

October 2018 Climate Summary – Georgia

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October in Georgia was characterized by above normal temperatures with several daily high temperature records broken. Precipitation was variable; much of central and southwest Georgia saw above normal precipitation while southeast Georgia missed out on rainfall. Many sites set a daily rainfall record on October 10th from rainfall associated with Hurricane Michael, which proved to have widespread and significant impacts from rain, flooding, and high winds. Drought conditions improved slightly due to near or above normal rainfall.

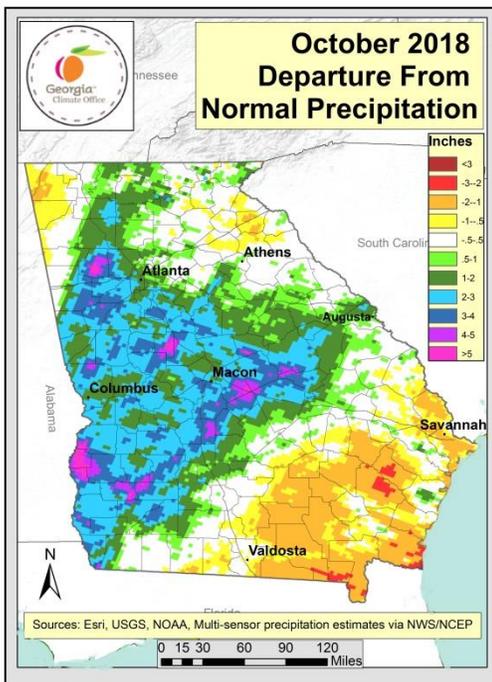
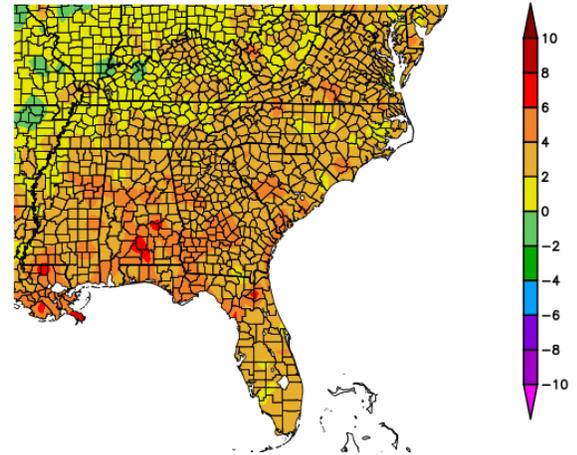
The average October temperature in Atlanta was 67.4°F (+4.1°) and ranked as the 6th warmest October on record. Savannah recorded 72.2° (+4.3°) making it the 7th warmest October on record. Macon’s average temperature was 68.9° (+4.0°) and ranked as the 9th warmest October on record. Both Athens and Columbus had their 10th warmest October on record with 66.3° (+3.3°) and 70.3° (+3.8°), respectively. Augusta recorded an average monthly temperature of 68.7° (+4.3°). All sites set several daily high temperature records during the month due to the above normal temperatures (see table 1). The HOMERVILLE 5 N COOP station in Clinch County had the highest average October temperature with 77.3°, while the MOUNTAIN CITY 2 SW COOP recorded the lowest average monthly temperature with 56.4°.

Atlanta’s total monthly precipitation was 4.75” (+1.34”), Athens recorded 4.26” (+0.71”), Macon’s total rainfall was 4.62” (+1.83”), Columbus recorded 4.14” (+1.56”), Augusta’s total precipitation was 4.58” (+1.31”), and Savannah recorded 2.79” (-0.90”). On October 10th, Atlanta, Macon, and Columbus set daily rainfall records with 3.42” (previous record of 1.59” was set in 1990), 3.22” (previous record of 1.18” was set in 1994), and 3.26” (previous record of 1.11” set in 1999), respectively. Augusta saw 2.48” on October 10th and ranked as a close second for daily maximum rainfall. The highest rainfall totals during October were in

southwest Georgia and associated with Hurricane Michael. The greatest total precipitation for October was recorded in Clay County at the FORT GAINES 13.0 ENE CoCoRaHS station with 11.95”. Sumter County saw abundant rainfall as well – the PLAINS SW GA EXP STATION COOP recorded 8.00” in October.

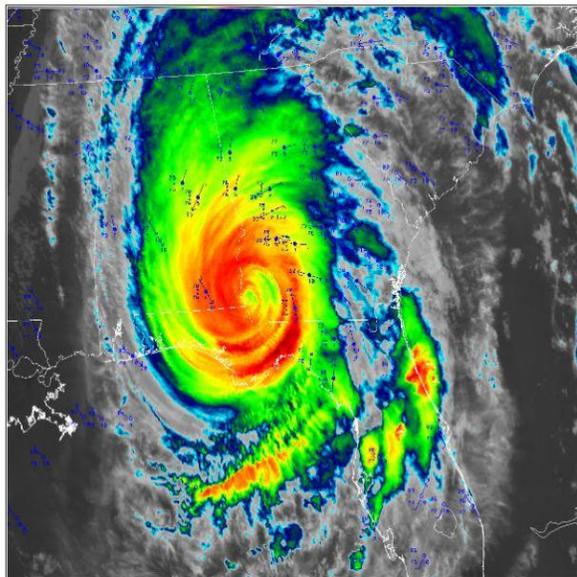
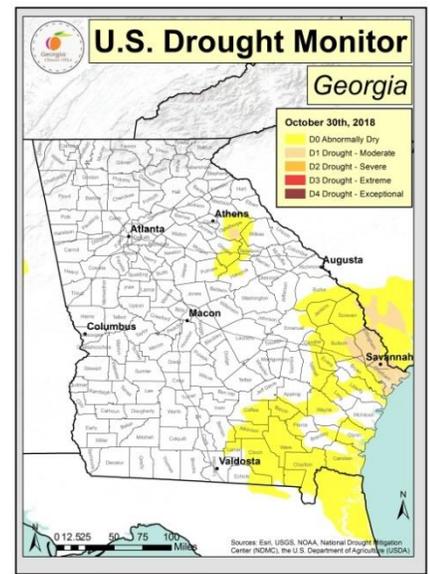
The active Atlantic Basin Hurricane Season continued in October with Hurricane Leslie (category 1), Tropical Storm Nadine, and Hurricane Oscar (category 2) traversing the open Atlantic waters before dissipating. Hurricane Michael broke records for its intensity in terms of pressure and wind speeds and had major impacts in Georgia. Michael became a tropical storm on October 7th and by October 9th peaked as a high-end category 4 storm in the Gulf of Mexico. With 155 mile per hour winds, Michael made landfall on the Florida panhandle the next day. The storm was the strongest hurricane on record to make

Departure from Normal Temperature (F)
10/1/2018 – 10/31/2018



landfall there, and Michael retained its strength as it moved into southwest Georgia as a category 3 hurricane. This was the first major hurricane to directly impact Georgia since the 1890s with up to 115 mile per hour winds, widespread tree damage, power outages, localized flooding with rainfall in excess of 5", and utter devastation to Georgia's agricultural sector. A few brief tornadoes were also associated with the outer bands, including an EF-0 in both Peach and Fulton counties and an EF-1 tornado in Crawford County. Besides the impacts associated with Hurricane Michael, there were no storm reports during October.

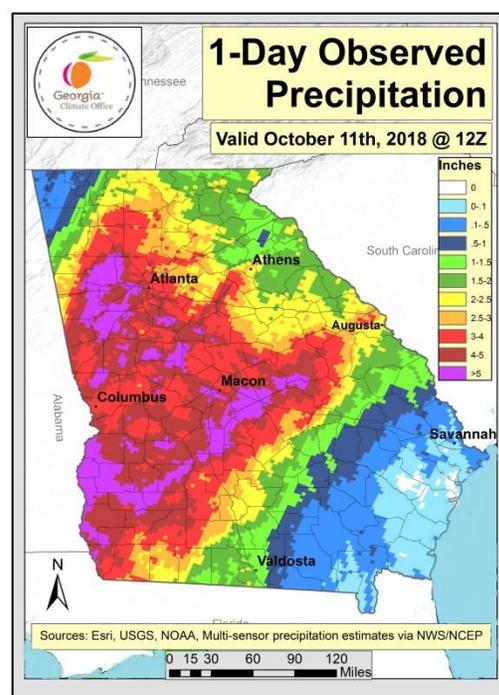
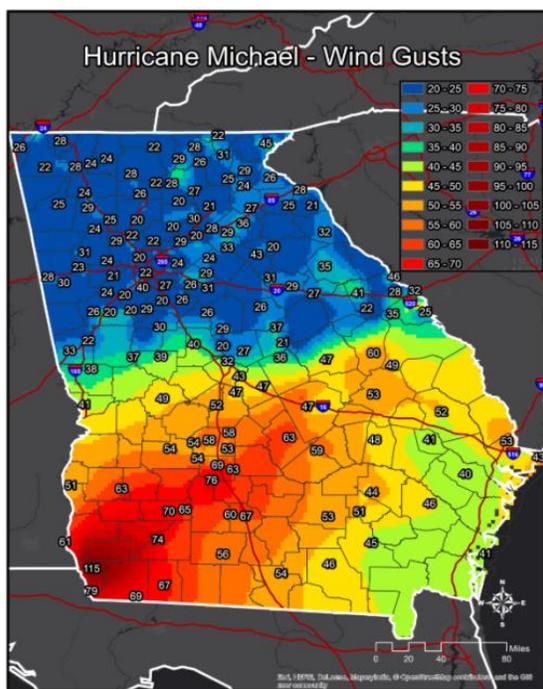
The United States Drought Monitor for Georgia showed that D0 (abnormally dry) conditions existed in much of the northern third of the state with D1 (moderate drought) conditions in central and southeast Georgia at the beginning of October. By the end of the month, conditions improved and D0 and D1 conditions were only present in a small part of east central Georgia and southeast Georgia.



This infrared satellite image was taken as Hurricane Michael entered southwest Georgia as it maintained a Category 3 intensity on the evening of October 10, 2018.

D1 conditions were only present in a small part of east central Georgia and southeast Georgia.

According to the Climate Prediction Center, ENSO-neutral conditions are present and there is currently an El Niño Watch. Equatorial sea surface temperatures are above average across most of the Pacific Ocean. El Niño is expected to form and continue through the Northern Hemisphere winter 2018 through 2019 with about an 80% chance, and continue into spring with about a 55% to 60% chance. The CPC's three-month seasonal outlook calls for equal chances for above, near, or below normal temperatures and chances for above normal precipitation, particularly in southeast Georgia, during December, January, and February.



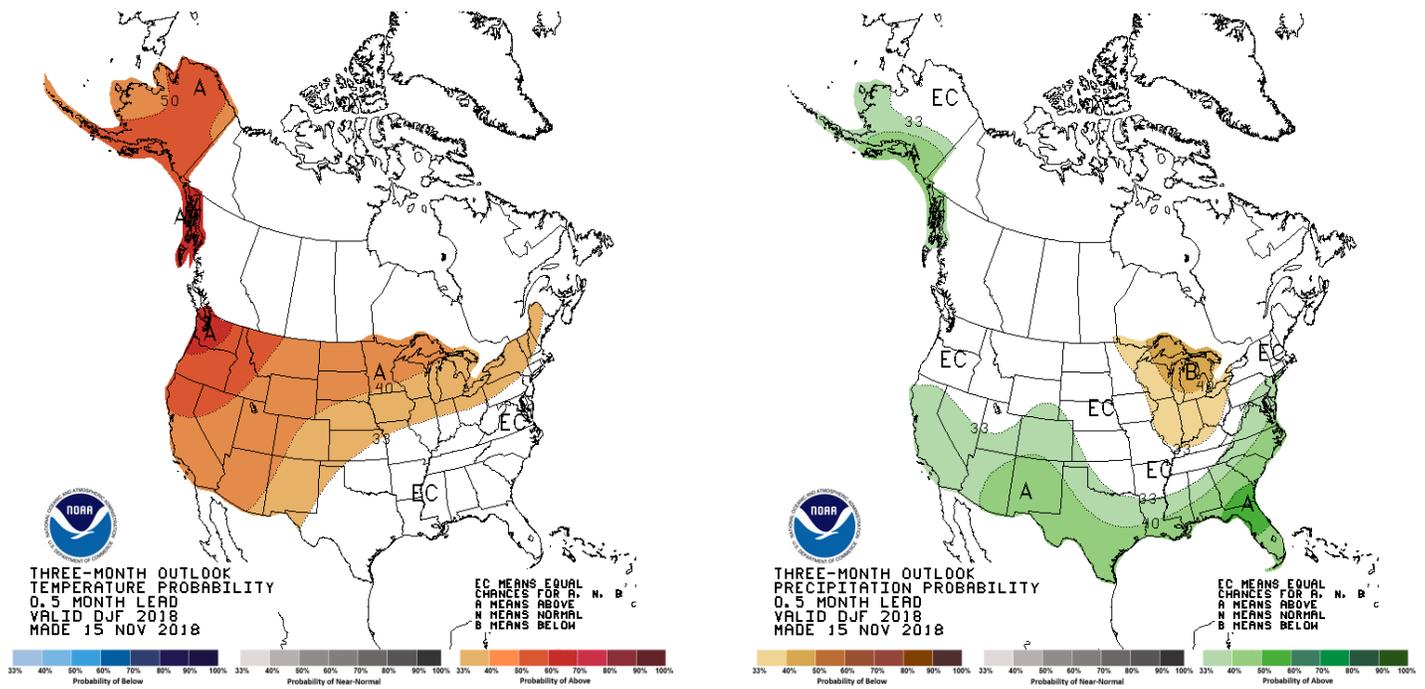


Table 1:

Daily High Temperature Records – October 2018				
Date	City	Record	Temperature	Previous Record
10/4	Atlanta	Maximum	91°	1954 (tie)
10/7	Atlanta	Minimum	71°	2017 (tie)
10/10	Atlanta	Minimum	72°	2017 (tie)
10/10	Athens	Minimum	71°	2017 (tie)
10/10	Macon	Minimum	74°	72° set in 2017
10/10	Columbus	Minimum	74°	1919 (tie)
10/10	Augusta	Minimum	75°	74° set in 2017
10/10	Savannah	Minimum	76°	75° set in 2017
10/11	Savannah	Maximum	90°	89° set in 2017
10/16	Athens	Minimum	66°	65° set in 1985
10/16	Macon	Maximum	92°	88° set in 2015
10/16	Augusta	Maximum	90°	89° set in 1984
10/16	Savannah	Maximum	91°	90° set in 1941
10/20	Savannah	Maximum	89°	88° set in 1969