

September 2017 Climate Summary – Georgia

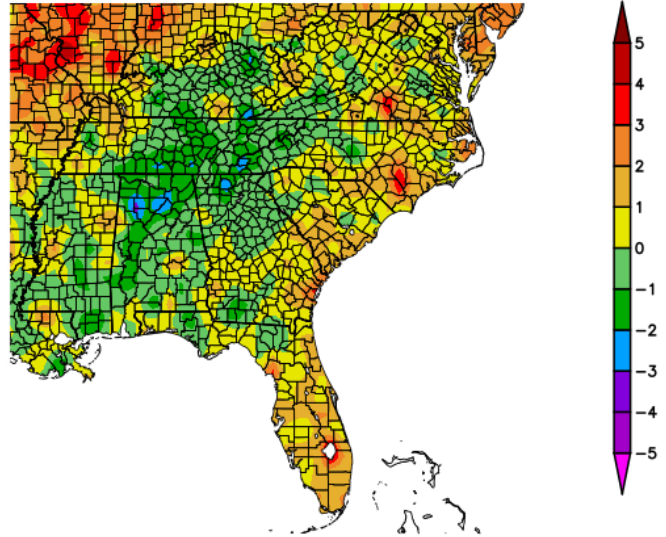
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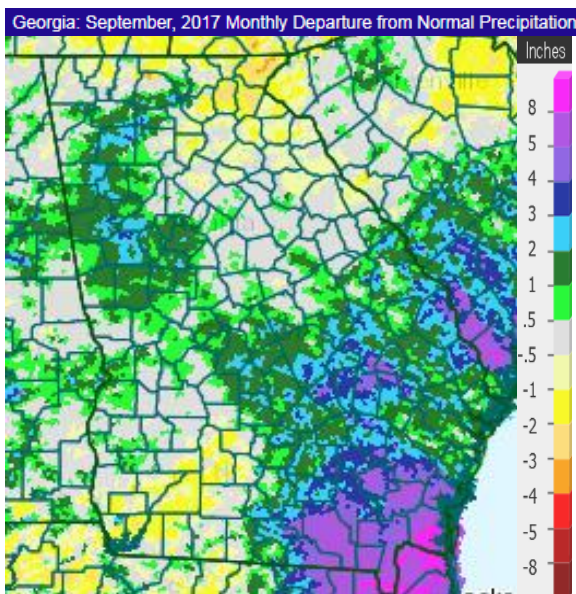
September average temperatures and precipitation were close to normal across much of the state except southern coastal areas; however, the vast majority of days in September were dry. Hurricane Irma provided much of the rainfall that was recorded across Georgia in September, in addition to some very cool and record-breaking daytime low and high temperatures.

Climate sites that recorded only slightly below normal monthly temperatures include Athens with 72.5° (-0.8°) and Macon with 74.8° (-0.2°). Areas recording above normal September temperatures include Atlanta with 73.8° (+0.3°), Columbus with 77.2° (+0.6°), Augusta with 76.7° (+2.1°), and Savannah with 78.9° (+2.0°). During the first half of September, temperatures were much below normal due to a strong cold front and Hurricane Irma, and several locations broke low temperature records (see table 1). The second half of the month generally saw above normal temperatures.

Departure from Normal Temperature (F)
9/1/2017 – 9/30/2017



Atlanta's monthly precipitation totaled 4.25" (-0.22"), Athens recorded 4.19" (+0.25"), Macon's September rainfall totaled 3.87" (+0.28"), Columbus recorded 3.19" (+0.13"), Augusta's monthly rainfall totaled 4.28" (+1.06"), and Savannah recorded 5.59" (+1.01). All of the major climate sites in Georgia had a record-breaking rainfall day on September 11th when Tropical Storm Irma moved through Georgia (see table 2). The outermost bands dropped rainfall amounts up to 5" to 6" across the state.



There were five hurricanes that formed in the Atlantic Basin during September, one of which had widespread and damaging impacts in Georgia. Hurricane Irma began as a tropical wave in late August and intensified to a category 5 hurricane by September 5th in the Caribbean. Irma made landfall on the Florida Keys as a category 4 hurricane with maximum winds of 130 miles per hour. The storm moved through Georgia on September 11th as a tropical storm with an incredibly large wind field, causing thousands of downed trees and 1.5 million customers in Georgia to lose power. Fortunately, there were no tornadoes reported that were associated with Irma due to an unseasonably cool and stable air mass that was in place. Hurricane Irma set a multitude of climatological records for intensity, days of hurricane strength, and landfall records, among others. For example, with 185 miles per

hour lifetime maximum winds, Irma is tied for the second strongest hurricane in the Atlantic Basin on record, in terms of wind speed. Besides the wind damage associated with Irma, severe weather was highly limited during

the month with only a few days of wind reports. In addition to Irma, Hurricane Jose (category 4), Hurricane Katia (category 2), Hurricane Lee (category 3), and Hurricane Maria (category 5) formed in the Atlantic Basin but did not have any impacts to the state.

The United States Drought Monitor shows that the first week of September had some spotty D0 (abnormally dry) areas in northwest, southwest, central, and along the South Carolina border. Those dry areas received beneficial rainfall and the state became drought-free for the rest of the month.

According to the Climate Prediction Center, ENSO-Neutral conditions are present. Equatorial sea surface temperatures are near-to-below average across the central and eastern Pacific Ocean. There is an increasing chance (55% to 60%) of La Niña during the Northern Hemisphere fall and winter 2017 through 2018, so a La Niña Watch has been issued. The CPC's three-month seasonal outlook shows greater chances for above normal temperatures and below normal precipitation for the entire state throughout October, November, and December.

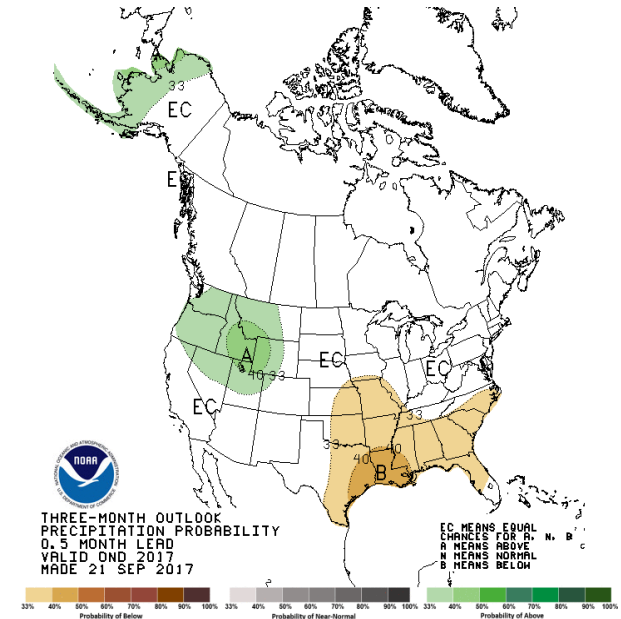
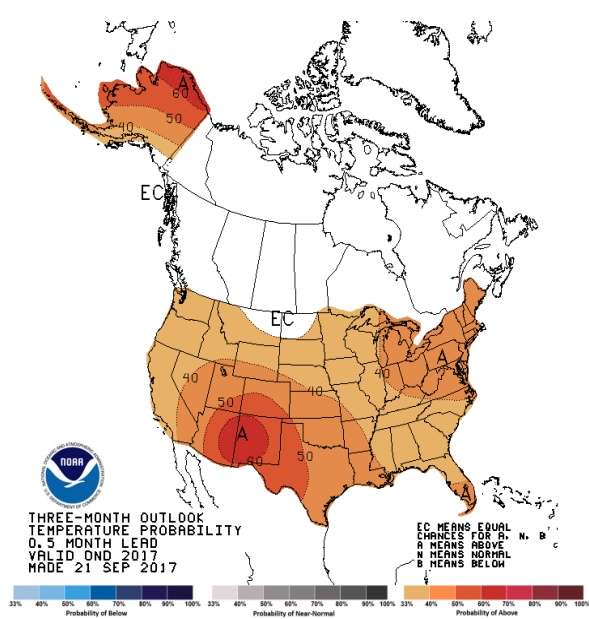
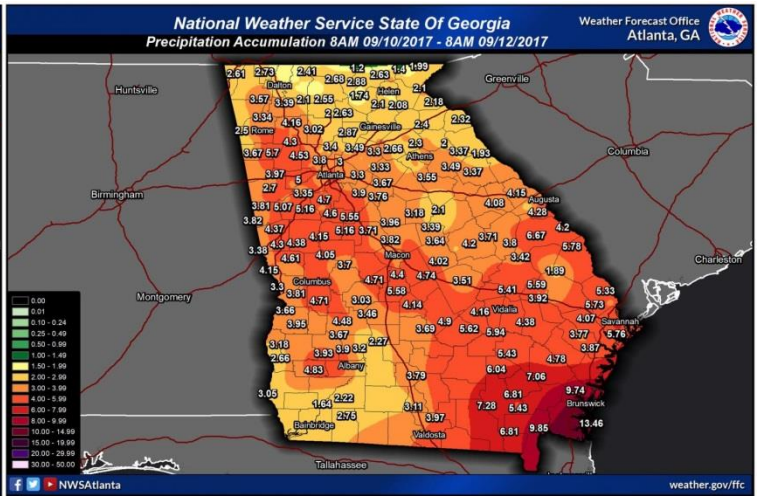
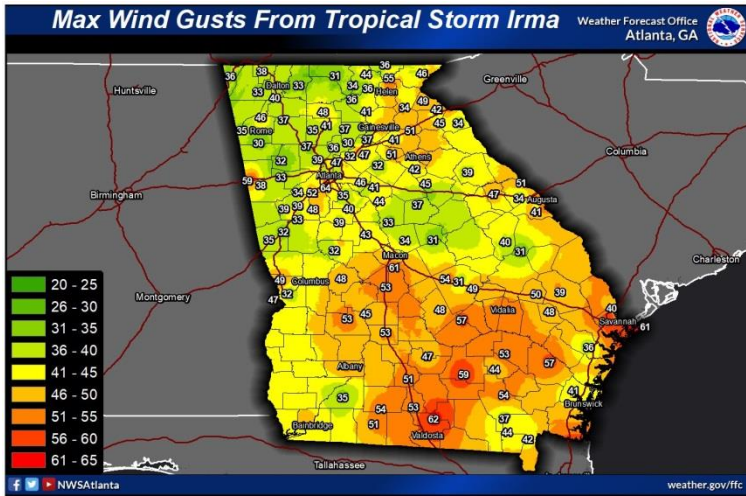
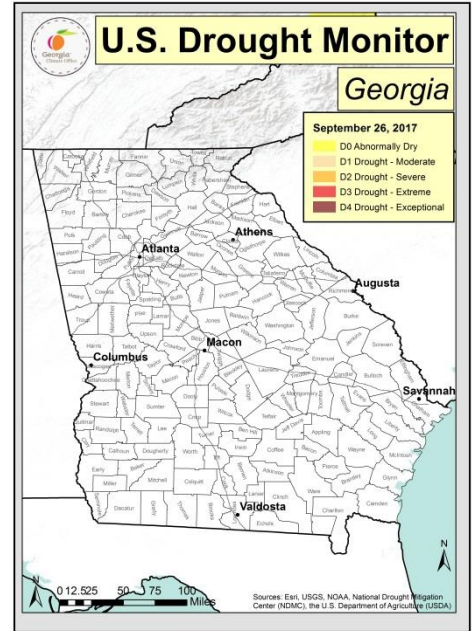


Table 1:

Daily Temperature Records Broken at Major Climate Sites in September				
Date	City	Record	Temperature	Previous Record
9/4	Athens	Daily low minimum	55°	1994 (tie)
9/7	Atlanta	Daily low minimum	53°	56° set in 1896
9/7	Athens	Daily low minimum	51°	55° set in 1997
9/7	Macon	Daily low minimum	51°	53° set in 1997
9/7	Columbus	Daily low minimum	57°	58° set in 1952
9/8	Athens	Daily low minimum	52°	54° set in 1932
9/8	Macon	Daily low minimum	52°	55° set in 1997
9/8	Columbus	Daily low minimum	57°	58° set in 1965
9/10	Athens	Daily low maximum	69°	70° set in 1944
9/10	Macon	Daily low maximum	69°	71° set in 1944
9/10	Savannah	Daily low maximum	73°	1883 (tie)
9/11	Athens	Daily low maximum	65°	66° set in 1944
9/11	Macon	Daily low maximum	69°	70° set in 1935
9/11	Columbus	Daily low maximum	65°	74° set in 1952
9/12	Atlanta	Daily low maximum	64°	67° set in 1891
9/12	Athens	Daily low maximum	67°	68° set in 1917
9/28	Augusta	Daily high maximum	97°	1986 (tie)

Table 2:

Rainfall Totals on September 11th associated with Hurricane Irma		
City	Total Rainfall	Previous Record
Atlanta	3.62"	1.94" set in 1944
Athens	3.21"	2.11" set in 1944
Macon	3.78"	0.91" set in 2016
Columbus	3.07"	2.68" set in 1946
Augusta	4.10"	2.30" set in 1884
Savannah	4.74"	3.75" set in 1878