Autumn remained a reluctant visitor during October as the jet stream retreated far to the north, leaving Oklahoma to bask in near summerlike heat. According to preliminary data from the Oklahoma Mesonet, the statewide average temperature finished at 66.9 degrees, 6 degrees above normal, to rank as the fourth warmest October since records began in 1895. High temperatures reached into the 80s and 90s somewhere in the state on 30 of October's 31 days. Several stations climbed into triple-digits across the northwest on the 16<sup>th</sup> and 17<sup>th</sup>. Slapout reached 102 degrees on the 16<sup>th</sup> and Buffalo equaled that mark on the 17<sup>th</sup> – the highest temperature ever recorded in the state that late in the calendar year. Both readings topped the previous record of 101 degrees at Healdton back on Oct. 17, 1972. The heat extended all the way to Halloween where highs in the 80s and 90s provided pleasant trick-or-treat weather that evening. Low temperatures did dip below freezing at times, although those instances were uncommon. The month's lowest temperature of 26 degrees was recorded by the Kenton Mesonet site on the sixth. October's heat continued to add to a very warm 2016 with the first 10 months of the year ranked as the seventh warmest on record at 2.4 degrees above normal.

The state was largely devoid of significant precipitation during the month. The Mesonet's statewide average of 1.85 inches was 1.69 inches below normal to rank as the 37th driest October on record. The Panhandle suffered through its 14<sup>th</sup> driest October with an average of a quarter-inch while the southeast averaged 0.96 inches, their 15<sup>th</sup> driest at 4 inches below normal. Only the northeast, where heavy rains fell along the Kansas border from Osage to Ottawa counties, managed a surplus with an average of 4.55 inches. That exceeds normal by nearly an inch and ranks as the 33rd wettest October for that region. Blackwell led the Mesonet with 8.33 inches. Approximately 350 miles to the west, the Kenton Mesonet site barely had a sip of water with 0.02 inches. Of the 121 Mesonet sites, 47 recorded less than an inch of rainfall during the month, and 73 recorded less than 2 inches. The first two months of climatological fall, September and October, ended as the 44th driest across the state with a deficit of 1.84 inches. The Panhandle and the southeast once again stood out in the statistics with a ranking of 12th driest for both during that period. The January-October statistics look much tamer with the wet spring and early summer included, but still ended with a deficit of nearly 3 inches, the 46<sup>th</sup> driest such period on record. The year has been much drier across eastern Oklahoma where the east central, northeast and southeast regions experienced their 33<sup>rd</sup>, 45<sup>th</sup> and 37<sup>th</sup> driest January-October on record. The southwest saw its 16<sup>th</sup> wettest, however, with a surplus of over 5 inches.

The lack of precipitation and excessive heat prompted drought's return in the northwest and intensification in the southeast. Drought was somewhat relieved in the northeast thanks to areas of heavy rain, but dry conditions spread from the far western Panhandle through northwestern Oklahoma. At the beginning of the month, 19 percent of the state was considered in at least moderate drought by the U.S. Drought Monitor, and 23 percent was considered to be abnormally dry. By month's end, those amounts had risen to 25 percent and 28 percent, respectively.

The November temperature outlook from the Climate Prediction Center (CPC) shows greatly increased odds of above normal temperatures across all of Oklahoma, but especially across the far northwest. The precipitation outlook is indeterminate except for slightly increased odds of below normal precipitation across far the far southeast and above normal precipitation in the far southwest and western Panhandle. Given those prospects, CPC's U.S. Monthly Drought Outlook for November considers further drought development likely across the eastern one-third of Oklahoma, and either persistence or intensification where drought already exists.