May 2017 Climate Summary – Georgia

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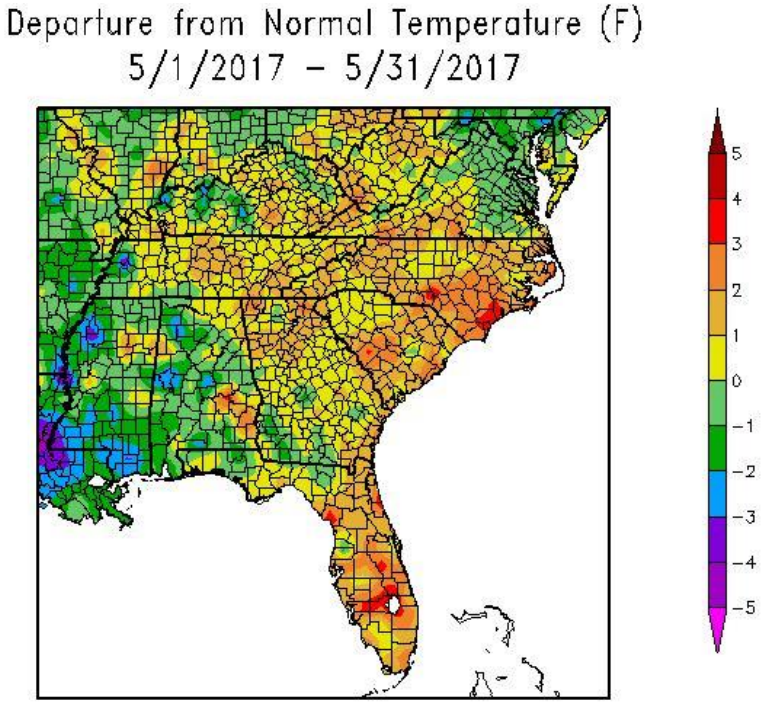
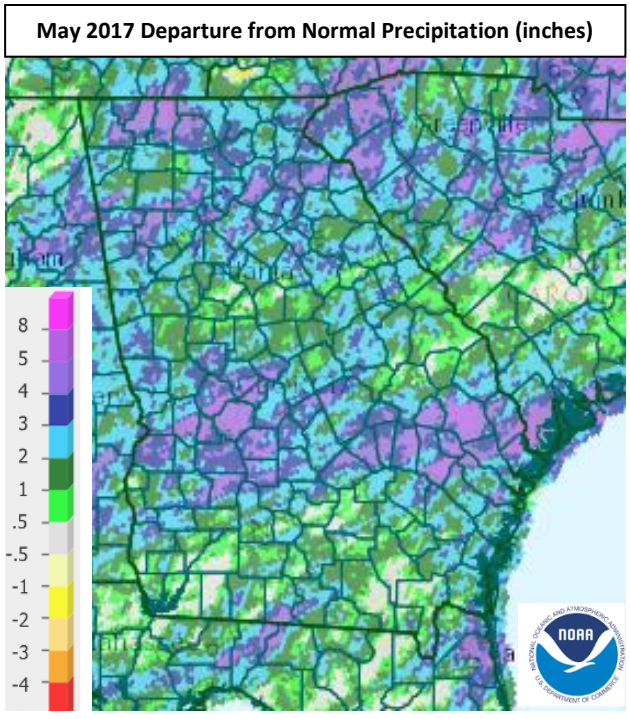
Meteorological spring ended on a warm note with above normal temperatures noted during March, April, and May. Above normal rainfall totals statewide during May allowed for the northern third of the state to see a surplus for this spring and a welcomed reduction in drought conditions. Temperatures during May averaged close to normal with a statewide average temperature of 71.4° (+0.4°). The month was very active in terms of severe weather, and by the end of the month, Georgia led the nation in number of year-to-date tornado reports with a total of 126.



Atlanta's average May temperature was 71.1° (+1.0°), Athens recorded 70.4° (+0.4°), Augusta's monthly average temperature was 74.1° (+3.0°), Columbus averaged 73.4° (+0.4°), and Savannah recorded 75.4° (+2.1°). Macon was the only major climate site recording a slightly below normal monthly temperature with 71.8° (-0.1°). A strong cold front affected the state on May 5th and many daily temperature records were broken. Atlanta, Athens, Macon, and Columbus only reached 56°, 60°, 59°, and 57°, respectively, and all broke their low maximum temperature records that day. Interestingly, May 18th and May 21st proved to be record warm days. Atlanta and Columbus broke their record high minimum temperature on May 18th, with each site only reaching 73° (the previous record of 72° was set in 1896 for Atlanta, and the previous record of 72° was set in 1995 for Columbus). Athens also tied its record high minimum temperature on that day with 68° (previously set in 1998). On May 21st, Augusta broke its record high minimum temperature with 72° (the previous record of 71° was set in 1987). Macon and Savannah both tied their record high minimum temperatures on that day with 71° (previously set in 2001) and 74° (previously set in 1902).

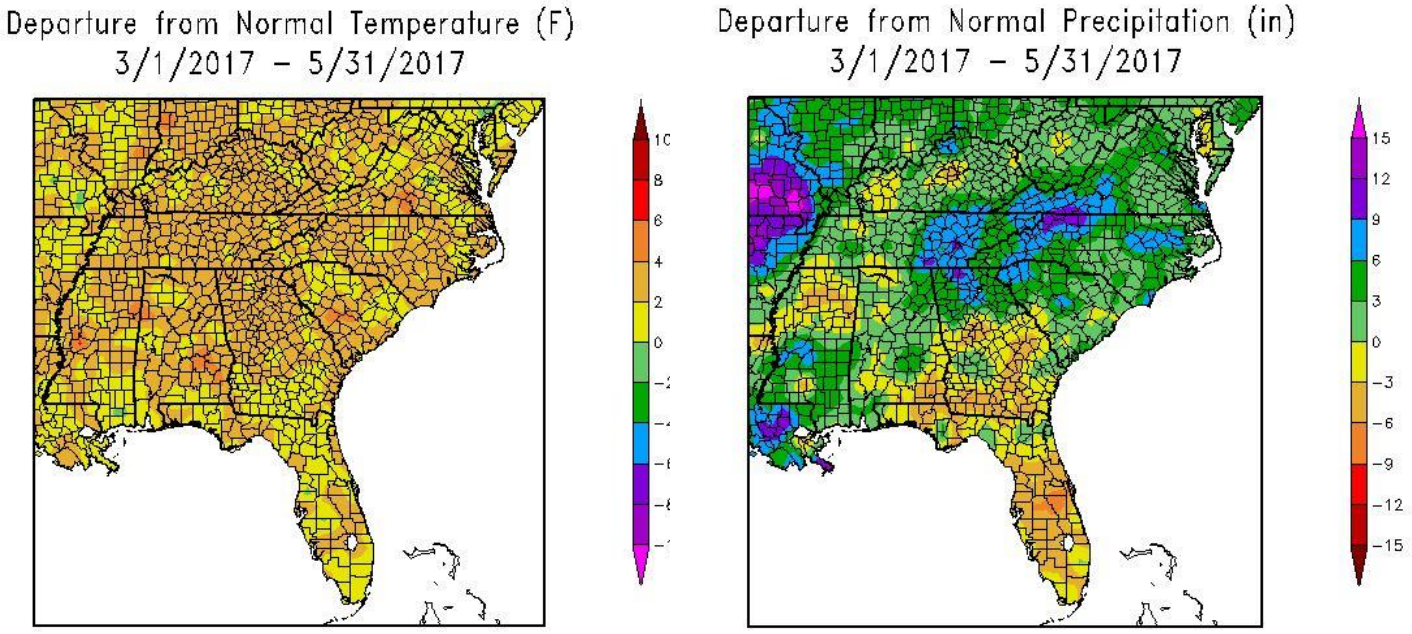


The vast majority of the state saw near to much above normal rainfall during May. Savannah recorded 11.54" (+8.56") during the month and had its wettest May on record. Rain that fell on May 22nd contributed to the high total; Savannah saw 6.61" and broke a daily rainfall record. This day also ranked as number one for maximum one-day total precipitation for the month of May by more than 1.50". Atlanta's monthly precipitation was 4.60" (+0.93"), Columbus recorded 5.37" (+2.18"), and Augusta's total May precipitation was 3.34" (+0.69"). Athens saw 6.24" (+3.24") this month, and on May 21st, 2.42" fell and set a new daily rainfall record. Macon had its 6th wettest May on record and received 6.07" (+3.35").

Georgia had its 7th warmest spring on record with an average temperature of 65.6° (+2.5°) for March, April, and May. Atlanta had its 3rd warmest spring with 65.5°, Athens and

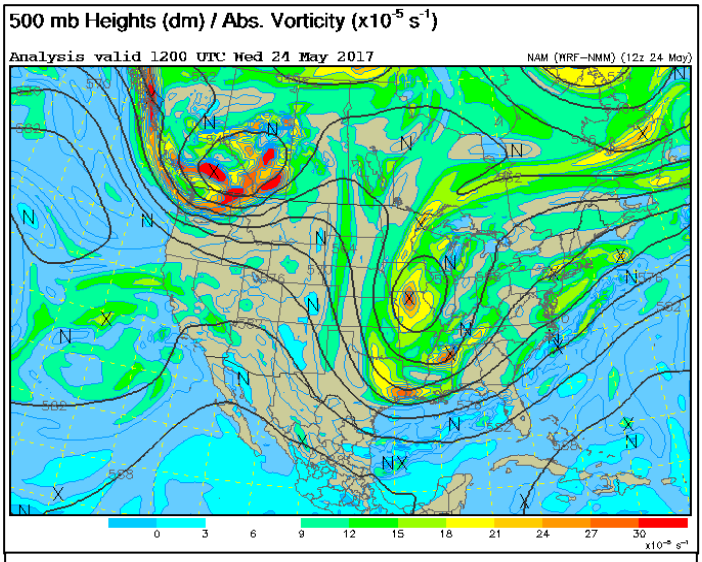
Augusta had their 5th warmest spring with 64.6° and 67.4°, and Columbus and Savannah had their 7th warmest spring with 67.9° and 69.2°, respectively. In general, the northern third of the state saw above normal spring precipitation, and the rest of the state saw below normal precipitation except for areas in west central and southeast Georgia.

Spring 2017 Temperature and Precipitation

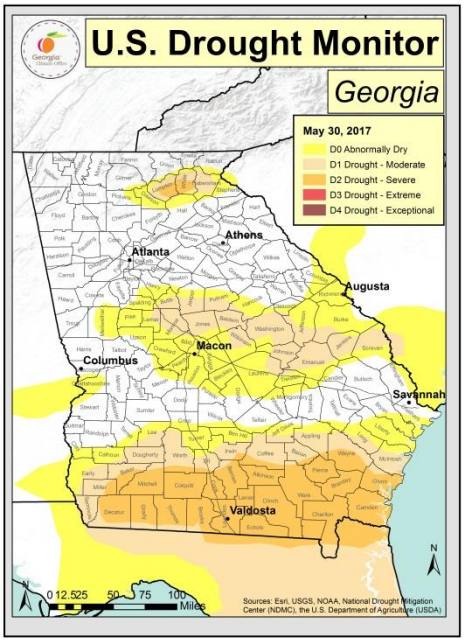


There were a total of 20 total tornadoes in Georgia during May, which is the 2nd highest May tornado count after 2008. On May 4th, thunderstorms developed south of a warm front and ahead of a cold front and spawned two EF-0 tornadoes in the Atlanta area and one EF-1 in Chatham County. One of the EF-0s occurred at Hartsfield-Jackson International Airport and caused some cargo bins to be tossed around, but there were no injuries reported. The high end EF-1 occurred in Garden City and caused significant structural damage and numerous snapped trees. After the cold frontal passage, a fairly significant wake low-type event also occurred. High wind warnings and wind advisories were issued due to 40 to 60 miles per hour wind reports in north Georgia. Another significant severe weather event occurred on May 24th when a strong low pressure system and associated cold front impacted the southeast. There were 3 EF-1s and 7 EF-0s reported throughout the state on this day.

The United States Drought Monitor showed that drought conditions were significantly reduced across north and central Georgia during May. By the end of the month, D3 (extreme drought) conditions were removed from north Georgia and the areas of D1 (moderate drought) conditions and D0 (abnormally dry) conditions were reduced throughout the northern half of the state. In south Georgia, D3 conditions were introduced in the early weeks of the month but eventually removed as beneficial rain fell throughout the state in May.



The 500 mb analysis shows a potent upper low pressure system that brought severe weather to the southeast on May 24th.



According to the Climate Prediction Center, ENSO-neutral conditions are present across the tropical Pacific. ENSO-neutral is favored (50 to 55% chance) through the Northern Hemisphere fall 2017. The CPC's three-month seasonal outlook shows greater chances for above normal temperatures in the entire state and equal chances of above, near, or below normal precipitation during June, July, and August. Towards the end of May, NOAA released its 2017 Atlantic Basin Hurricane Outlook. The forecast calls for an above average hurricane season this year with 2 to 4 major hurricanes, 5 to 9 total hurricanes, and 11 to 17 named storms.