June 2012 Climate Summary - Georgia

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The month of June was characterized by abundant rainfall from Tropical Storm Debby across South Georgia and Florida, as well as record-breaking heat across much of the U.S. Tropical Storm Debby engulfed Florida with flooding rains beginning June 23rd and continued the deluge into parts of extreme southern and southeast Georgia through the 27th. The NWS climate station at St. Simons Island recorded 5.99 inches of rainfall during the period of the 23rd-27th, with a record daily maximum amount of rainfall set on the 26th. The record daily rainfall of 2.9 inches on the 26th broke the old record of 2.77 inches set in 1963. COCORAHS rainfall reports topped 10 inches in many areas, with readings such as 12.96" in Kingsland, GA and 10.05" at Kings Bay. The heaviest rainfall totals for the 7-day period of 6/21 through 6/27 were confined to extreme southern and southeast Georgia, similar to TS Beryl. Rainfall totals decreased further north, as drier air filtered in from a strong high pressure system in the wake of Debby. Alma, Georgia only reported 1.49 inches of rainfall for the event.





Although Tropical Storm Debby provided drought relief across Florida and southeast Georgia (as registered by the Drought Monitor), it did not reach the heart of the drought areas in SW Georgia, central Georgia, and in the Central Savannah Region Area (CSRA). Gridded SERFC multisensor precipitation estimates and observed reports for June still show rainfall departures an inch or more from normal across much of north and central Georgia. Atlanta (-1.67), Macon (-1.02), Columbus (-1.54) and Athens (-1.23) all recorded below normal rainfall for the month of June.



Impact on Drought



The official start of summer was followed by a remarkable heat wave event, 6/29 through 7/1, as a strong upper level ridge dominated across the Southeast. Numerous temperature records were set, not only in Georgia, but across the U.S as well. During the three-day period, many locations reported temperatures well above 100°F. Several all time highs were set at select cities in the state. Among those, Columbus and Atlanta set all time record highs of 106° F on the 30th, while Athens set a record of 109°F on the 29th. Macon tied a record of 108°F, which was last observed in 1980. The map below details the highest recorded temperatures for the month of June, most of which occurred during the extreme heat event. Even amid such record-breaking temperatures, Augusta still recorded the 7th coolest June on record, according to the NWS. The June temperature average at Augusta Regional Bush Field was 74.7°F (3.9° below the normal of 78.6° F). The coolest June on record at Augusta occurred in 1956 and 1966 with an average temperature of 74° F.





The high temperatures, along with dry, highly stable conditions provided stagnant conditions for north Georgia at the end June, which allowed for very poor air quality to occur as well. Metro Atlanta recorded a rare code Purple at the Environmental Protection Division (EPD)'s McDonough, GA site on the 29th, which is considered Very Unhealthy under EPA's Air Quality Standards for ozone. The concentration reached an 8-hr average of 122 parts per billion by volume (ppbv). The last code purple Metro Atlanta experienced was on Aug 15th, 2007. A "Very Unhealthy" condition triggers a health alert signifying that everyone may experience serious health effects from prolonged outdoor exposure. The EPD site at Conyers, GA reached 109 ppbv on the 29th, which is a high code Red ("Unhealthy"). An "Unhealthy" condition signifies that everyone may begin to experience some adverse health effects and members of sensitive groups may experience more serious effects.

