

November 2016 Climate Summary – Georgia

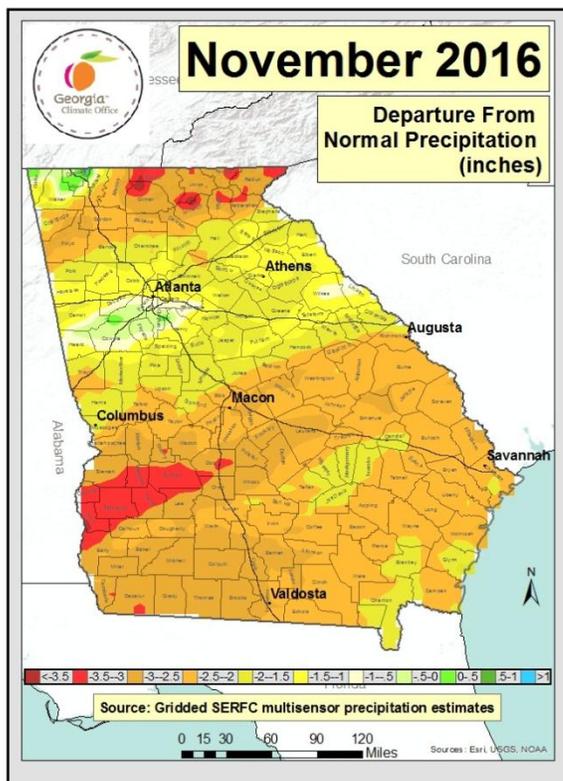
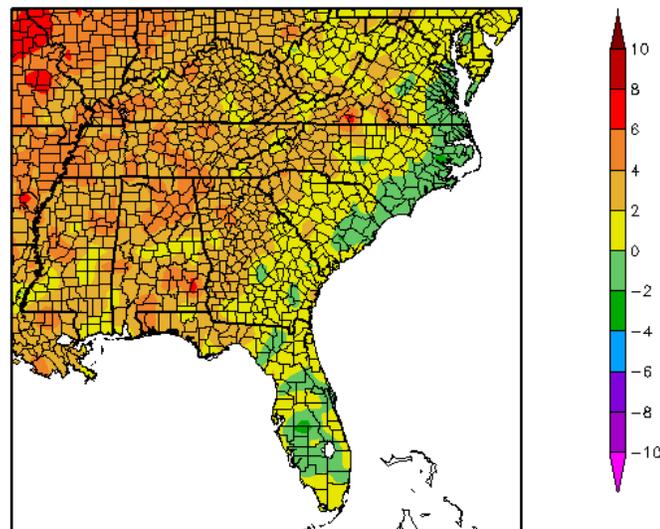
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The persistent trend of much above normal temperatures statewide continued through November. Although there was finally some beneficial rain at the end of the month, the vast majority of the state saw 1” to 4” November rainfall deficits. A large number of climate sites broke records as weeks passed with no measureable rainfall in much of the state. The lack of rainfall, combined with above normal temperatures, caused drought conditions to worsen and increased wildfire activity in mid-November. It was no surprise that meteorological fall proved to be much warmer and drier than normal this year.

Atlanta’s average November temperature was 58.9°F (+4.9°), making it the 3rd warmest November on record (with a tie for 2nd). Athens had its 8th warmest November on record with 56.8° (+3.0°). Macon, Columbus, Augusta, Savannah, St. Simon's Island and Valdosta all recorded above average temperatures of 58.4°, 59.9°, 57.3°, 61.1°, 63.5°, and 61.3°, respectively. Rome was well above normal with an average temperature of 54.9° (+4.0). There were many record high temperatures that were broken or tied throughout the month (see table 1). On November 3rd, Atlanta, Athens, Macon, and Augusta all set daily high temperature records.

Much of Georgia saw below normal precipitation in November, and many National Weather Service reporting stations, particularly in south Georgia, actually recorded 0.00” or trace amounts of rainfall during the entire month. Atlanta and Athens recorded 2.98” (-1.12”) and 2.24” (-1.58”), respectively. On November 29th, after several weeks with no measureable rainfall, both sites broke daily rainfall records when 2.32” fell in Atlanta and 1.29”

Departure from Normal Temperature (F)
11/1/2016 – 11/30/2016

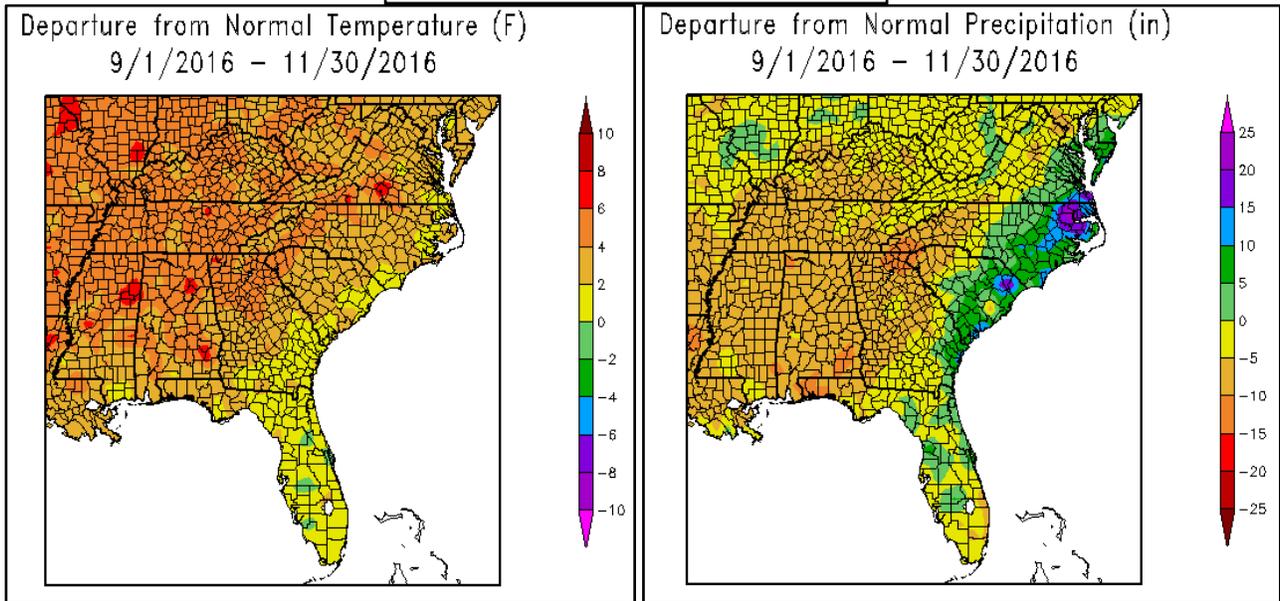


fell in Athens. In fact, many sites in Georgia saw more than five weeks with no recorded precipitation. The two most notable sites were Plains and Montezuma, with both showing 72 consecutive days with no measureable rainfall (see table 2). Macon’s November precipitation totaled 1.15” (-2.17”), Columbus recorded 2.18” (-1.92”), Augusta’s total precipitation was 0.62” (-2.20”), and Rome recorded 1.77” (-3.08”). Valdosta saw only trace precipitation on one day in November, making it 2.56” below normal for the month. St. Simons Island had its driest November on record when only 0.04” (-1.99”) fell, and Savannah had its 7th driest November on record with 0.20” (-2.17”).

For September, October, and November, the state as a whole had its 4th warmest meteorological fall on record with 67.7°, and its 16th driest fall on record with an average statewide precipitation total of 5.78”. Atlanta saw its warmest fall on record with 69.1°. Both Athens and St. Simons Islands had their 4th warmest fall on record with 67.4° and 71.6°, respectively. Athens also had its 6th driest fall on record with 3.49” total precipitation. Columbus saw an average fall temperature of 70.3° and a total of 3.85” rainfall, making it the 5th warmest and 13th driest fall on record. Macon had its 6th warmest fall on record with 68.6° and its 11th driest fall on record with 3.53”. Savannah had its 9th warmest fall on record with 70.5°, and interestingly, its 16th wettest fall on record with 16.79”

due to increased hurricane activity and subsequent abundant rainfall. Augusta also had a warm fall with an average temperature of 67.7°, making it the 12th warmest fall on record.

METEOROLOGICAL FALL



The United States Drought Monitor showed that all drought categories increased in coverage in Georgia throughout November, and the entire state showed some level of drought by the end of the month. The amount of D4 (exceptional drought) conditions more than doubled across the northern half of the state, while D3 (extreme drought) and D2 (severe drought) conditions expanded into central and southwest Georgia. Several weeks with no rainfall and warmer than normal temperatures in November contributed to the low soil moisture and expanding dry conditions in the state.

An interesting impact related to the drought in the south was observed when wildfire activity ramped up in north Georgia, Tennessee, and North Carolina. During the middle of the month, a large fire in the Cohutta Wilderness area in Fannin County developed and grew due to dry, high pressure conditions, low relative humidities, and strong winds associated with a cold frontal passage. The prevailing northerly winds allowed smoke plumes from this fire and others to drift into much of central and even parts of south Georgia, which caused decreased visibilities and bad air quality to affect Atlanta and other parts of Georgia (see graph 1). Smokey conditions were noted as far south as Savannah.

According to the Climate Prediction Center, there is currently a La Niña Advisory and La Niña conditions are present. There is around a 75% chance for La Niña conditions to continue in December, January and February. The CPC's three-month seasonal outlook shows there are chances for above normal temperatures and below normal precipitation, especially in south Georgia, during December, January, and February, which reflects the effects of La Niña in the southeast.

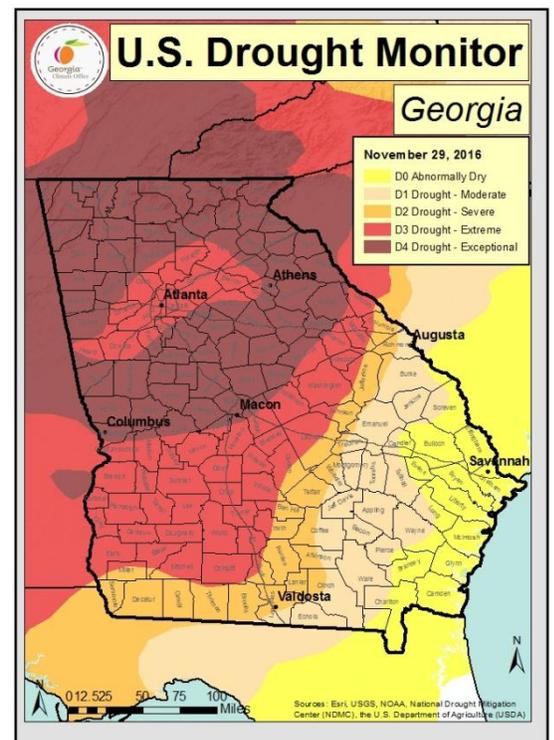


Table 1

RECORD HIGH TEMPERATURE RECORDS			
City	Date	Temperature	Previous Record
Atlanta	11/1	82°	81° set in 1974
Atlanta	11/3	84°	82° set in 1974
Atlanta	11/4	80°	tie with 1946 record
Atlanta	11/24	76°	tie with 2014 record
Athens	11/3	85°	84° set in 2000
Athens	11/18	80°	tie with 1994 record
Macon	11/3	86°	tie with 2004 record
Macon	11/25	80°	tie with 1973 record
Augusta	11/3	87°	86° set in 1974
Augusta	11/30	81°	tie with 1991 record
Savannah	11/29	82°	tie with 1985 record
Savannah	11/30	83°	82° set in 1985

Table 2

2016 Number of Consecutive Days Precipitation <= 0.00"					
STATION	# DAYS	DATES	RANK	RECORD	POR
Plains SW GA EXP STN (COOP)	72	9/20 – 11/30	1	-	1956 - present
Montezuma 2 NW	72	9/19 – 11/29	1	-	1904 - present
Cartersville Airport	70	9/19 – 11/27	1	-	2000 - present
Albany SW GA Regional Airport	64	9/27 – 11/29	1	-	1948 - present
Atlanta – Peachtree Airport	52	10/8 – 11/28	1	-	1998 - present
Macon Middle GA Regional Airport	52	10/8 – 11/28	1	-	1892 - present
Atlanta – Hartsfield-Jackson Airport	43	10/17 – 11/28	1	-	1878 - present
Atlanta – Fulton Co. Airport	43	10/17 – 11/28	1	-	1998 - present
Peachtree City – Falcon Field	43	10/17 – 11/28	1	-	1994 - present
Valdosta Regional Airport	44	10/17 – 11/29	1	-	1948 - present
Alma Bacon Co. Airport	40	10/16 – 11/24	1	-	1948 - present
Rome B. Russell Airport	38	10/17 – 11/23	1	-	1948 - present
Gainesville Gilmer Airport	27	10/17 – 11/12	2	31 days (1998)	1998 - present

days includes trace amounts reported

