

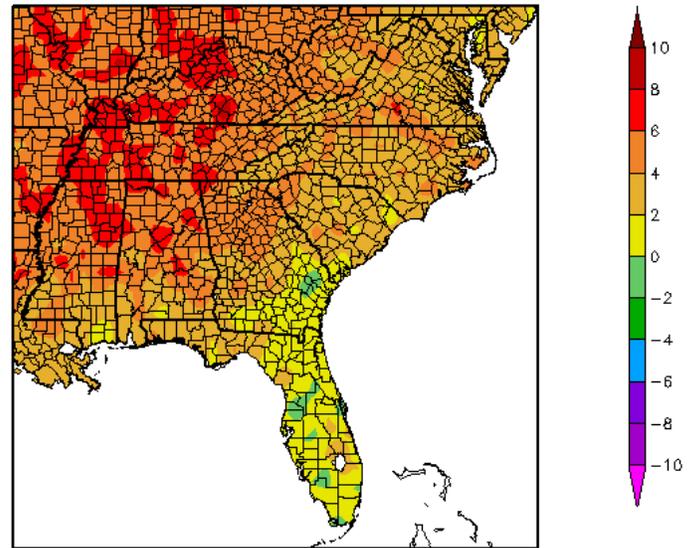
# October 2016 Climate Summary – Georgia

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The warm streak in Georgia continued through October as the majority of the state saw well above normal temperatures, with the exception of small areas along the coast that were impacted by Hurricane Matthew. This month marks the 5<sup>th</sup> month in a row where the vast majority of Georgia recorded above normal monthly temperatures. Much of coastal Georgia received abundant rainfall from Matthew and saw above normal monthly precipitation, while the rest of the state saw deficits ranging from 1” to 3” this month. Although October is climatologically dry, some areas of the state only received trace amounts of rain or less. The warm temperatures combined with lack of rainfall caused drought conditions to intensify greatly during the month.

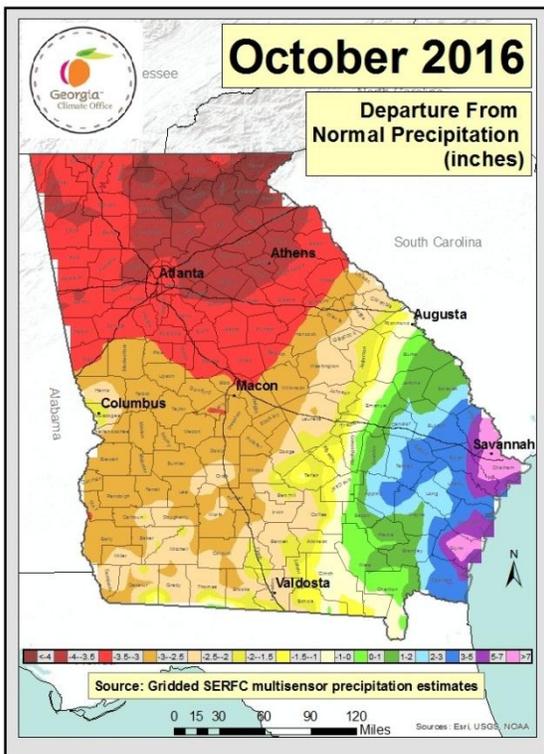
Atlanta’s average October temperature was 69.6° (+6.3°), making it the 3<sup>rd</sup> warmest October on record. Athens recorded 4.8° above normal this month with an average temperature of 67.8°, making it the 4<sup>th</sup> warmest October on record. Macon had its 10<sup>th</sup> warmest October on record with 68.7° (+3.8°) and Columbus recorded 70.8° (+4.3°) and had its 8<sup>th</sup> warmest October on record. Augusta’s October average temperature was 68.2° (+3.8°), Savannah recorded 70.8° (+2.9°), and St. Simons Island’s monthly average temperature was 71.9° (+1.7°). Table 1 below shows the numerous daily high temperatures that were broken throughout the month. The last two weeks of October were especially warm, particularly the 18<sup>th</sup> through the 20<sup>th</sup> and the 29<sup>th</sup> through the 31<sup>st</sup>. Most major climate sites easily broke daily records on the last three days of the month.

Departure from Normal Temperature (F)  
10/1/2016 – 10/31/2016

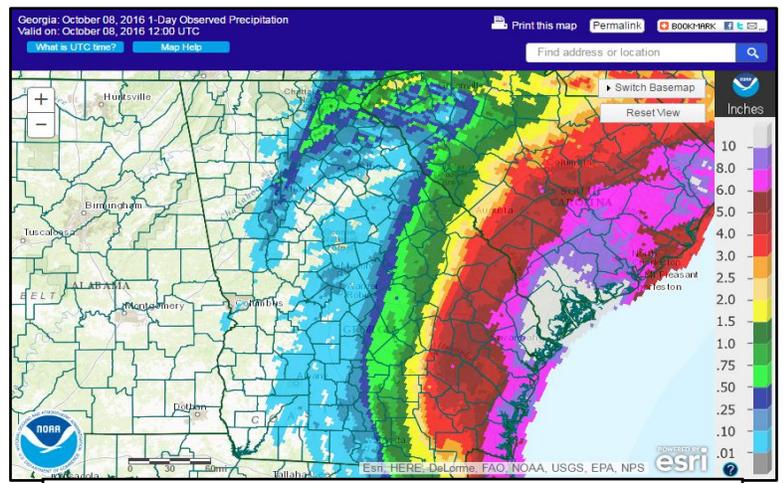


The northern half of the state saw below normal precipitation for the second month in a row, while hurricane activity continued to provide southeast Georgia with near to above normal rainfall this month. The impressive gradient of rainfall amounts caused northern sites to have a record dry month and coastal areas to have a record wet month. Athens recorded a mere 0.03” (-3.52”) in October, ranking it as the 3<sup>rd</sup> driest October on record. Macon’s monthly precipitation was 0.20” (-2.59”), making it the 6<sup>th</sup> driest October on record. Atlanta recorded 0.16” (-3.25”) and had its 8<sup>th</sup> driest October on record. Columbus and Augusta saw below normal monthly precipitation with 0.92” (-1.66”) and 2.09” (-1.18”), respectively. On the other end of the rainfall spectrum, Savannah recorded an incredible 11.60” (+7.91”) this month and had its 3<sup>rd</sup> wettest October on record. On October 7<sup>th</sup>, 8.94” of rainfall associated with Hurricane Matthew was recorded, breaking the previous record of 2.81” in 1946. St. Simons Island’s monthly precipitation totaled 11.19” (+6.73”), making it the 4<sup>th</sup> wettest October on record.

The strongest hurricane of the Atlantic Hurricane Season so far caused flooding, wind damage, and other impacts to much of southeast Georgia. Hurricane Matthew strengthened to a category 5 hurricane in late



September before weakening slightly to a category 4 and making landfall on Haiti on October 4<sup>th</sup>. From there, the hurricane moved near eastern Florida on October 7<sup>th</sup> and tracked just off the coast of Florida and Georgia until it made landfall on the South Carolina coast on October 8<sup>th</sup> as a category 1 hurricane with 75 miles per hour winds. Record-breaking storm surges of just fewer than 8 feet were recorded between Savannah and Tybee Island, where 94 miles per hour wind gusts were also reported just off the coast. Much wind damage was reported as Hurricane Matthew moved northward. Rainfall amounts of more than 6" were recorded along Georgia's coast, with the greatest amounts



Rainfall amounts associated with Hurricane Matthew.

around Savannah.

Although Matthew alleviated abnormally dry (D0) conditions along Georgia's coast, the rest of the state only saw drought conditions intensify in all categories throughout October. D4 (exceptional drought) expanded across north central and west to east central Georgia, while D3 (extreme drought) conditions expanded into south central Georgia. Soil moistures took a hard hit from the high temperatures and little to no rainfall in areas of the state this month, with east central Georgia and south central Georgia seeing a rapid decline in drought conditions throughout October.

According to the Climate Prediction Center, there is currently a La Niña Watch, and La Niña is favored to develop (~70% chance) during the Northern Hemisphere Fall 2016 and slightly favored to persist (~55% chance) during Winter 2016-17. The CPC's three-month seasonal outlooks shows chances for above normal temperatures and chances for below normal precipitation in November, December, and January.

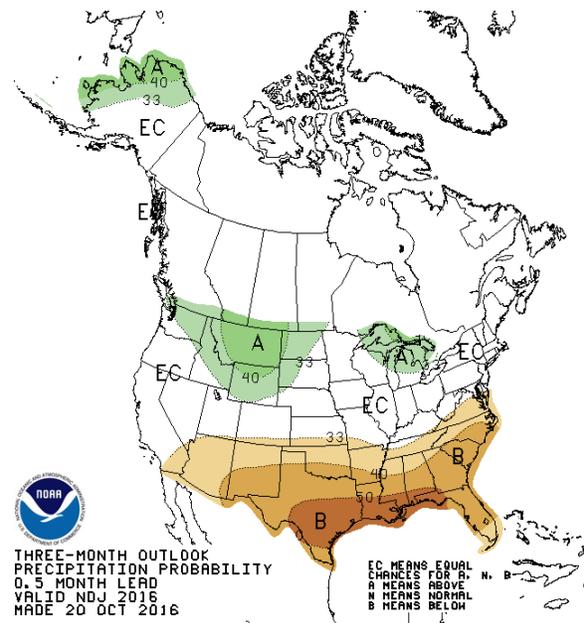
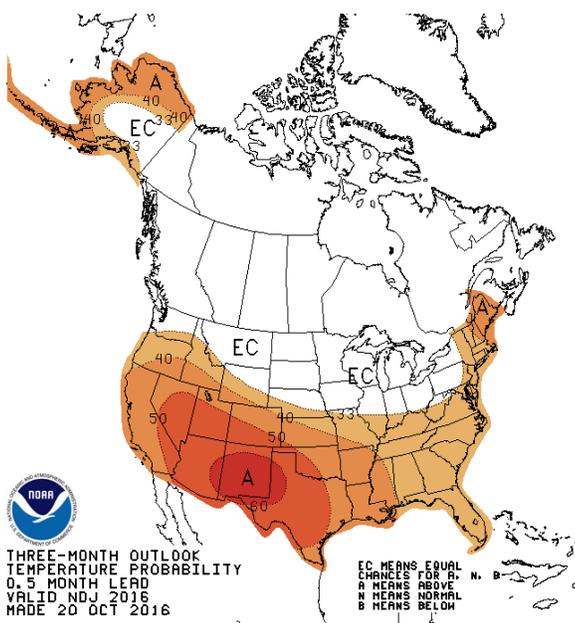
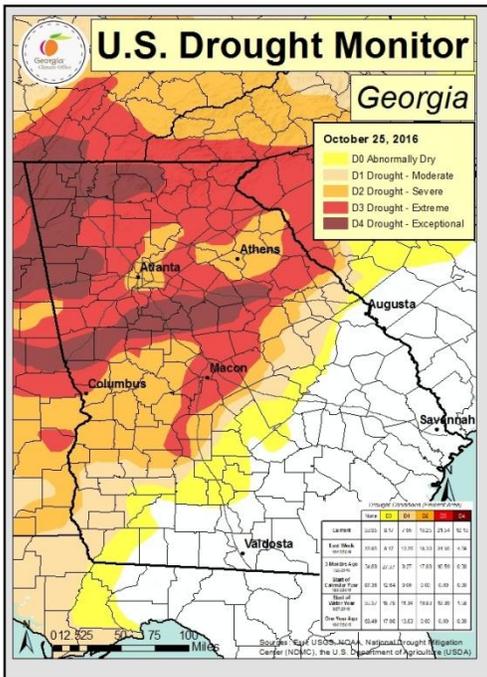


TABLE 1:

October 2016 Daily High Temperature Records			
Date	City	Temperature	Previous Record
10/8	Athens	92°	2007 (tie)
10/18	Atlanta	86°	1984 (tie)
10/18	Athens	88°	87° in 1938
10/19	Atlanta	66°	1993 (tie)
10/19	Atlanta	88°	87° in 1938
10/19	Athens	91°	90° in 1926
10/19	Macon	91°	89° in 1926
10/20	Atlanta	88°	85° in 1943
10/20	Atlanta	66°	65° in 1994
10/20	Athens	90°	1910 (tie)
10/29	Atlanta	85°	1996 (tie)
10/29	Athens	86°	1919 (tie)
10/29	Macon	88°	87° in 1984
10/29	Augusta	86°	85° in 1996
10/30	Atlanta	86°	83° set in 1998
10/30	Athens	87°	1984 (tie)
10/30	Macon	89°	88° in 1984
10/30	Augusta	90°	1984 (tie)
10/30	Savannah	86°	85° in 1935
10/31	Atlanta	86°	85° in 1961
10/31	Athens	88°	84° in 1961
10/31	Macon	90°	88° in 1950
10/31	Columbus	88°	1919 (tie)
10/31	Augusta	89°	1961 (tie)
10/31	Savannah	87°	86° in 1961

high min temp  
high max temp