October 2015 Climate Summary – Georgia

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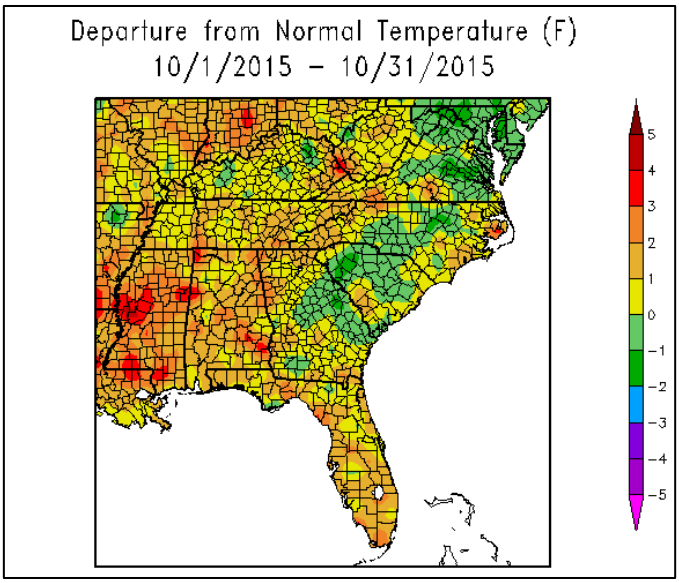
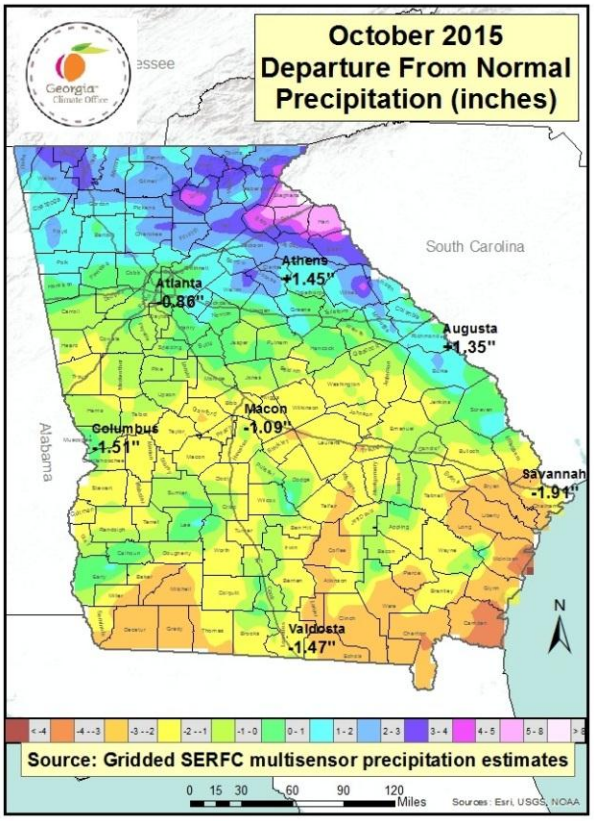
The month of October began on a wet note when a heavy rainfall event linked to Hurricane Joaquin off the Atlantic coast allowed for abundant rainfall in the state, particularly in the northeast. The rest of the month was characterized by cold frontal passages associated with low pressure systems, mild high pressure days, cold air damming events, and another surge of moisture from the Gulf of Mexico at the end of the month. October's mean monthly temperatures throughout Georgia were close to normal. North and northeast Georgia generally received above normal precipitation, while areas in the south and along the coast saw below normal precipitation. Areas that saw more rainfall generally had cooler than normal monthly temperatures due to increased cloud cover; areas receiving less rainfall, and thus less cloud cover, mostly had warmer than normal temperatures this month.



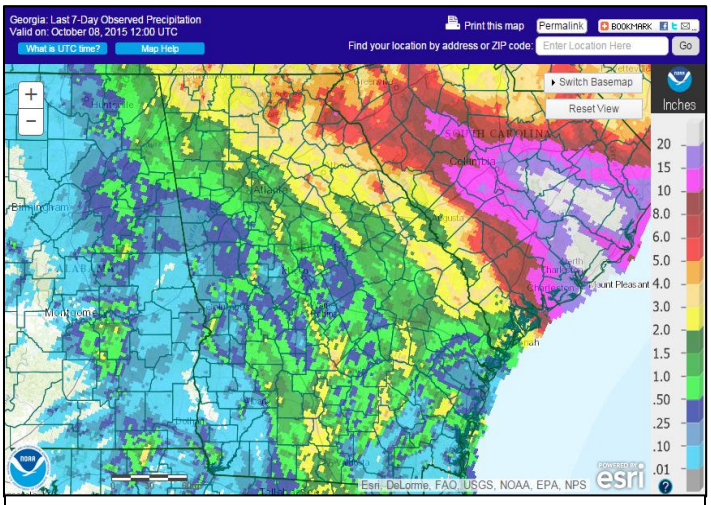
Temperatures were variable but close to average across the state in October. Both Columbus and St. Simons Island were right at their average monthly temperatures with 66.5° and 70.2°, respectively. Atlanta's monthly average temperature was 64.1° (+0.8°), Athens recorded 62.2° (-0.8°), Augusta's average temperature was 64.0° (-0.4°), and Savannah recorded 68.2° (+0.3°). Alma's average temperature was 68.3° (-0.1°), and a record low temperature of 39° was set on October 19th, breaking the old record of 40° set in 2009. Macon's monthly average temperature was 64.3° (-0.6°), and on October 17th a record high temperature of 88° was tied (the previous record was set in 1971).



Due in part to the heavy rainfall event affecting northeast Georgia at the beginning of the month, precipitation varied widely across the state. Atlanta's total monthly precipitation was 2.55" (-0.86"), Athens received 5.00" (+1.45"), Macon's monthly precipitation was 1.70" (-1.09"), Columbus received 1.07" (-1.51"), Augusta's monthly precipitation was 4.62" (+1.35"), and Savannah received 1.78" (-1.91"). Two daily rainfalls were set on October 1st. In Alma, 2.51" of rain fell and broke the old record of 0.58" set in 1989. St. Simons Island set a record daily maximum rainfall of 3.38", breaking the previous record of 0.76" set in 1957. Alma and St. Simons Island received 3.26" (+0.23") and 4.47" (+0.01"), respectively.

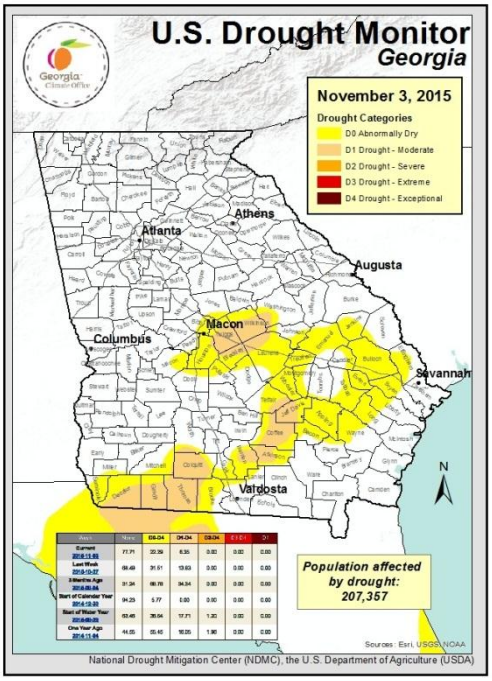
While severe weather reports were quite rare in October, the Atlantic Hurricane Season continued to have implications for Georgia with Hurricane Joaquin, a category 4 hurricane and the strongest of the Atlantic hurricane season thus far. A stalled coastal front combined with deep tropical moisture, associated

with Joaquin, set up a tropical conveyer belt of heavy rainfall with the main axis positioned mostly over South Carolina; meanwhile, an upper level trough remained stationary over the southeast U.S. The region of heavy rain missed most of Georgia, but local stream flooding occurred and high amounts of rain fell in the northeast Georgia mountains in the first few days of October.



7-day observed rainfall associated with moisture from Hurricane Joaquin.

The current U.S. Drought Monitor for Georgia shows small areas of D1 (moderate drought) conditions in parts of central and south west Georgia, with D0 (abnormally dry) conditions in eastern Georgia. D0 conditions expanded in eastern Georgia during October, while all drought in north Georgia was eliminated by the end of the month. Soil moisture conditions are likely to continue improving, especially across south Georgia, as the progressive upper level pattern and an active subtropical jet continue to bring ample moisture to the area.



The Climate Prediction Center's current Three-Month Seasonal Outlook reflects the impacts of a strong El Niño in Georgia, forecasting chances for above normal precipitation in the entire state through the winter season. There are equal chances of above, near, or below normal temperatures in November, December, and January. According to the CPC, El Niño conditions are present. There is an approximately 95% chance that El Niño will continue through Northern Hemisphere winter 2015-16, gradually weakening through spring 2016.