

November 2013 Climate Summary - Georgia

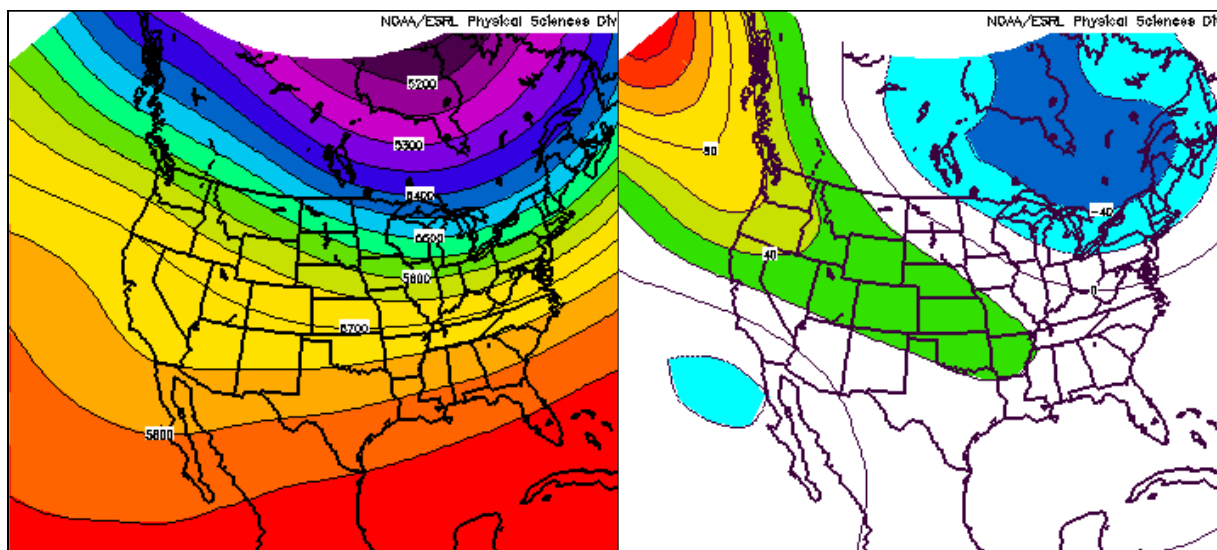
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State of Georgia Climate Office

Summary

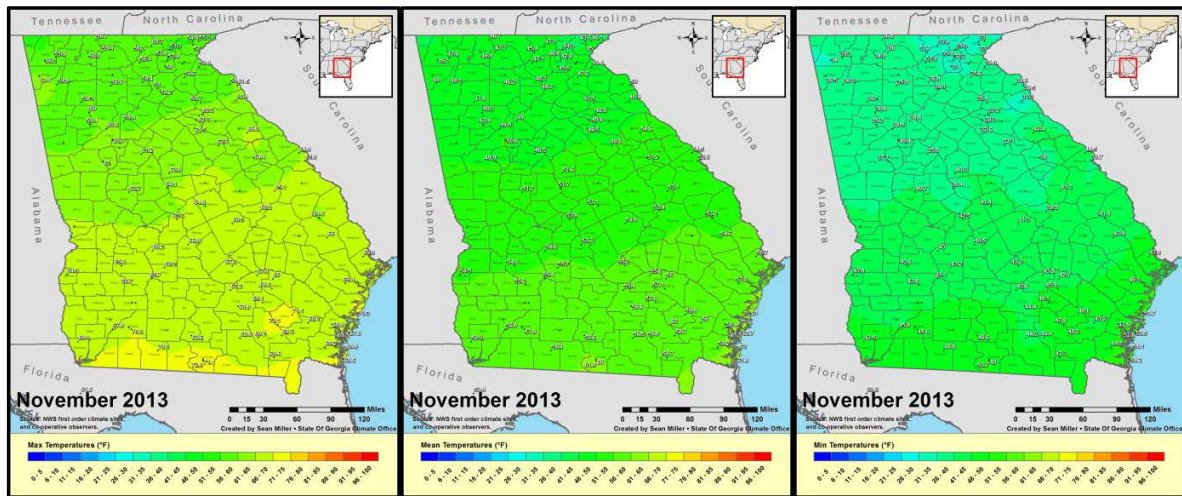
The mean weather pattern for November featured a high pressure ridge over the eastern Pacific with troughing prevailing over eastern Canada and New England. An active upper level flow pattern brought a series of weather disturbances through the state keeping the month rather cool and unsettled. Mean temperatures were below normal statewide, with the coldest readings in the north. Cold-air outbreaks on the 13th and 28th brought record low temperatures to some locations.



Average geopotential height fields on the 500 hPa pressure surface (left), and anomalies (right)

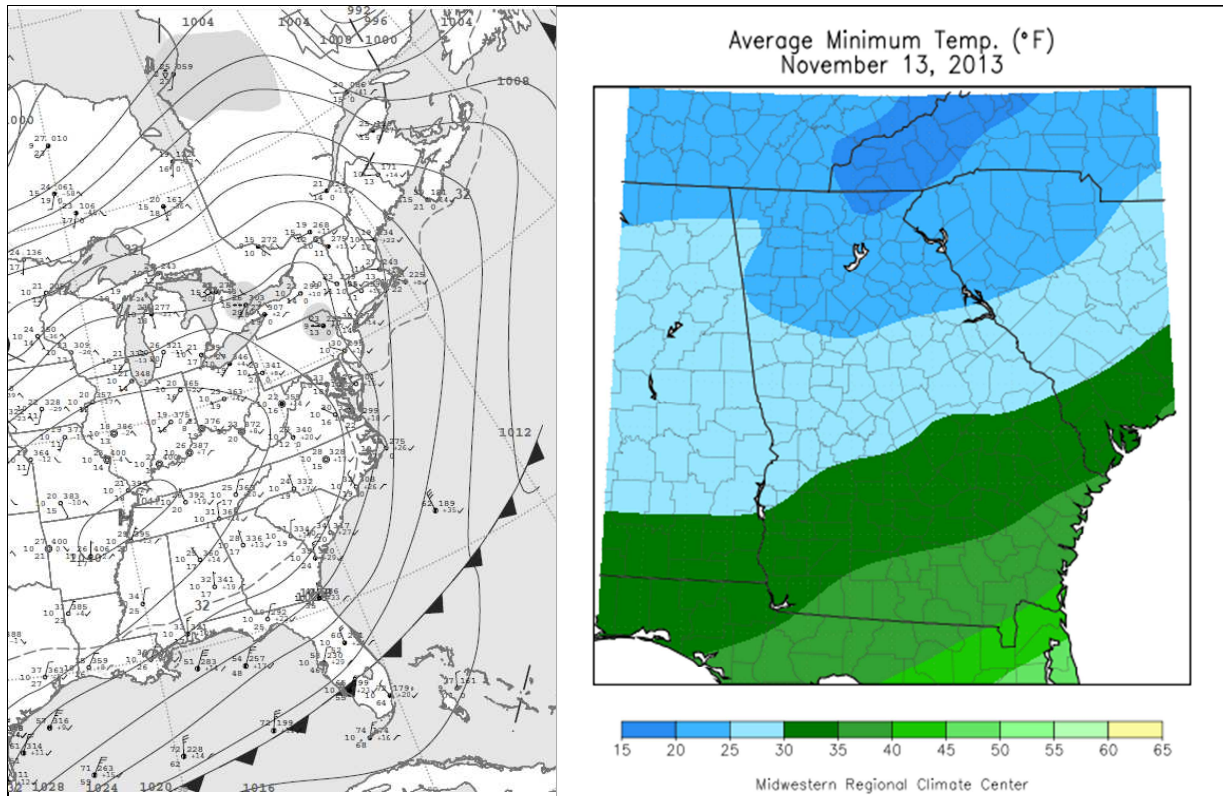
Temperatures

Mean temperatures across the state were below normal, with departures ranging from less than one degree below normal in the southeast to over five degrees below normal in the northwest. Temperature departures at the first order climate sites ranged from - 4.0° at Athens to - 0.5° at Savannah.



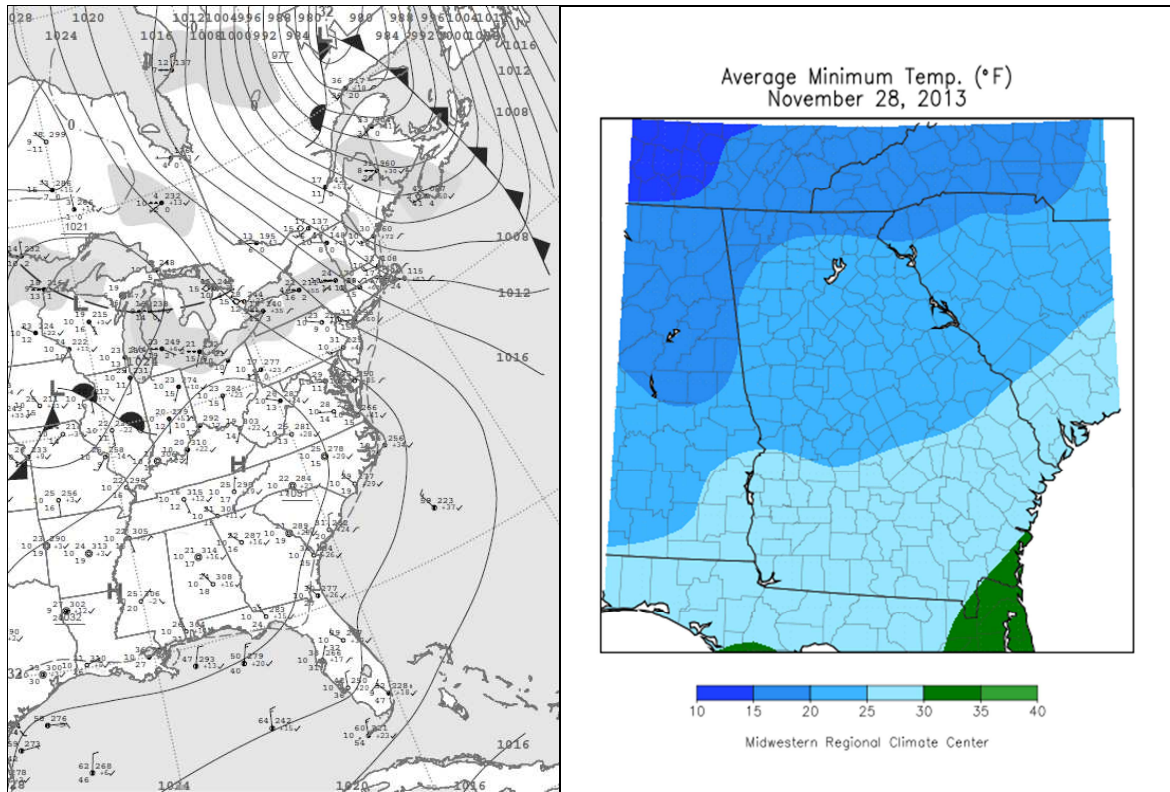
Average High (left), mean (center), and low (right) temperatures for November 2013.

The month began on a mild note temperature-wise, with mean temperatures from the 1st through 7th in the lower 50s (north) to lower 60s (far southeast). Slight cooling occurred on the 8th after the passage of a weak cold front, with temperatures moderating through the 11th. A strong cold front impacted the area on the 12th, with cold temperatures statewide on the 13th and 14th. Several cooperative observing sites in northern Georgia recorded daily minimum temperatures in the teens during this period. Among the coldest readings were 13° at LaFayette (on the 14th), and 14° at Blairsville (13th). This is the earliest date on which LaFayette has recorded a temperature this low (the previous earliest date was 11/15/40 with 11° and 11/15/69 with 13°). Atlanta's Hartsfield-Jackson International Airport also recorded its first freeze of the season on the 13th with 28°. This date coincides with the historical average first freeze date for Atlanta.



Weather Map at 7 AM EST (left) and daily low temperatures (right) for 13 November 2013.

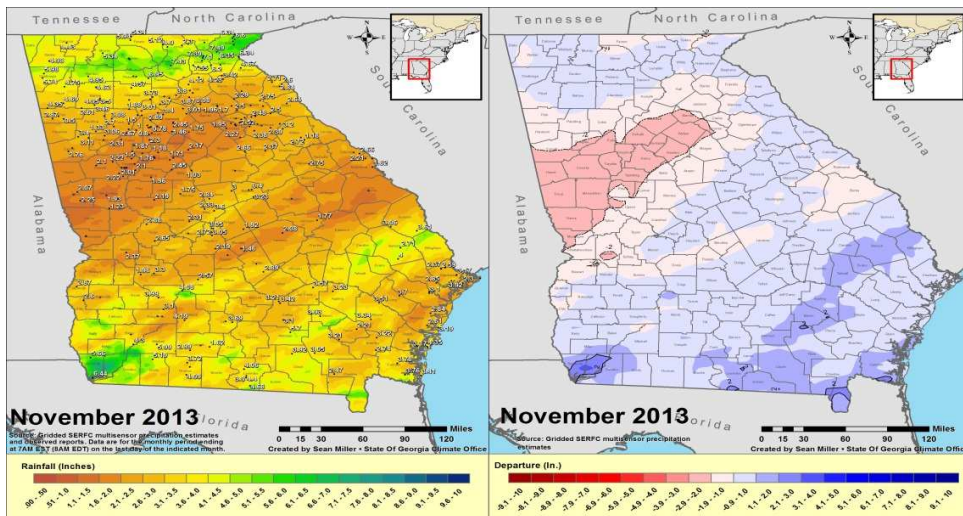
After a brief warm spell on the 17th and 18th, temperatures again cooled following the passage of a cold front on the 19th. Further cooling continued through the 25th as a modified area of arctic high pressure settled into the region. Following the passage of a strong upper level trough and associated surface wave on the 26th and 27th, high pressure again built into the region with radiational cooling allowing for record cold temperatures at a few climate sites. Augusta and Macon set new record low temperatures on the 28th with 21°, breaking their existing low temperature records of 22°, set in 1903 (Macon) and 1938 (Augusta). The Elberton cooperative observing site also recorded a low of 13° on the 29th.



Weather Map at 7AM EST (left) and daily low temperatures (right) for 28 November 2013.

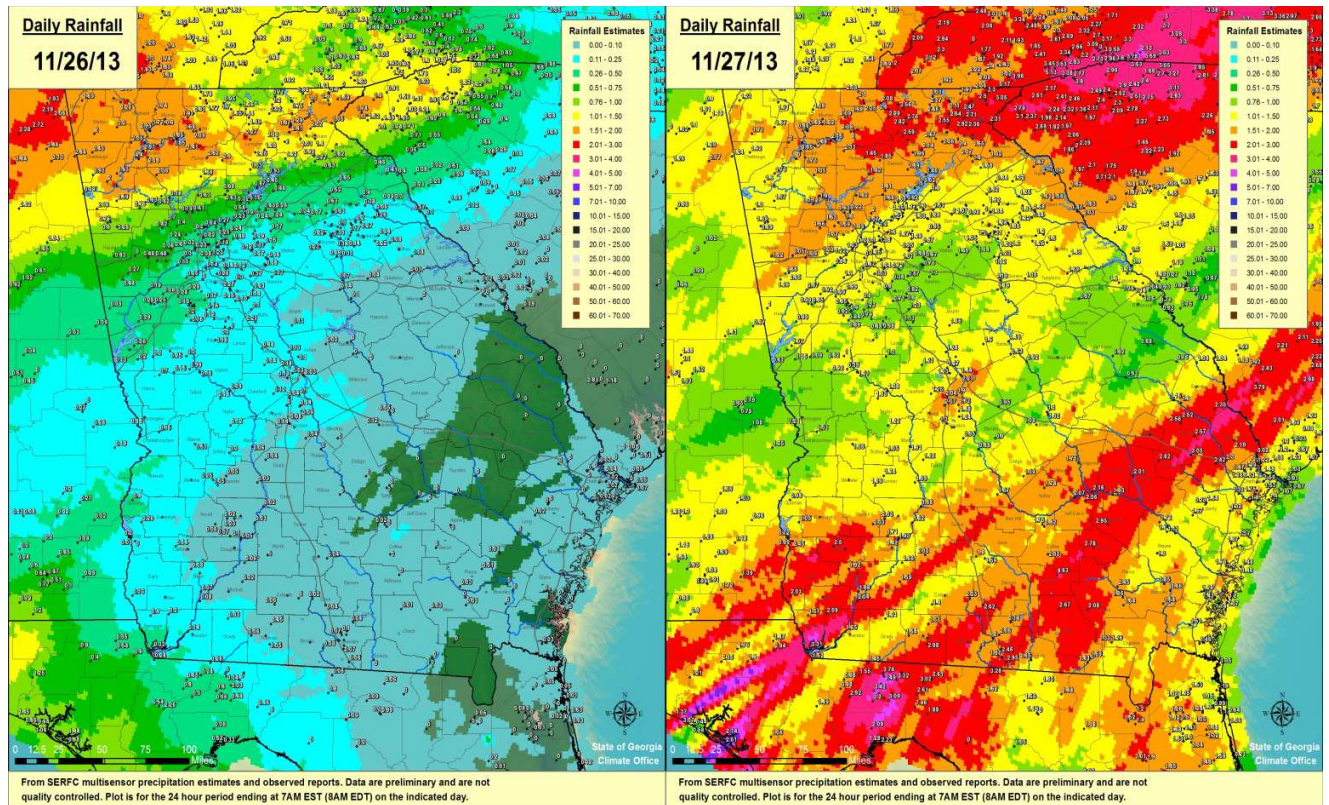
Precipitation

November continued the pattern of below normal rainfall across much of the state. Rainfall ranged between 1 to 3 inches in a large swath of western and central Georgia, which is 25-50% of normal. Atlanta and Columbus both fell over 2" below normal for the month, receiving 1.87" and 1.79", respectively.



Observed rainfall (left) and departures from normal (right) for November

Rainfall totals across southeast Georgia were generally above normal for the month, primarily due to a storm system that moved through on the 26th-27th. Alma set a daily rainfall record of 2.60" on the 26th, which also was the maximum daily precipitation total for the month. St. Simons Island also set a daily rainfall record of 1.19" on the 26th, which broke the old record of 0.70 inches set in 1976.

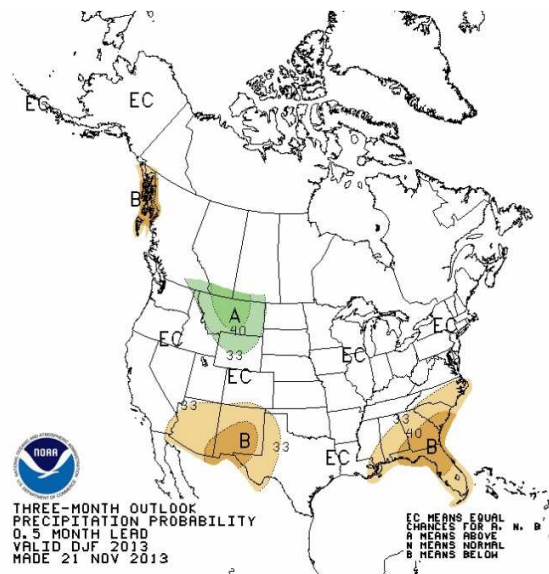
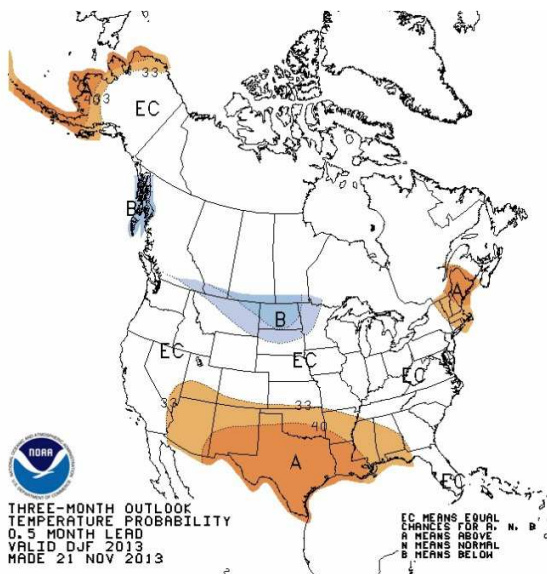


Precipitation estimates for Nov. 26-27th

The greatest daily rainfall total for the entire state was 4.63" at the Pearson CoCoRaHS site on the 27th. The highest monthly rainfall total of 9.73" was recorded at the Ellijay site in North Georgia. By the end of November, Ellijay was a little over an inch shy of breaking its wettest year on record in 1967 when 84.69" of precipitation fell. White County in northern Georgia is also well above average for year-to-date rainfall with 85.47" by the end of November. That total is +23.58" above normal and +44.15" above rainfall amounts this same time last year.

Seasonal Outlook

NOAA's Climate Prediction Center three month seasonal outlook reflects an equal chance of above, below or normal temperatures across the state. Below-median precipitation is favored in much of the southeast. Recent atmospheric and oceanic observations continue to indicate ENSO neutral conditions. The official ENSO outlook calls for a continuation of the ENSO neutral state into early 2014.



Climate Statistics for November 2013

Location	Avg. Maximum Temperature (departure) Ranking*	Avg. Minimum Temperature (departure) Ranking*	Mean Temperature (departure) Ranking*	Total Rainfall (departure) Ranking*
Athens	61.3 (-3.9) T-28th coldest	38.3 (-4.1) T-23rd coldest	49.8 (-4.0) 21st coldest	2.42 (-1.40) 48th driest
Atlanta	60.7 (-2.9) T-49th coldest	40.4 (-4.1) T-27th coldest	50.6 (-3.5) T-35th coldest	1.87 (-2.23) 38th driest

Augusta	65.9 (-3.2) T-54th coldest	38.7 (-2.7) 20th coldest	52.3 (-3.0) T-28th coldest	1.82 (-1.00) T-58th driest
Columbus	65.6 (-2.8) 18th coldest	44 (-2.1) 32nd coldest	54.8 (-2.5) 25th coldest	1.79 (-2.31) 15th driest
Macon	64.8 (-4.0) T-29th coldest	39.8 (-3.2) 16th coldest	52.3 (-3.6) T-19th coldest	3.37 (+0.05) T-34th wettest
Savannah	69.9 (-0.7) T-52nd warmest	47.6 (-0.3) 55th coldest	58.7 (-0.5) T-66th warmest	2.51 (+0.14) 40th wettest

*T denotes tie

TOP FIVE MONTHLY EXTREMES*

Greatest Rainfall Totals

Location	Type	Amt
ELLIJAY 9.9 NW	CoCoRaHS	9.73
UNICOI SP	COOP	9.10
CLEVELAND 3.9 WNW	CoCoRaHS	7.55
HELEN 9.5 ENE	CoCoRaHS	7.49
DAHLONEGA 6.4 NW	CoCoRaHS	7.43

Highest Mean Temperatures

Location	Type	T °
BRUNSWICK MALCOLM MCKINNON AP	WBAN	75.5
SAVANNAH INTL AP	WBAN	75.5
BRUNSWICK 23 S	WBAN	75.5
STAFFORD-CUIS GEORGIA	RAWS	75.5
BRUNSWICK	COOP	75.0

Lowest Mean Temperatures

JASPER 1 NNW	COOP	25.0
BALL GROUND	COOP	26.0
SAUTEE 3 W	COOP	26.0
LAFAYETTE 5 SW	COOP	27.0
MTN CITY 2 SW	COOP	27.0
JASPER 1 NNW	COOP	25.0

TOP FIVE DAILY EXTREMES*

Greatest Rainfall Totals

Location	Type	Amt	Date
PEARSON 3.5 NE	CoCoRaHS	4.63	2013-11-27
UNICOI SP	COOP	4.10	2013-11-27
SUCHES 8NW	COOP	4.08	2013-11-30
LYERLY 4.8 SSE	CoCoRaHS	3.95	2013-11-26
CAMILLA 3 SE	COOP	3.48	2013-11-27

Highest Maximum Temperatures

Location	Type	T °	Date
MILLEDGEVILLE	COOP	87.0	2013-11-19
WAYCROSS 4 NE	COOP	86.0	2013-11-01
DUBLIN 2	COOP	86.0	2013-11-19
WAYNESBORO	COOP	86.0	2013-11-19
AUGUSTA BUSH FLD AP	WBAN	86.0	2013-11-18

Lowest Minimum Temperatures

Location	Type	T °	Date
ELBERTON 2 N	COOP	13.0	2013-11-29
LAFAYETTE 5 SW	COOP	13.0	2013-11-14
BLAIRSVILLE EXP STN	COOP	14.0	2013-11-13
MTN CITY 2 SW	COOP	15.0	2013-11-30+
BRASSTOWN #1 GEORGIA	RAWS	15.0	2013-11-28

*All data are considered preliminary and are for informational purposes only.