

December 2017 Climate Summary – Georgia

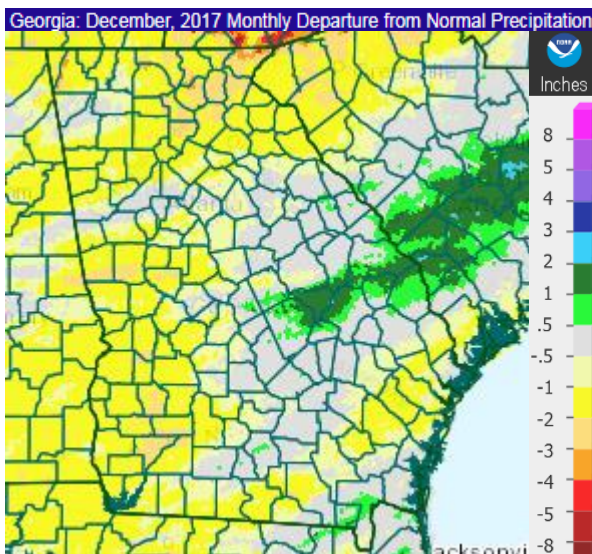
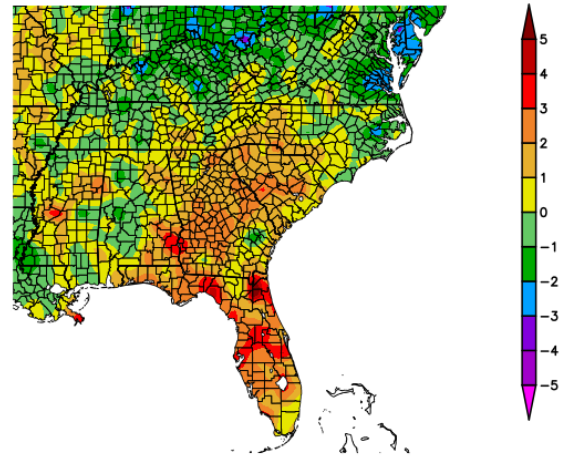
Lauren Lindsey, Service Climatologist
State of Georgia Climate Office

December average temperatures were near to above normal across much of the state, while precipitation was generally below normal except for areas of central and east central Georgia. A fairly significant winter weather event occurred early in the month when cold temperatures and abundant moisture brought snow to much of north Georgia. Drought conditions remained mostly unchanged during the month except for east central Georgia where conditions improved slightly.

Atlanta's average December temperature was 46.8°F (+1.5°), Athens recorded 46.5° (+1.1°), Macon's average temperature was 50.1° (+2.1°), Columbus recorded 51.1° (+2.0°), Augusta's monthly average temperature was 49.6° (+2.4°), and Savannah recorded 53.0° (+1.3°). Although the state saw above normal monthly temperatures as a whole, there were no daily temperature records broken at any major climate site in December.

The only major climate sites to record above normal precipitation include Atlanta with 4.38" (+0.48") and Augusta with 4.11" (+0.72"). Atlanta also set a daily maximum snowfall record when 1.50" fell on December 9th, breaking the previous record of 1.10" set in 1989. Augusta set a daily maximum rainfall record with 1.86" (the previous record of 1.64" was set in 1924). Athens and Macon saw 2.75" (-0.98") and 3.26" (-0.78"), respectively. Savannah's monthly precipitation totaled 2.35" (-0.60"). On December 7th the site set a daily maximum rainfall record of 0.79" (the previous record of 0.66" was set in 1969). Columbus saw a large rainfall deficit in December with only 2.55" (-1.72"), but on December 9th the site set a daily maximum snowfall record when a trace amount was recorded, tying that previous record set in 1937.

Departure from Normal Temperature (F)
12/1/2017 – 12/31/2017



Looking back at 2017 as a whole, the big story was the much warmer than normal temperatures observed across Georgia. The vast majority of climate sites ranked in their top five warmest years on record (see table 1). In addition to warm annual mean average temperatures, most sites ranked in the top ten for warmest mean maximum and minimum temperatures. Atlanta and Columbus had their warmest annual mean minimum temperatures with 56.2° and 57.8°, and Augusta and Savannah had their warmest annual mean maximum temperatures with 80.3° and 80.4°, respectively. Precipitation during the year was variable but close to normal, with the exception of some noticeable departures in northeast and southwest Georgia and a surplus of rainfall in northwest, west central, and southeast

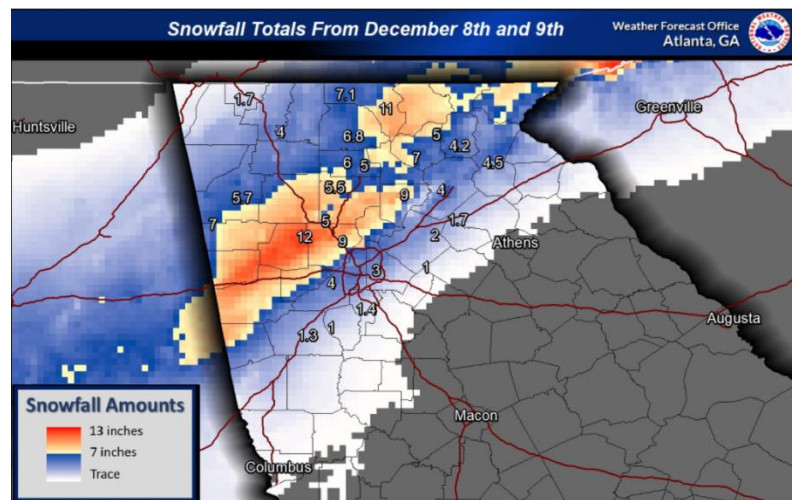
Georgia. Atlanta's annual precipitation totaled 52.48", Athens recorded 55.86", Macon totaled 48.69", Columbus recorded 50.99", Augusta saw 44.96", and Savannah recorded 53.24" in 2017.

Table 1:

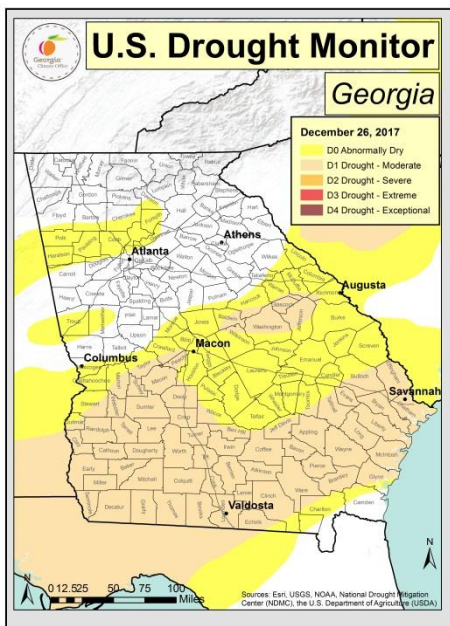
Annual Mean Average Temperatures for Major Climate Sites in Georgia in 2017		
City	Temperature (°F)	Ranking
Atlanta	65.4°	3 rd warmest
Athens	64.5°	5 th warmest (tied)
Macon	66.6°	3 rd warmest (tied)
Columbus	68.1°	4 th warmest
Augusta	67.7°	1 st warmest
Savannah	69.7°	1 st warmest

Severe weather was very quiet during December in Georgia. However, there was one tornado report on December 20th when an EF-0 touched down in Meriwether County, traveling 3.1 miles and damaging numerous trees. Thunderstorm-force winds were also reported on this day in the same area, both as a result of a strong line of embedded storms associated with a passing cold front.

On December 8th and 9th, a potent low pressure system brought cold temperatures and frozen precipitation to much of north Georgia. The heaviest band of snow fell from Carroll County northeastward through Union County, with the highest total at the Dallas COOP station in Paulding County with 12.3” of snow. Even locations as far south as Columbus saw trace amounts.



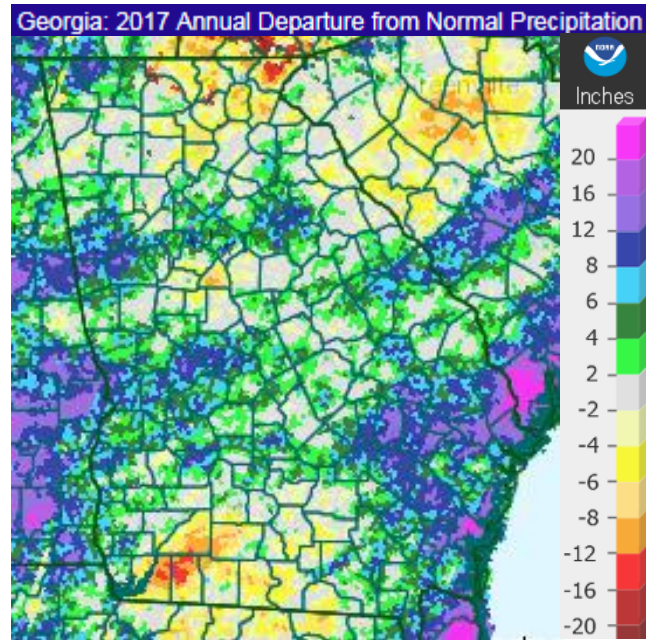
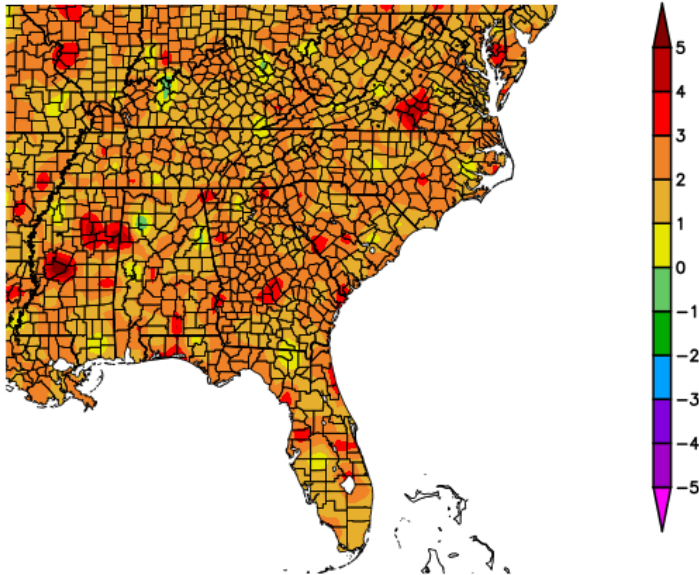
The United States Drought Monitor showed that drought conditions were variable across the state during December. Areas in northeast Georgia where D0 (abnormally dry) conditions were present were eliminated slightly during the month. D1 (moderate drought) conditions were reduced in much of central Georgia but expanded across extreme south Georgia by the end of December. Some D0 and D1 conditions were also reduced in east central Georgia.



According to the Climate Prediction Center, La Niña conditions are present and there is currently a La Niña Advisory. Equatorial sea surface temperatures are below average across the central and eastern Pacific Ocean. La Niña is likely (exceeding about 80%) through the Northern Hemisphere winter 2017 through 2018, with a transition to ENSO-neutral most likely during the mid-to-late spring. The CPC’s three-month seasonal outlooks call for above normal temperatures, particularly in the southern half of the state, and below normal precipitation with increasing chances for below normal precipitation as you move southeastward during January, February, and March.

2017 Annual Departure From Normal Temperature and Precipitation

Departure from Normal Temperature (F)
1/1/2017 – 12/31/2017



CPC Seasonal Outlooks – January, February and March 2018

