33.9 degrees at Okemah. The state's recorded December temperature extremes are 92 degrees at Ardmore on December 30, 1951 and 18 degrees below zero (-18) at Perry on December 22, 1989.

### Precipitation

Mean: 2.04 inches  
Wettest year: 1984, 4.98 inches  
Driest year: 1980, 0.07 inches  
Wettest location: Smithville, 5.19 inches  
Driest location: Goodwell, 0.34 inches  
Most recorded: 18.13 inches, Bear Mountain Tower, 1971

December precipitation, including rain and melted snow or sleet, when averaged statewide, accumulates only to a depth of 2.04 inches. The historical range of statewide-averaged monthly precipitation is from 0.10 inch in 1950 to 4.98 inches in 1984. The range of normal precipitation, increasing from the northwest to the southeast, is from 0.34 inch at Goodwell to 5.19 inches at Smithville. The extreme southeastern corner of the state received a record-breaking soaking in December 1971, exemplified by the 18.13 inches recorded at Bear Mountain

Tower in Western McCurtain County, which established the state record for December precipitation at a given station. The state record for daily precipitation during December (11.34 inches) was established at the same location on December 10, 1971.

Snow is common in the northwestern portions of the state by late December. Boise City averages 6.1 inches of snow per December. Stations in the far southern portions of the state generally average less than one-half inch of snow during December. Records for snowfall extremes were set at Beaver. That panhandle city, while en route to a state-record seasonal snowfall of 87 inches, received 35 inches of snow in December 1911, including 22 inches reported on the 19th. From 1911 forward, sufficient snow has been on the ground on Christmas morning for large portions of the state to declare a "White Christmas" in seventeen different years. Most snowy Christmases have occurred in the state's northwestern half, but other areas of the state have also been affected from time-to-time.

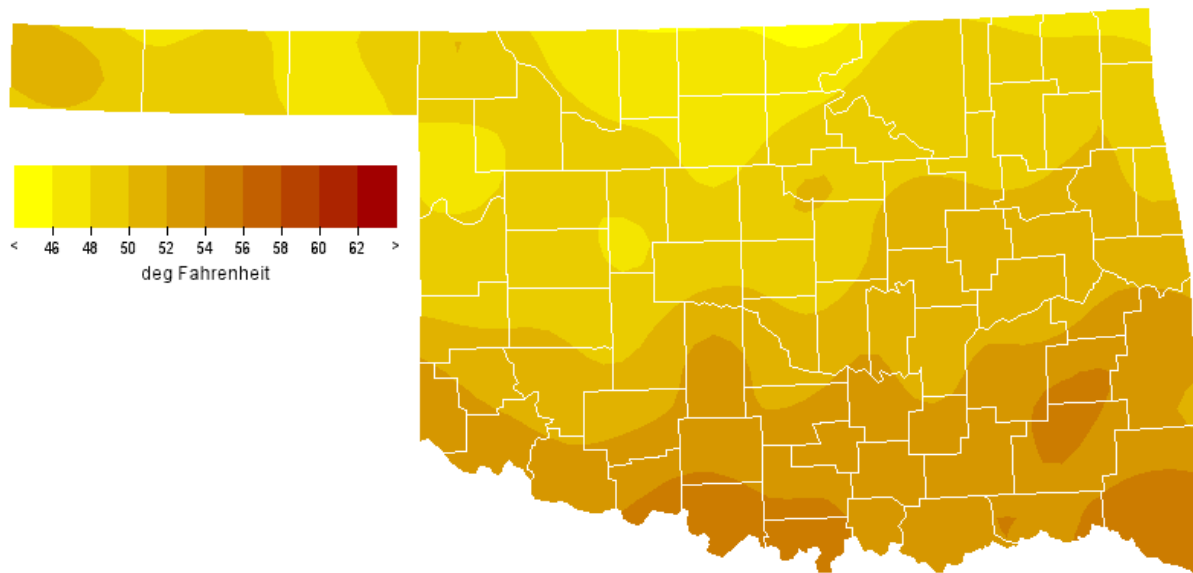
An unfortunate by-product of developing winter storms is the presence of sleet or freezing rain. Major ice storms spread across much of the state, beginning on Christmas Day in 1987 and, again, in 2000. Those two storms left 114,000 and 175,000 customers, respectively, without power for several days. A similar storm in mid-December 1937 left extensive damage to power and telephone lines in central and northern Oklahoma. For many late December travelers, the winter storms that seem inevitable during the week between Christmas and New Year's Day sometimes appear to have become something of an Oklahoma tradition. Other major ice storms struck Oklahoma during the Decembers of 1897, 1916, 1924, 1969, 1972, and 1998.

### Tornadoes

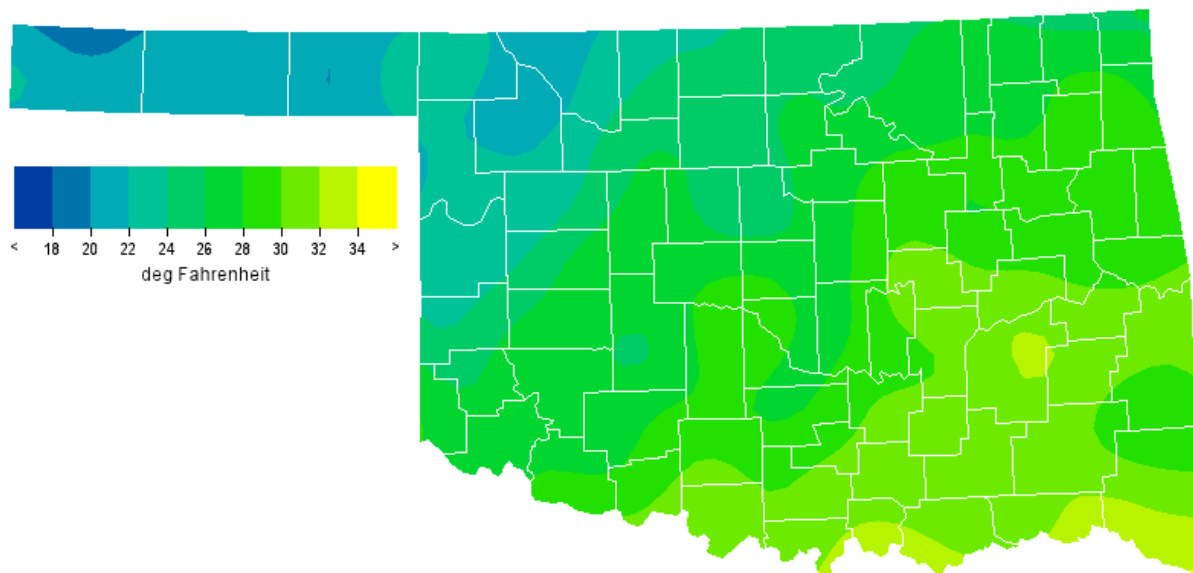
Average December Tornadoes: 0.4  
Most: 4 (1982)

Tornadoes are not a regular December feature. Only 22, occurring in seven different years, are included in the comprehensive database that begins in 1950. Four tornadoes were reported in Oklahoma during each of 1971, 1975, and 1982.

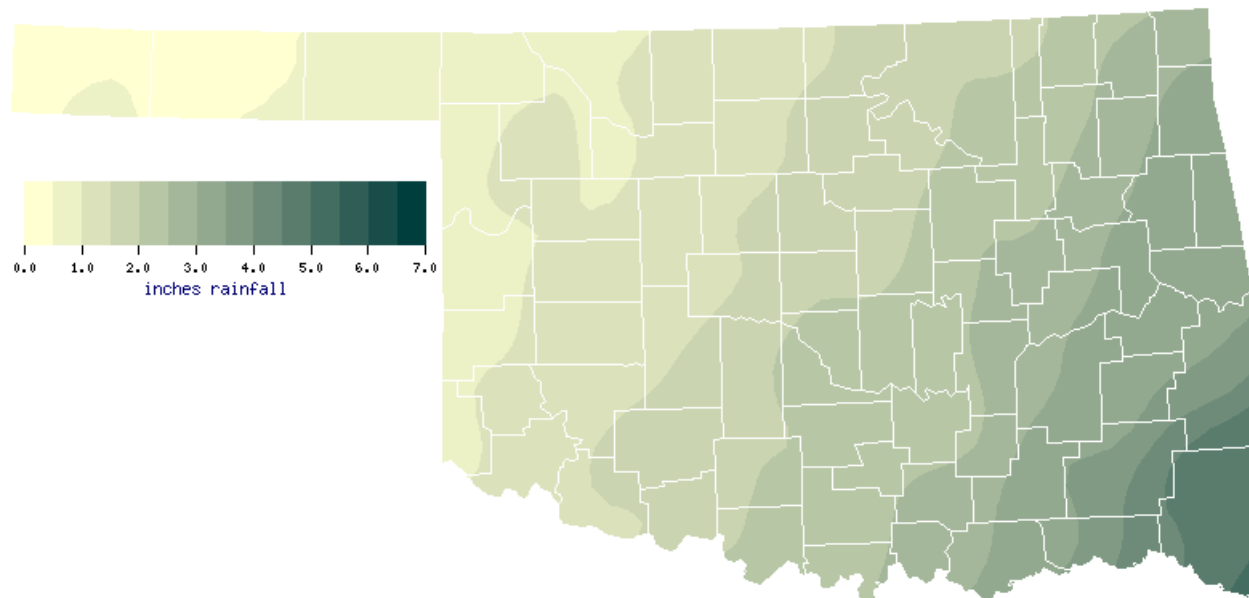
## December Normal Monthly Maximum Temperature (1971-2000)



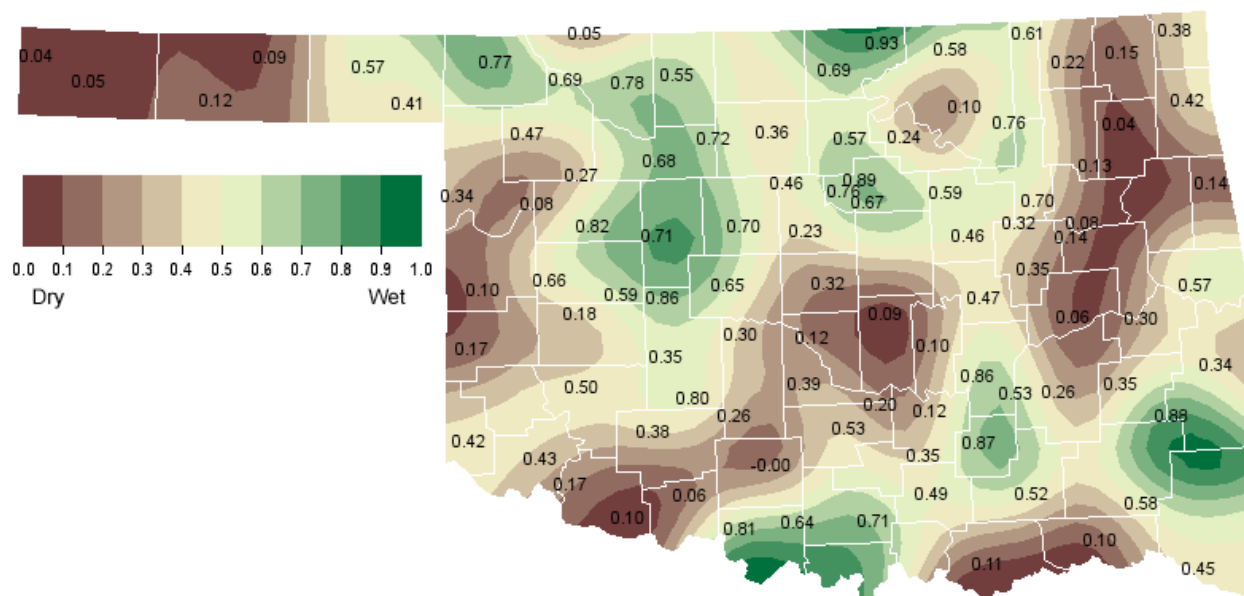
## December Normal Monthly Minimum Temperature (1971-2000)



## December Normal Precipitation (1971-2000)

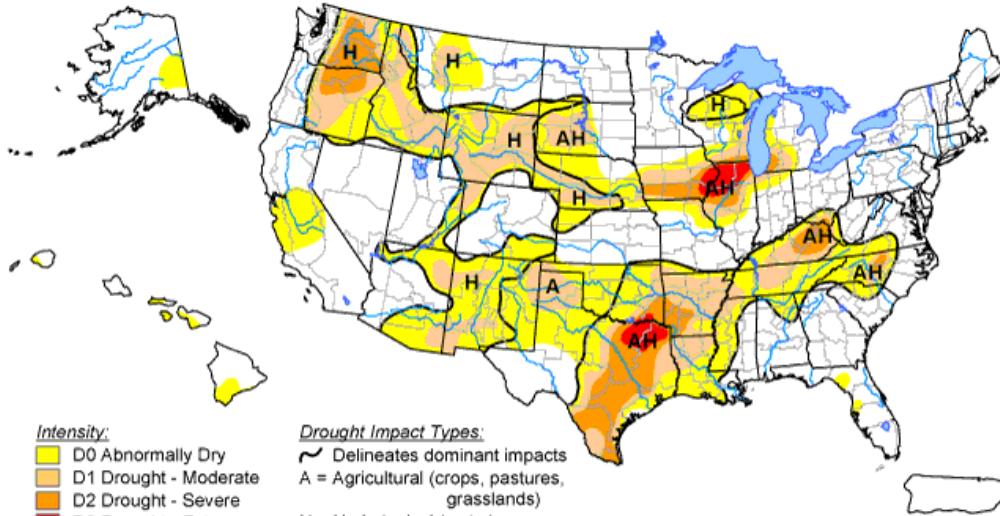


## December 1, 2005 Soil Moisture Conditions at 25cm



# U.S. Drought Monitor

November 29, 2005  
Valid 8 a.m. EST



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

**Drought Impact Types:**  
 ~ Delineates dominant impacts  
 A = Agricultural (crops, pastures, grasslands)  
 H = Hydrological (water)

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

<http://drought.unl.edu/dm>

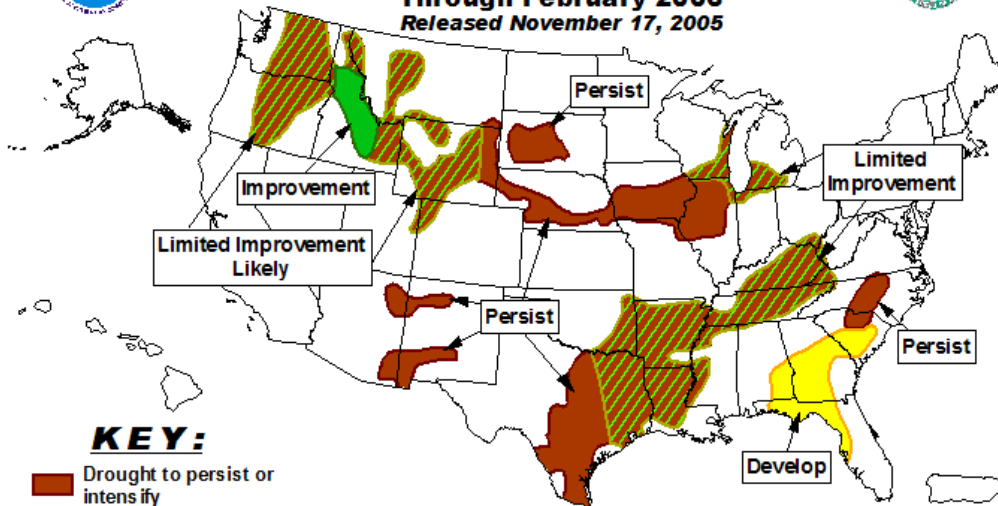


Released Thursday, December 1, 2005  
 Author: Brad Rippey, U.S. Department of Agriculture



## U.S. Seasonal Drought Outlook Through February 2006

Released November 17, 2005

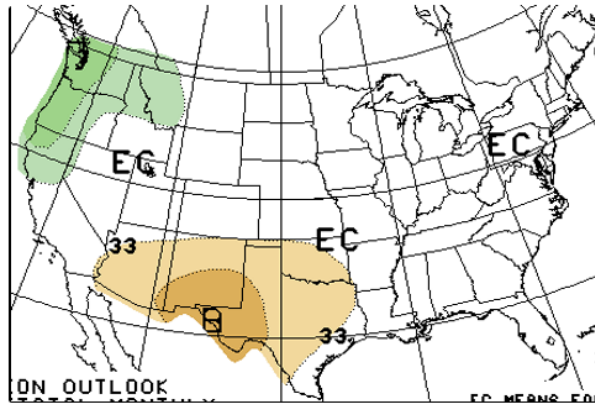


**KEY:**

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are schematically approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

## December 2005 U.S. Precipitation Forecast

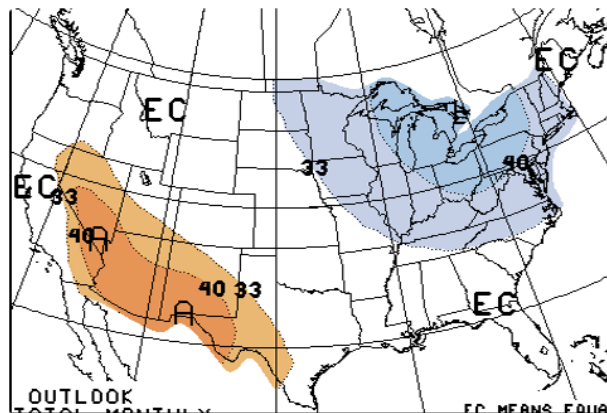


Percent Likelihood  
of Above or Below  
Average Precipitation\*

|  |          |           |
|--|----------|-----------|
|  | 5% - 10% | A = Above |
|  | 0% - 5%  |           |
|  | 0% - 5%  | B = Below |
|  | 5% - 10% |           |

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

## December 2005 U.S. Temperature Forecast



Percent Likelihood  
of Above and Below  
Average Temperatures\*

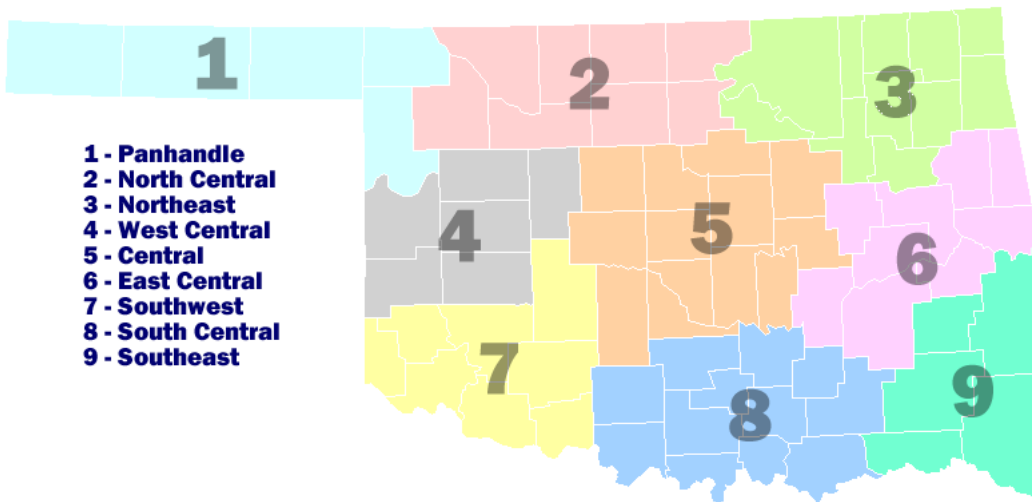
|  |           |           |
|--|-----------|-----------|
|  | 10% - 20% | A = Above |
|  | 5% - 10%  |           |
|  | 0% - 5%   |           |
|  | 0% - 5%   | B = Below |
|  | 5% - 10%  |           |

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

## December Climate Normals

| Climate Division | Max. Temperature (°F) | Min. Temperature (°F) | Avg. Temperature (°F) | Precipitation (inches) |
|------------------|-----------------------|-----------------------|-----------------------|------------------------|
| 1                | 49.2                  | 21.7                  | 35.5                  | 0.68                   |
| 2                | 47.2                  | 23.9                  | 35.6                  | 1.30                   |
| 3                | 49.4                  | 27.8                  | 38.6                  | 2.29                   |
| 4                | 48.8                  | 25.3                  | 37.1                  | 1.11                   |
| 5                | 50.2                  | 28.0                  | 39.1                  | 1.98                   |
| 6                | 51.2                  | 30.0                  | 40.6                  | 3.01                   |
| 7                | 51.6                  | 27.1                  | 39.4                  | 1.39                   |
| 8                | 53.3                  | 30.4                  | 41.9                  | 2.54                   |
| 9                | 53.9                  | 30.7                  | 42.3                  | 4.21                   |
| Statewide        | 50.5                  | 27.3                  | 38.9                  | 2.14                   |

## 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](http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.html)

### Climate Calendars and other local weather and climate information

Oklahoma Climatological Survey: <http://climate.ocs.ou.edu> or

<http://www.ocs.ou.edu/>

E-mail ([ocs@ou.edu](mailto:ocs@ou.edu)) or telephone (405/325-2541)



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