Georgia Climate Summary for January 2014

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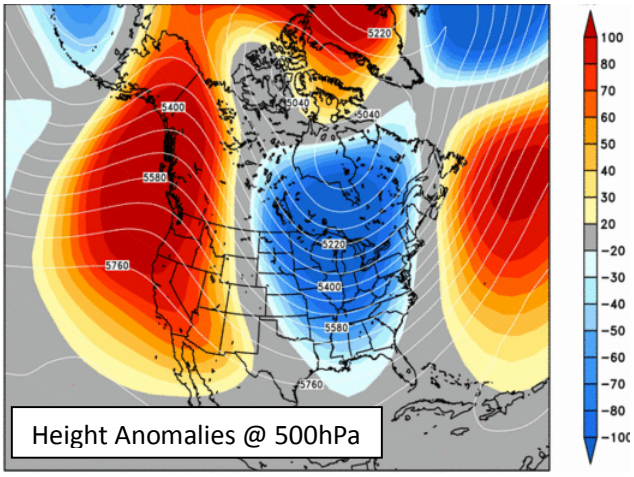
State of Georgia Climate Office

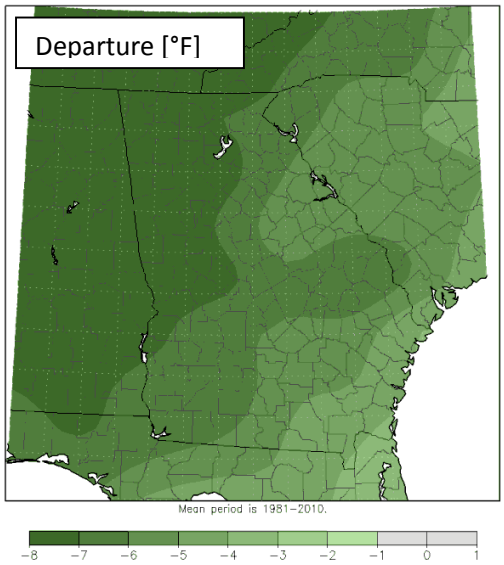
Summary

The mean upper-level circulation pattern for January featured stout ridging over the eastern north Pacific and western North America, with deep troughing prevalent from eastern Canada into the eastern United States. A southward shift of the circumpolar vortex and subsequent amplification of the eastern trough were observed in conjunction with the anomalously strong western ridge. This pattern brought colder and drier than normal conditions to Georgia, with frequent cold-air outbreaks and bouts of wintry precipitation.

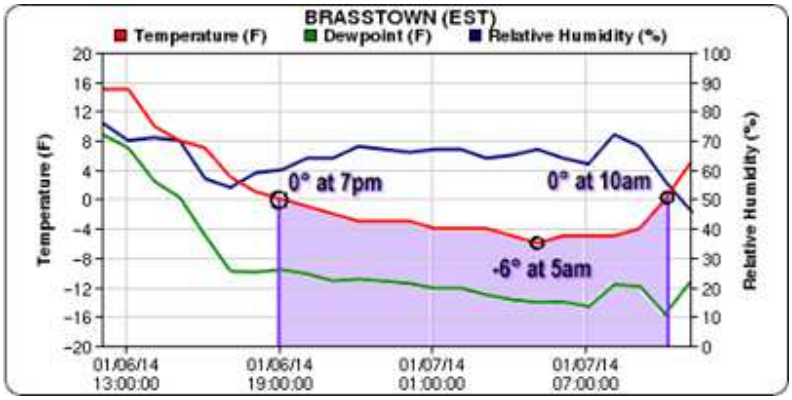


Temperatures

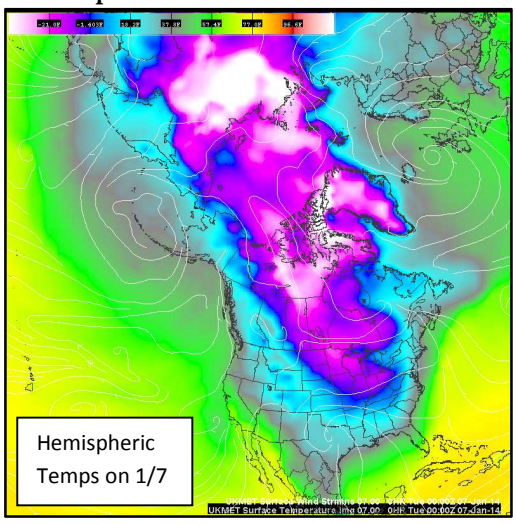
Monthly average temperatures were well below normal statewide, with the greatest departures found across the north and west. Columbus had a mean temperature of 39.7°, which is 7.5° below normal for January. Other monthly averages include Athens and Atlanta with 37.0° (6.5° and 6.3° below normal respectively), Augusta with 39.5° (5.9° below normal), Macon with 39.1° (7.2° below normal), and Savannah with 46.4° (3.1° below normal).



Temperatures statewide plummeted to values not seen in decades on the 6th and 7th in association with a cold-air outbreak. Daily minimums on the 7th ranged from around -5° in the northern mountains to near 20° along the immediate coast. The coldest temperature observed during this event was -6° at the United States Forest Service Remote Automated Weather Station at Brasstown Bald. This location spent over fifteen hours at or below zero during the overnight period from the 6th into the 7th. Several daily minimum temperature records were established on the 7th including: 6° at Atlanta, 7° at Athens, 11° at Columbus, and 12° at Augusta (all breaking records established in 1970). Additional records were set in Macon (11°; breaking the old record established in 1924) and Savannah (19°; breaking the old record established in 1959). Many climate locations also established new daily low maximum records on the 7th as well.



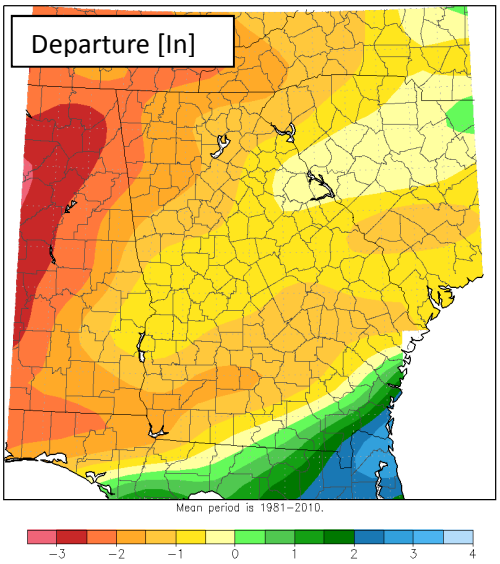
After a brief mid-month warm-up, cold temperatures returned on the 21st and continued for the remainder of the month. Brasstown Bald again dropped below zero on the 24th with a low of -1°, while Macon established a new record low of 13° on the 25th (breaking the old record of 16° set in 1963). Additional temperature records were set through the remainder of the month, including a low of -1° at Rome on the 30th (the coldest there since January of 1977).



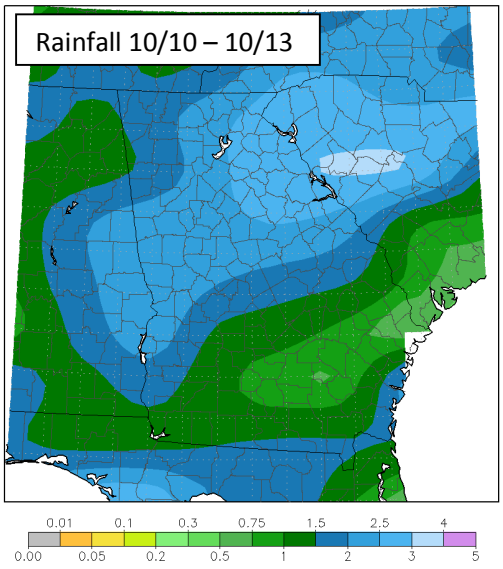
Statewide the monthly mean temperature was 40.1° which is 6.8° below the average of 46.9°. ***This ranks as the 6th coldest January***

for the state since records have been maintained starting in 1895. This is also the coldest January statewide since 1978.

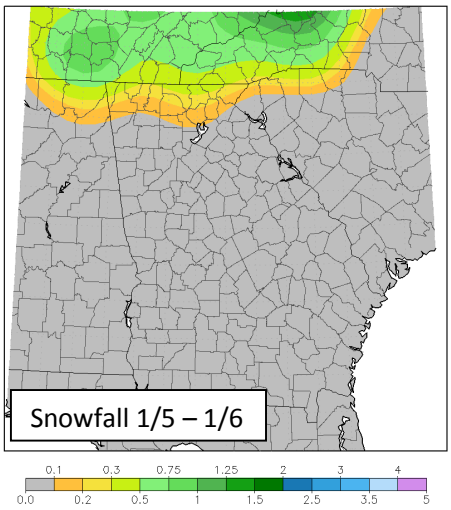
Precipitation



Precipitation was below average across the state in January. The lone exception was along the southeastern coast, where departures were two to three inches above normal. Other portions of the state were one to two inches below normal, with some isolated two to four inch deficits in the extreme north. Athens received 4.68" for the month (0.63" above normal), Atlanta had 3.35" (0.85" below normal), Augusta had 2.48" (1.43" below normal), Macon had 3.23" (1.01" below normal), and Savannah had 2.41" (1.28" below normal). The greatest monthly rainfall amounts were in and around Sapelo Island, where the CoCoRaHS and NWS cooperative observers reported 8.09" and 7.69" respectively. Over 2" of this rainfall occurred during the 24 hour period ending on the 11th. The greatest one day rainfall total across the state was reported by the NWS cooperative observer in Ellijay on the 12th with 3.54".

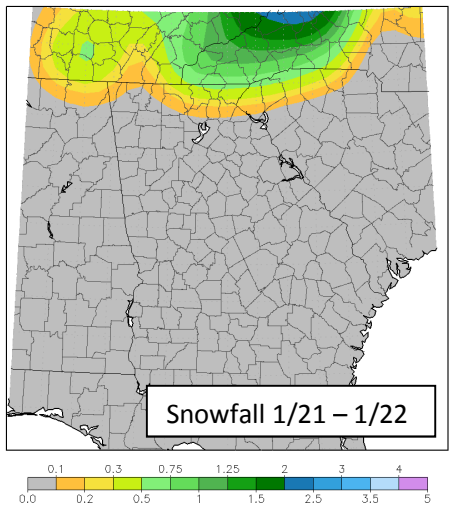


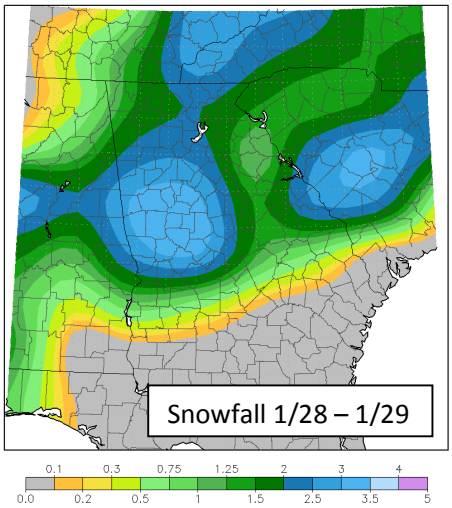
Accumulating snowfall occurred in the far northern portions of the state on the 5th and 6th and again on the 21st and 22nd. Trace amounts were reported as far south as Atlanta in both cases. The



CoCoRaHS observers in Blue Ridge and Morganton each reported one half inch of accumulation on the 6th, with 0.6" falling in Blue Ridge on the 21st. The greatest snowfall total from the second event was 1.0" reported by the CoCoRaHS observer near Rabun Gap.

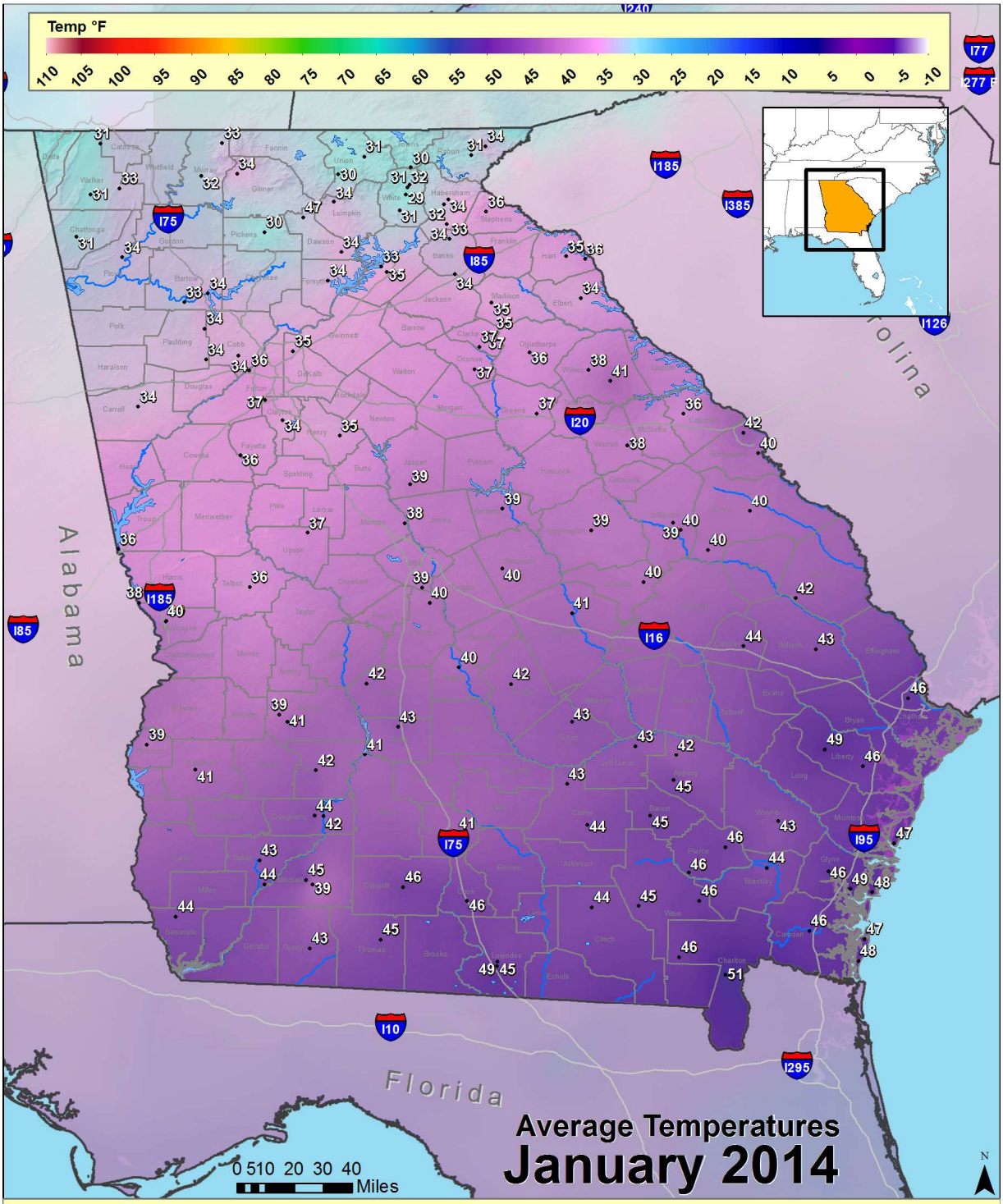
A significant winter storm affected much of the state on the 28th and 29th with accumulating snow and freezing rain. Snowfall totals exceeded 2" in northern and central parts of the state, with Dallas reporting 3.5" of accumulation. Ice accretions exceeding one half inch were reported northwest of Savannah, with numerous trees and power lines down. The combination of very cold temperatures (dropping from 27° when snow began at 11am on the 28th to 12° at 8am on the 29th in Atlanta), accumulating snowfall, and workday-hours onset resulted in abysmal travel conditions in and around Atlanta, where some commuters were stuck in their vehicles on icy roadways for over 24 hours. Many people abandoned their cars and traveled on foot to seek shelter from the cold. This event paralleled a similar one from January 12, 1982 (referred to locally as Snow Jam '82) during which travel around metropolitan Atlanta became virtually impossible.





Storm Reports

Severe weather affected portions of the state on the 11th. Storm reports include an EF-0 tornado near Waleska and 80 mile per hour straight-line winds near Cedartown. Scattered gusts of 40-60 miles per hour were reported in other portions of the state coincident with the passage of a squall line. These winds resulted in numerous reports of trees and power lines down, particularly in southeastern portions of the state. Outside of this event, by far the most significant weather impacts during the month resulted from winter weather as discussed in the previous section.



Map created using provisional data from various meteorological networks. All values are considered preliminary. Limited quality control has been applied.

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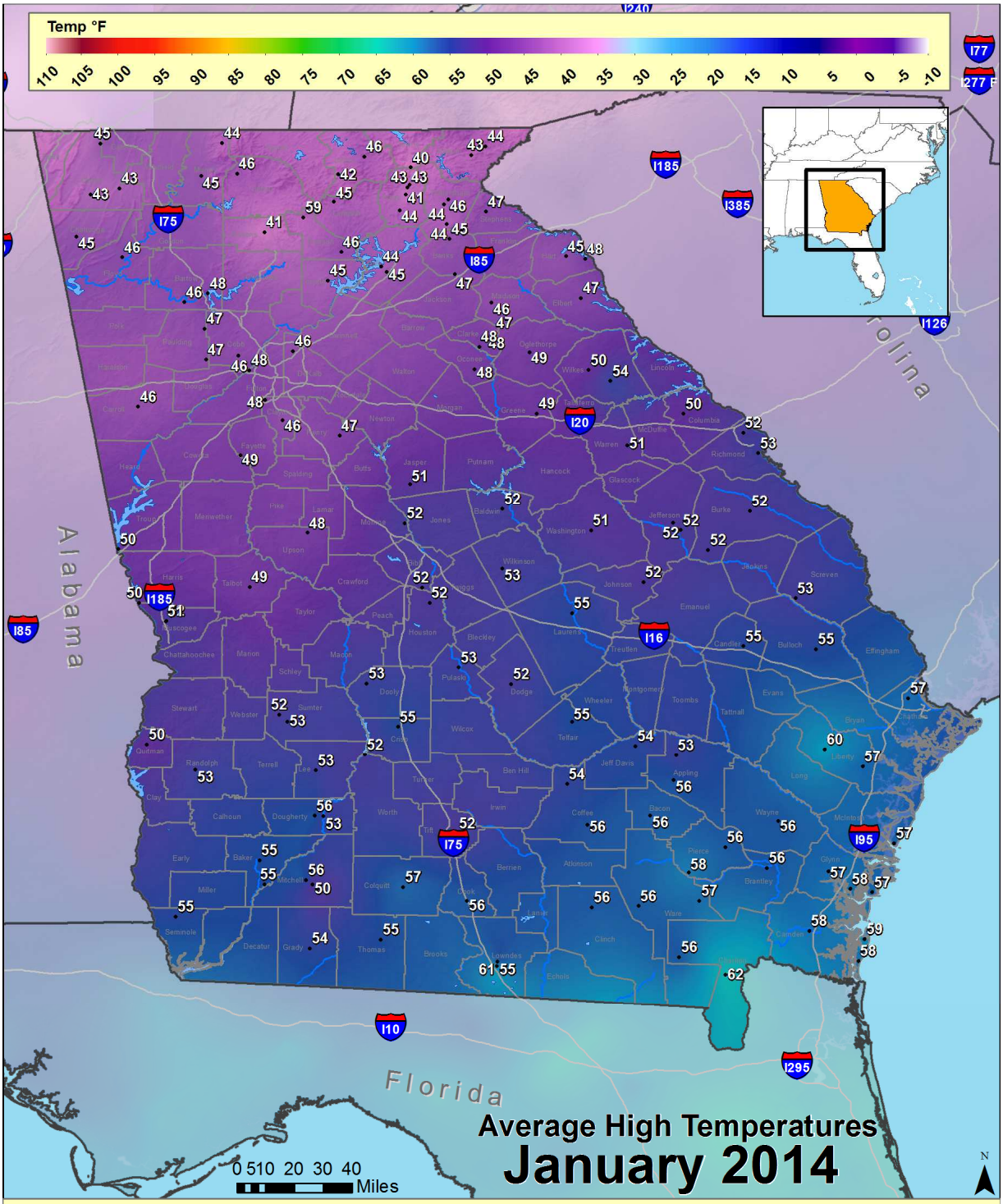

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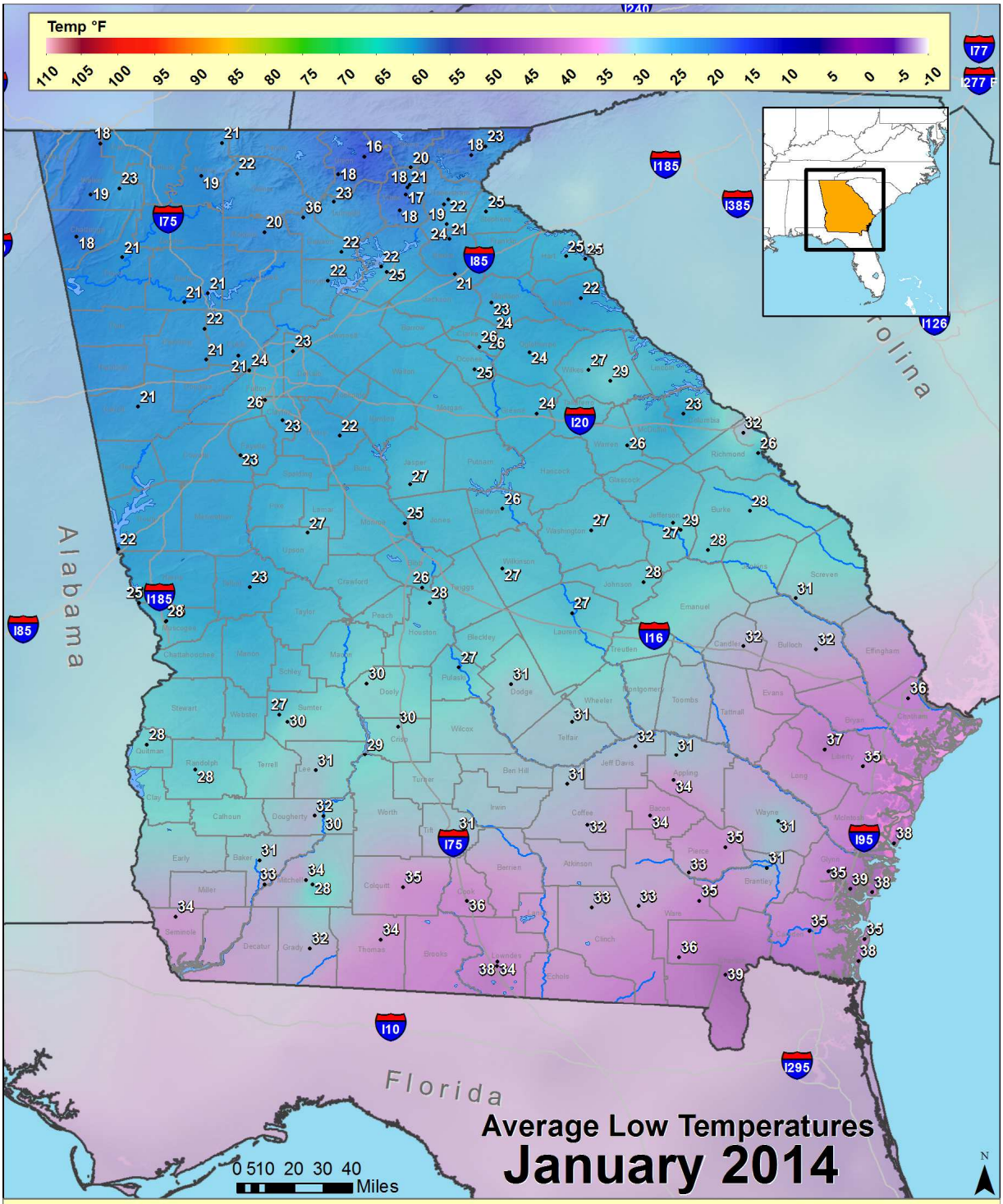

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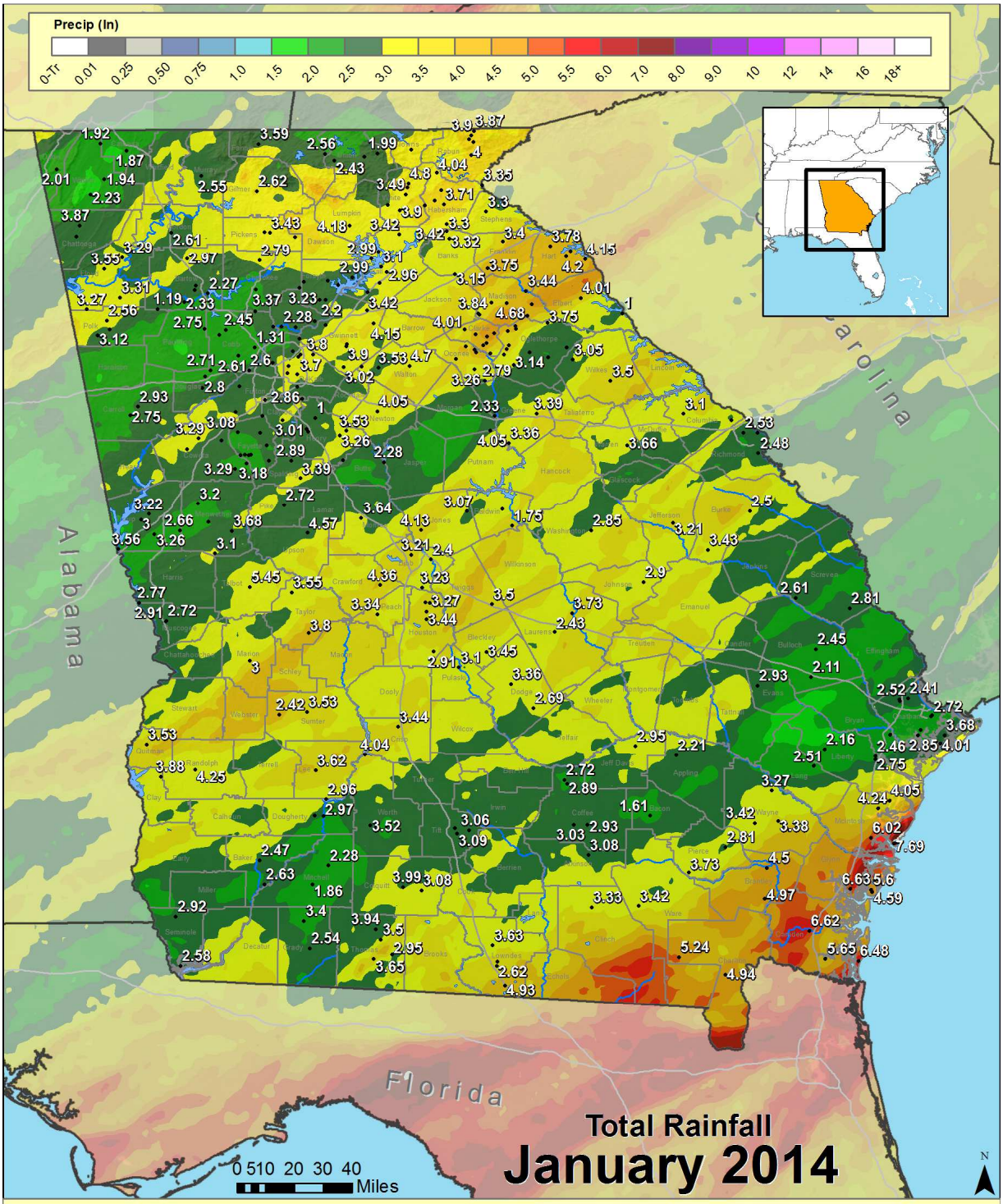

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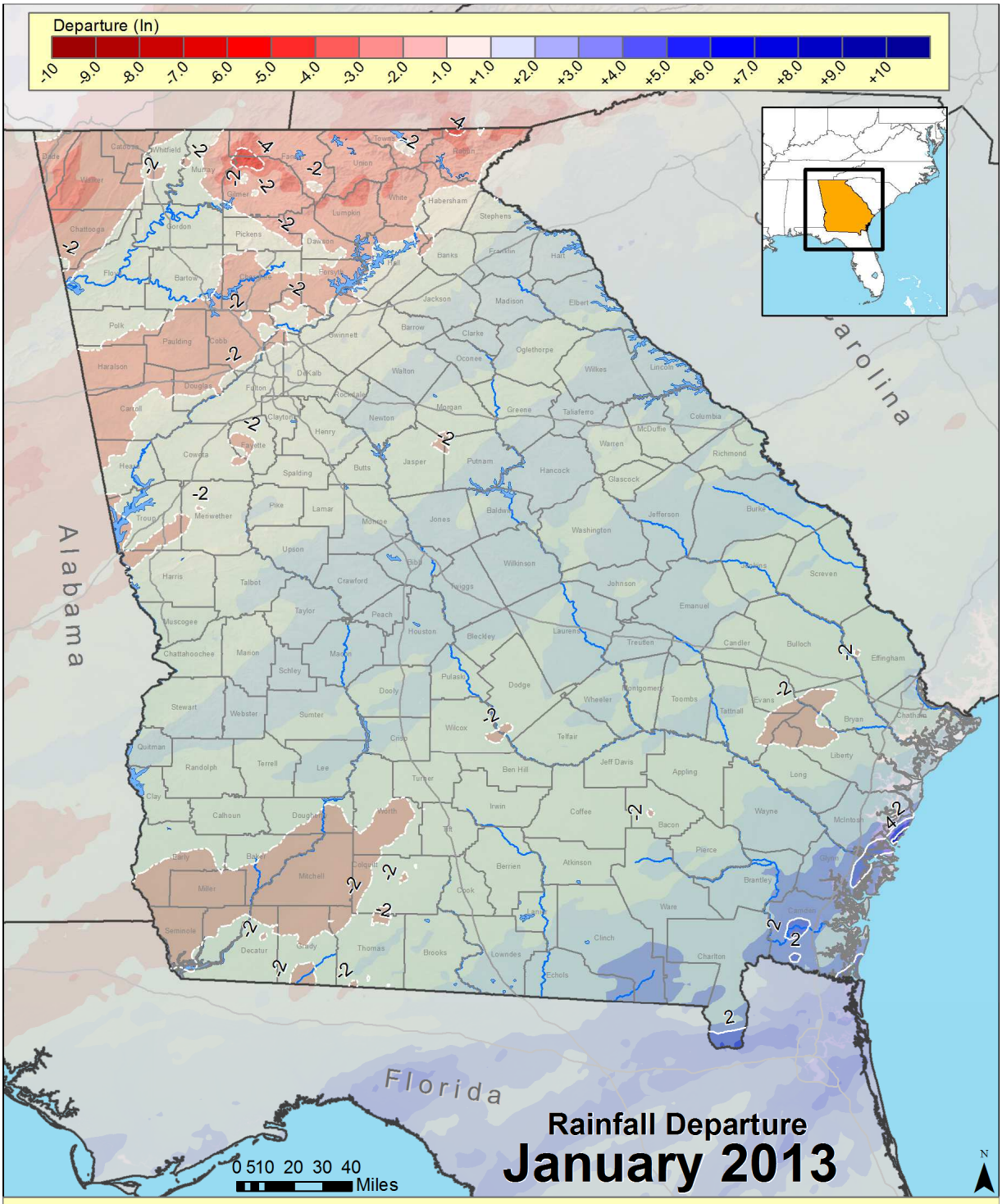

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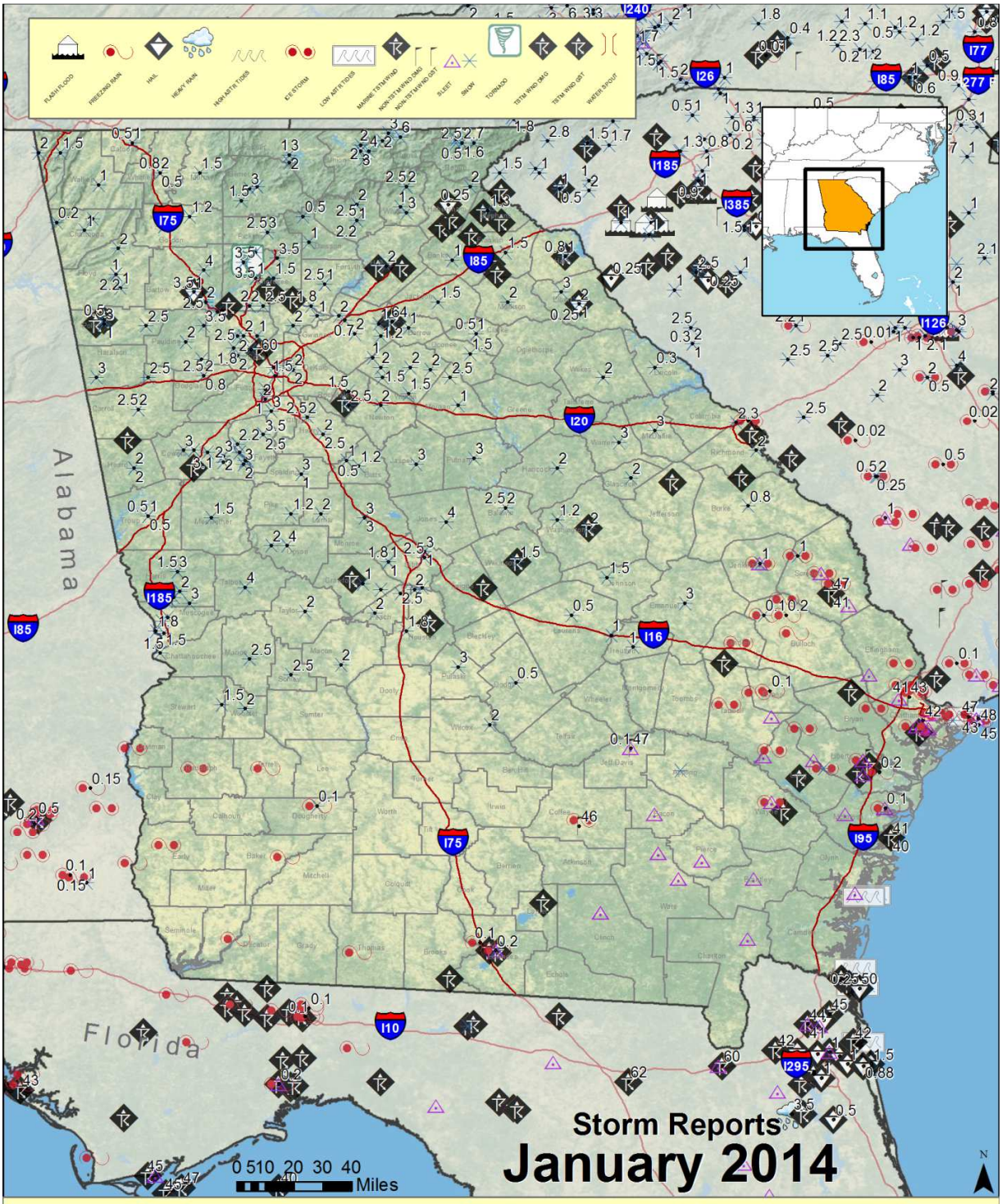

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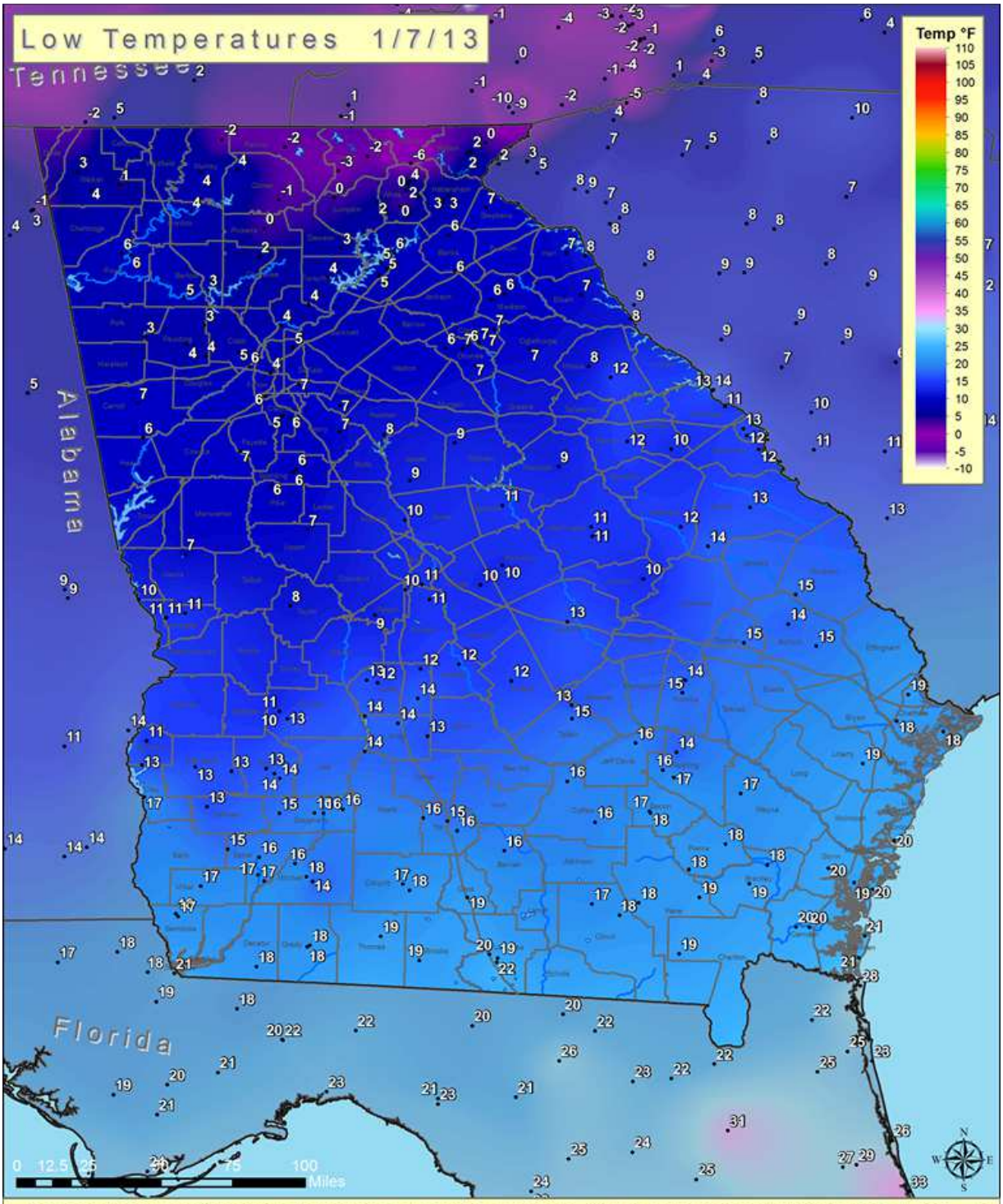
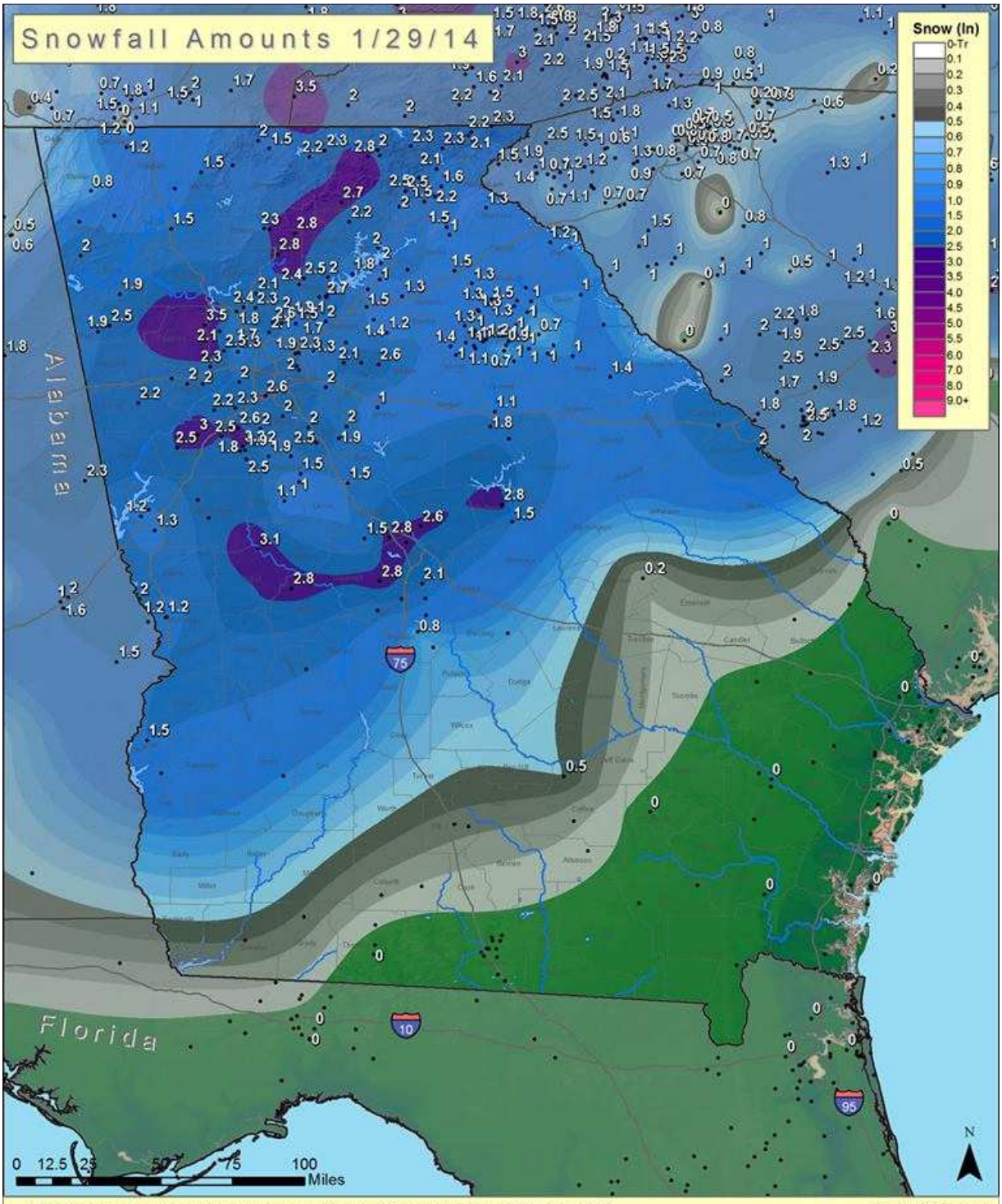


Map created using provisional data from various meteorological networks. All values are considered preliminary. State of Georgia
Limited quality control has been applied. Plot is for the 24 hour period ending at 7am on the indicated day. Climate Office



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