



# National Weather Service (Atlanta)

January 20, 2025  
12:25 PM

Disclaimer: The information contained in this briefing is time sensitive which should be taken into consideration while viewing.



## Special Weather Briefing

For Cold and Winter Weather This Week

Valid: 12:30 PM Monday (1/20/25)

NWS Atlanta/Peachtree City



National Oceanic and  
Atmospheric Administration  
U.S. Department of Commerce

National Weather Service  
Peachtree City, GA





# Main Points / Headlines

January 20, 2025  
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Monday, January 20 through Thursday, January 23

- **Winter weather will impact the state Tuesday into Wednesday morning.**
  - A **Winter Storm Watch** is in effect from 10am Tuesday until 7 am Wednesday generally along and south of I-85, including much of metro Atlanta
  - For **Winter Weather Advisories / Winter Storm Warnings**: **Travel impacts** will be the primary concern given the cold surface temperatures with ANY amount of snow
  - Uncertainty remains in snow amounts, although there is remains the possibility of a brief period of light snow along and north of I-85
- **Cold conditions continue into Thursday**
  - A **Cold Weather Advisory** will likely be needed for areas along and north of I-85.
  - An extended period of cold/below-normal temperatures expected through the week.
- **Please continue to monitor the forecast carefully.**
  - Additional email briefing will continue through Tuesday morning.





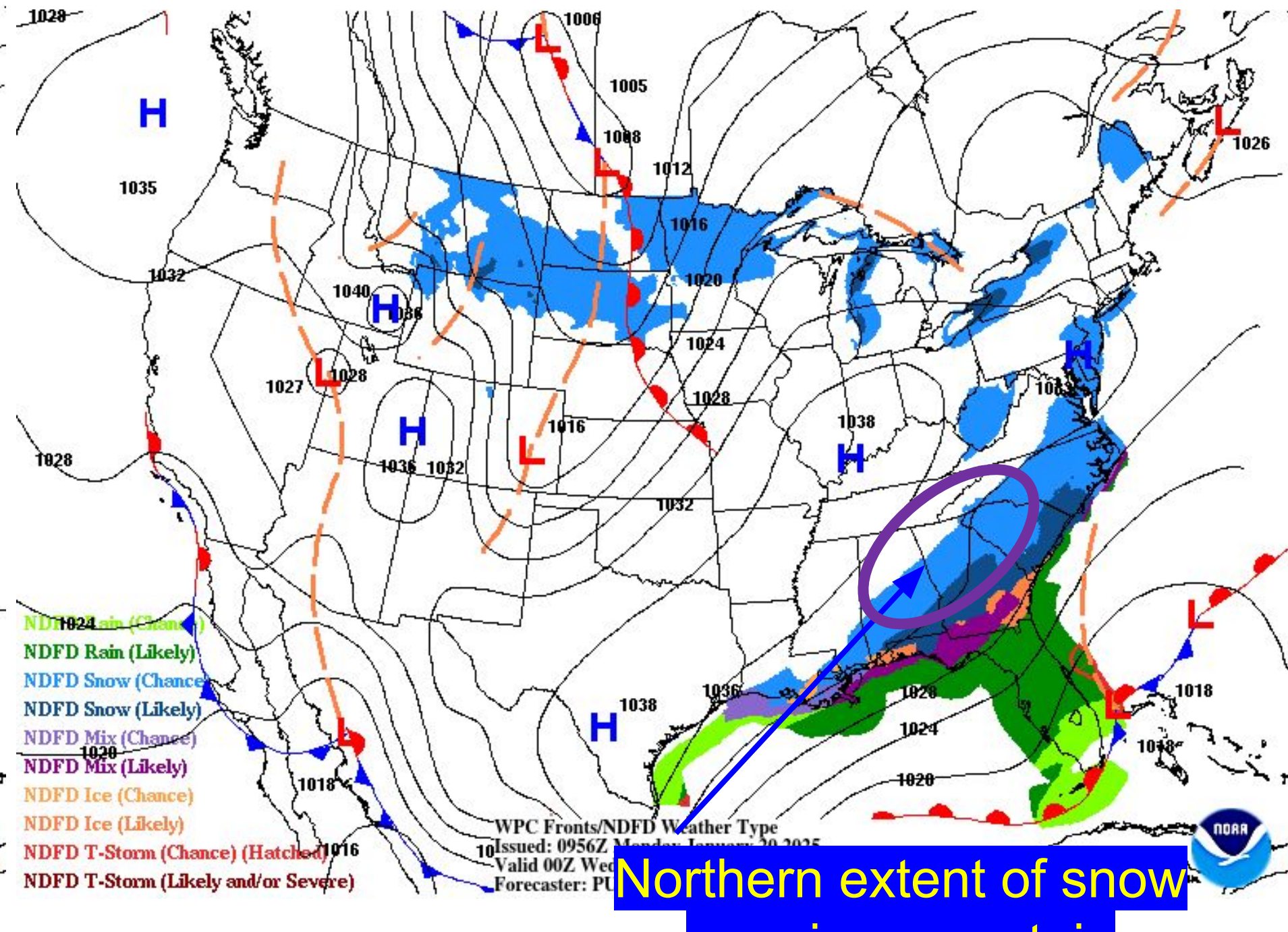
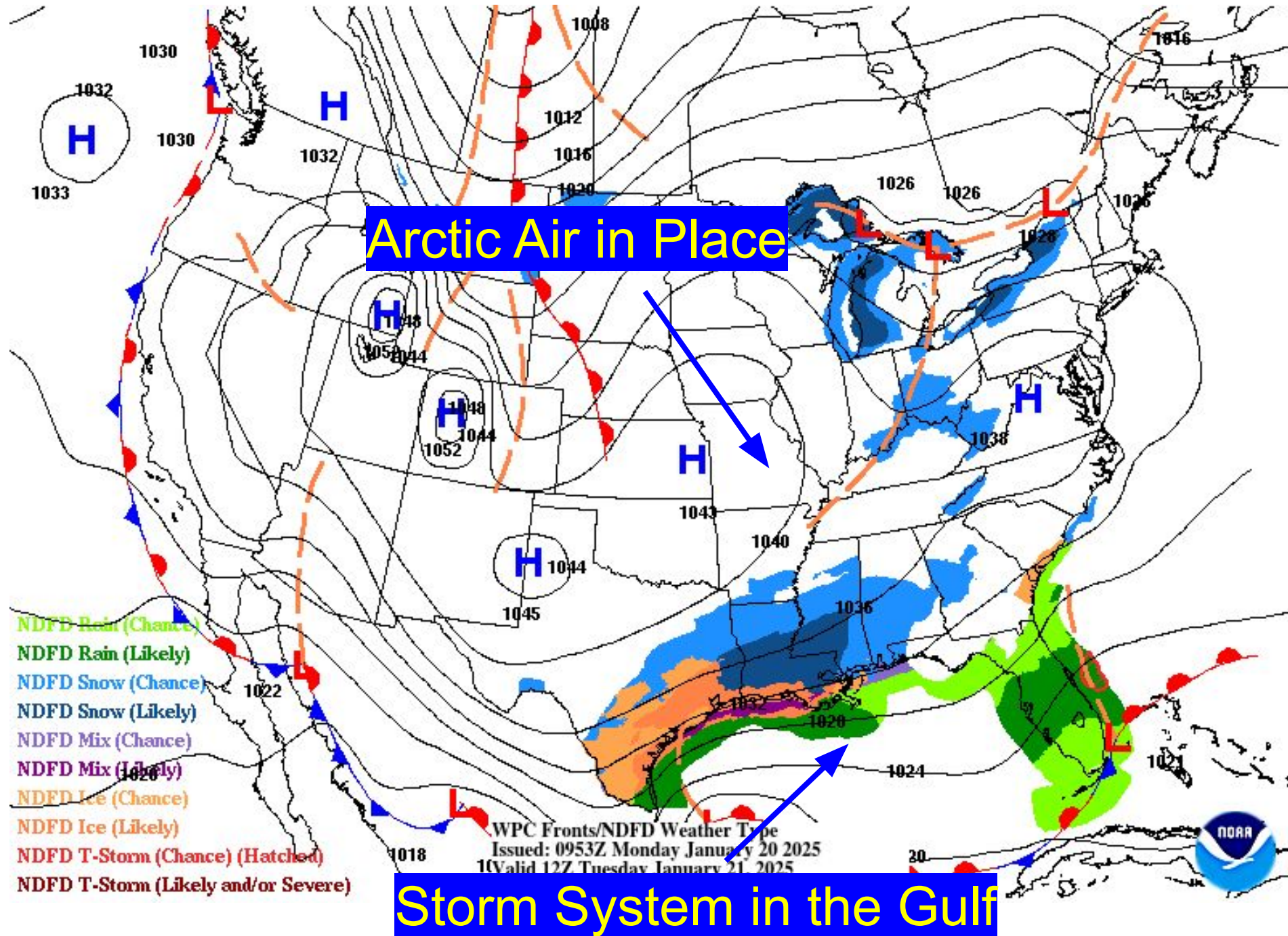


# Weather Maps - Tuesday

January 20, 2025  
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Tuesday Morning Weather Map

Tuesday Evening Weather Map







# Cold Weather Advisory...

January 20, 2025  
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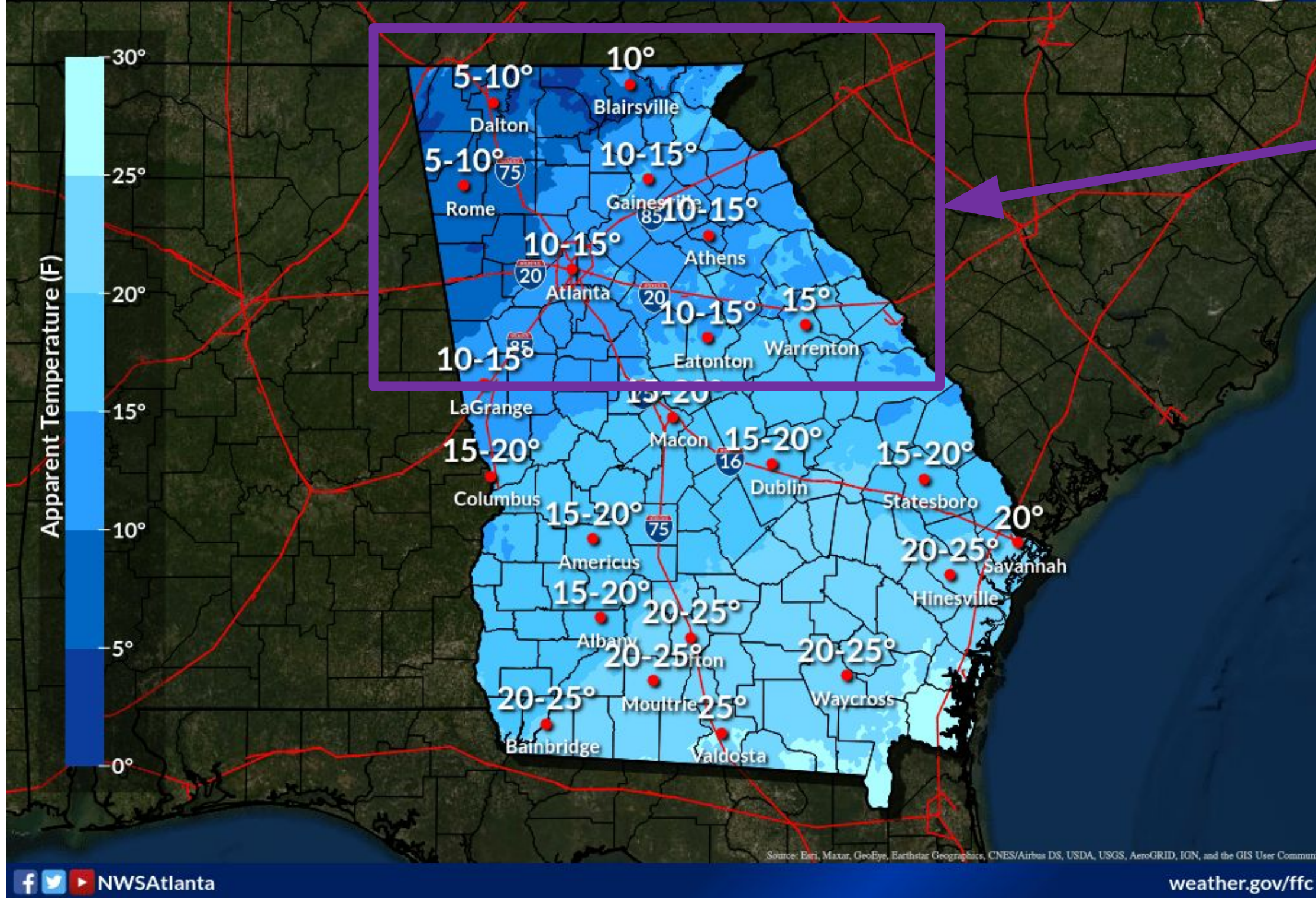
...Will likely be needed Tuesday morning

## Minimum Apparent Temperature

Valid Mon 7:00PM through Tue 9:00AM EST

Weather Forecast Office  
Atlanta, GA

Issued Jan 20, 2025 3:41 AM EST



- **High confidence** in Wind Chill values at or below 15° for the area indicated on Tuesday Morning.
  - Temperatures south of Macon to Columbus will likely remain above criteria though temperatures will be primed for winter weather.
- **Cold Weather Advisory** will likely be needed again on Wednesday as cold temperatures persist into the middle of the week.
- Temperatures will begin to rebound on Thursday as highs finally climb back into the 40s and return to the 50s this weekend.

NWSAtlanta

weather.gov/ffc



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Peachtree City, GA

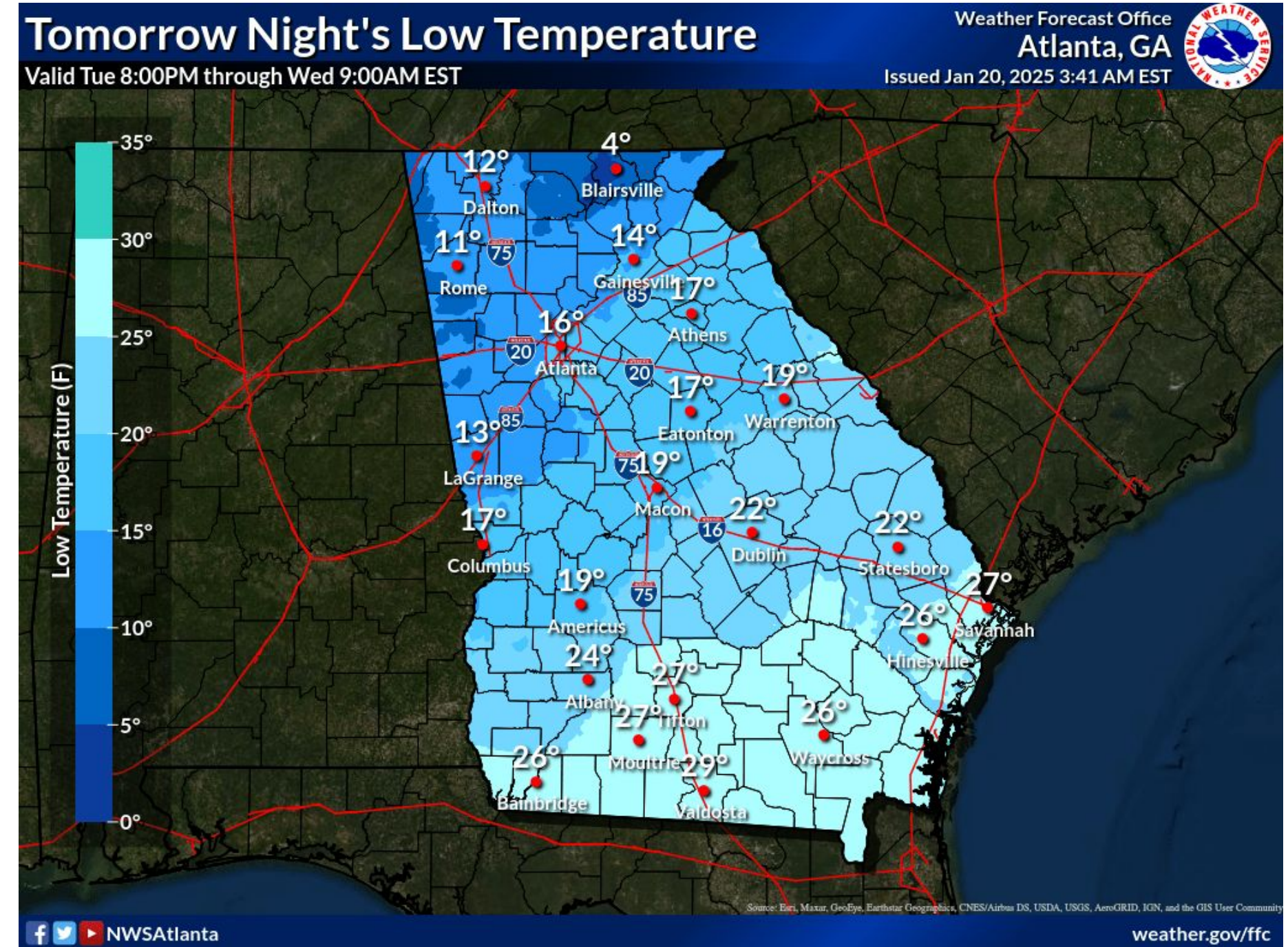
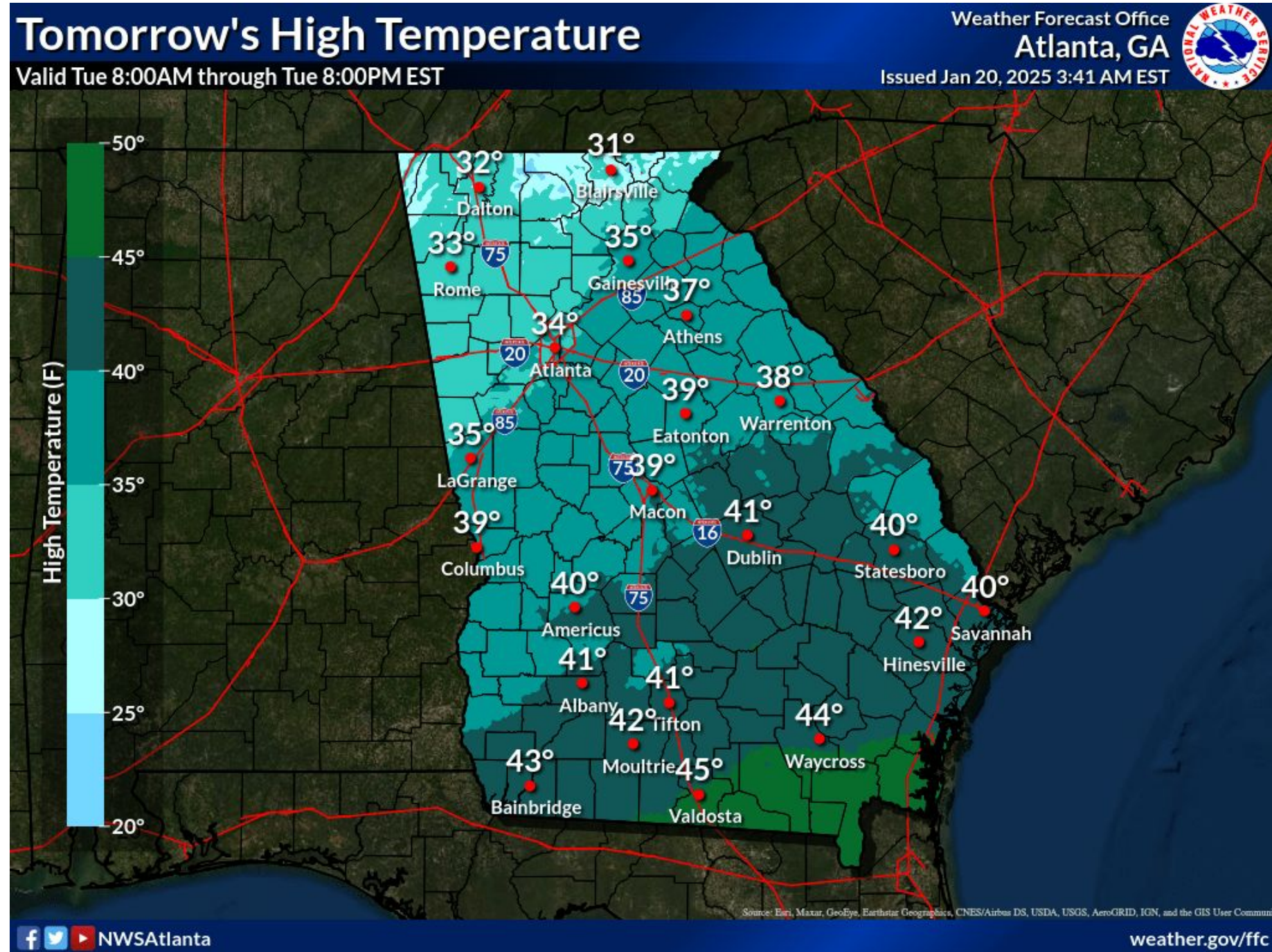




# Bigger Story - COLD!!

January 20, 2025  
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**Dangerously Cold conditions expected through Thursday 1/23**



**\*\*Max Temps Tuesday may occur early - winter precip would "wet bulb" our temps lower as it falls**





# Bigger Story - COLD!!

January 20, 2025  
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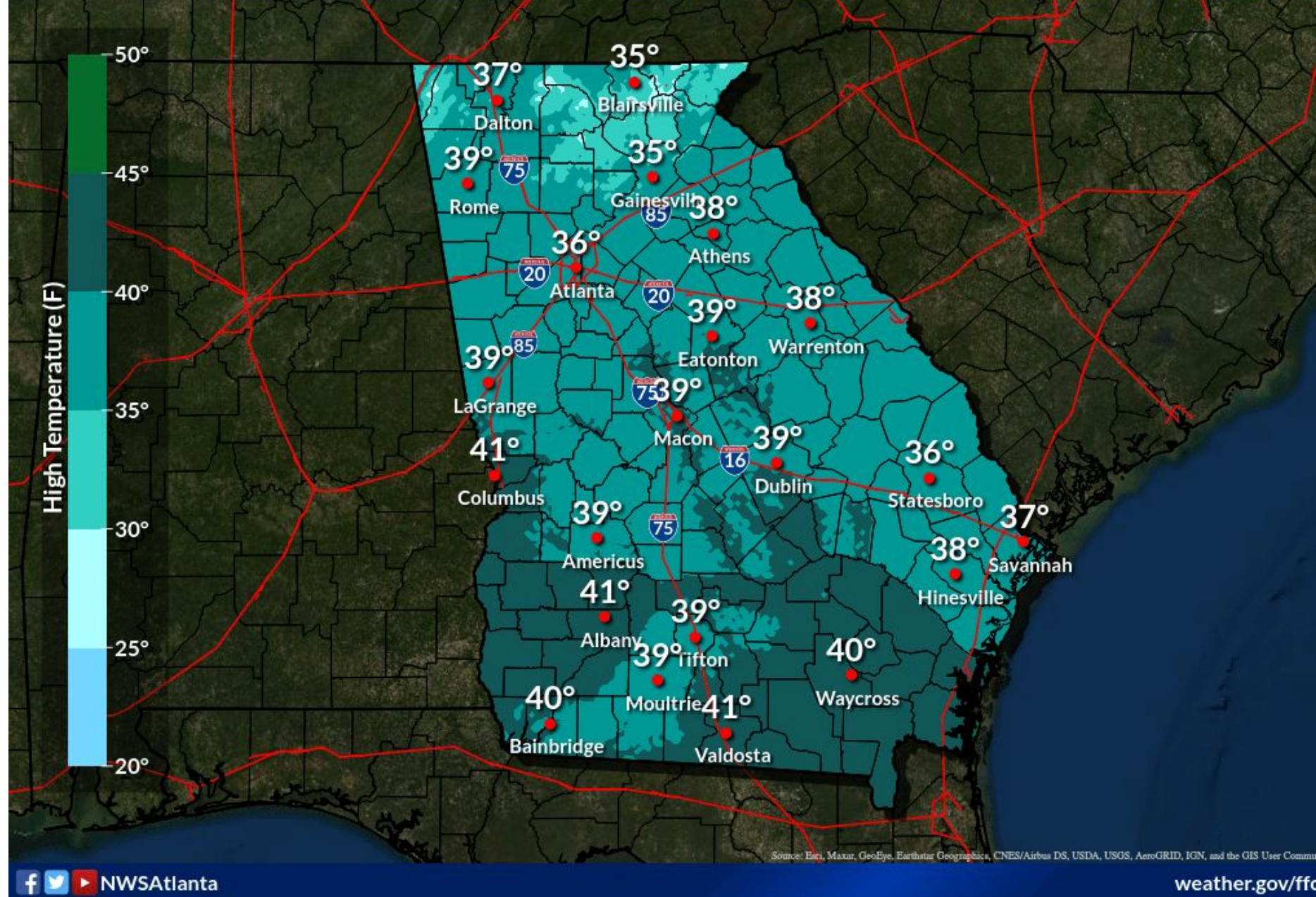
**Dangerously Cold conditions expected Sunday night through Thursday (1/19-1/23)**

## High Temperature Wednesday

Valid Wed 8:00AM through Wed 8:00PM EST

Weather Forecast Office  
Atlanta, GA

Issued Jan 20, 2025 3:41 AM EST

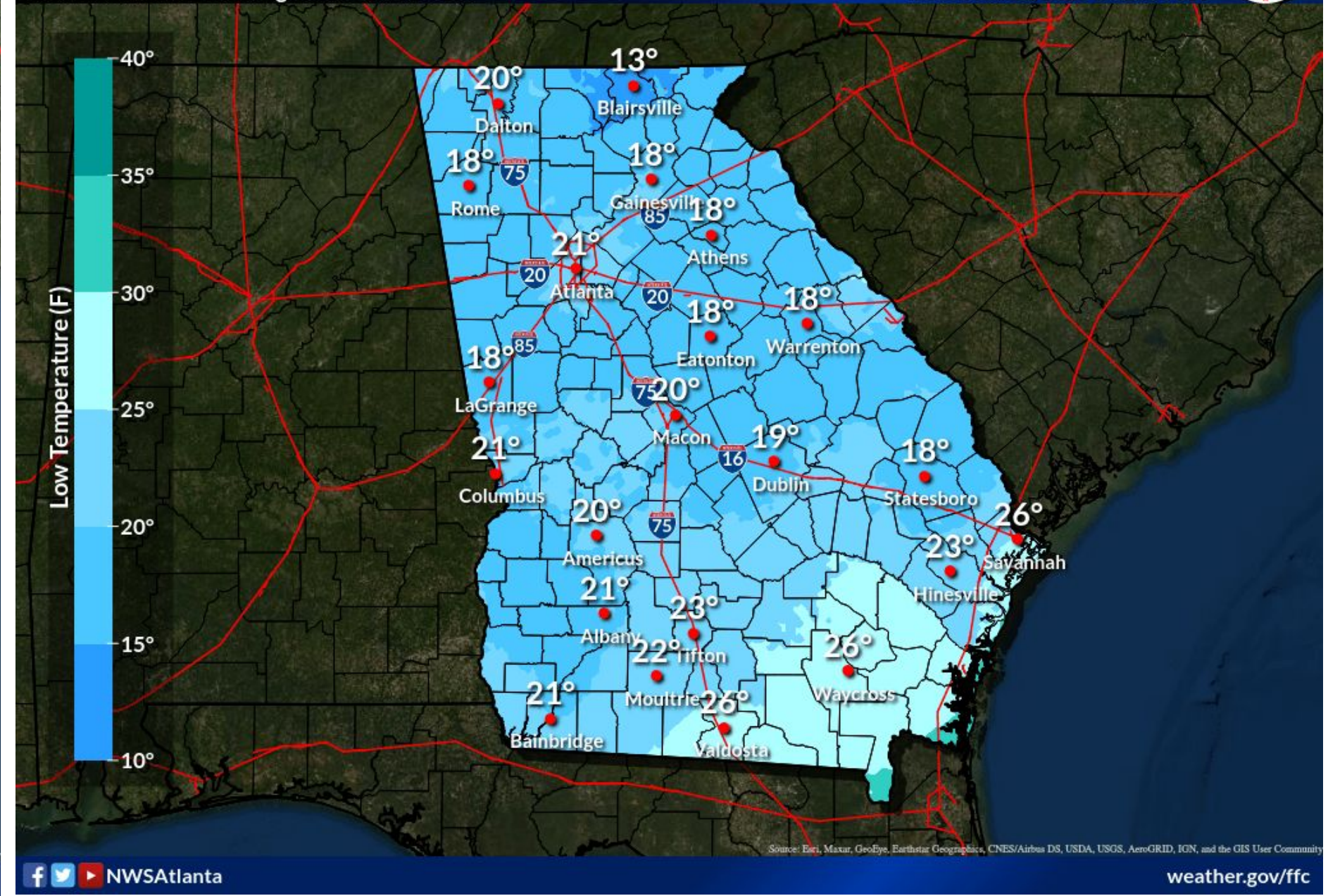


## Low Temperature Wednesday Night

Valid Wed 8:00PM through Thu 9:00AM EST

Weather Forecast Office  
Atlanta, GA

Issued Jan 20, 2025 3:41 AM EST



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Peachtree City, GA





# Bigger Story - COLD!!

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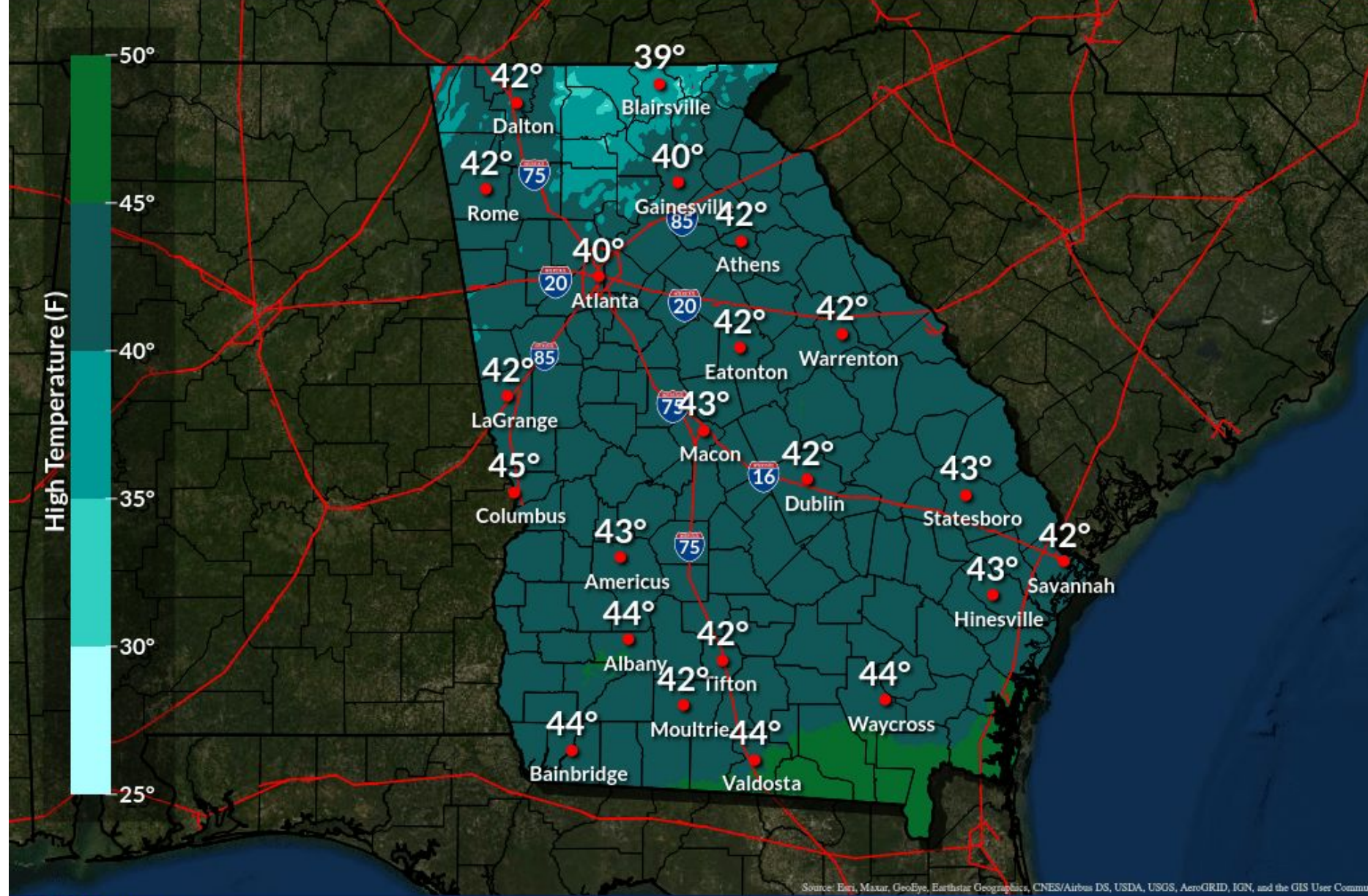
**Dangerously Cold conditions expected Sunday night through Thursday (1/19-1/23)**

## High Temperature Thursday

Valid Thu 8:00AM through Thu 8:00PM EST

Weather Forecast Office  
Atlanta, GA

Issued Jan 20, 2025 3:41 AM EST



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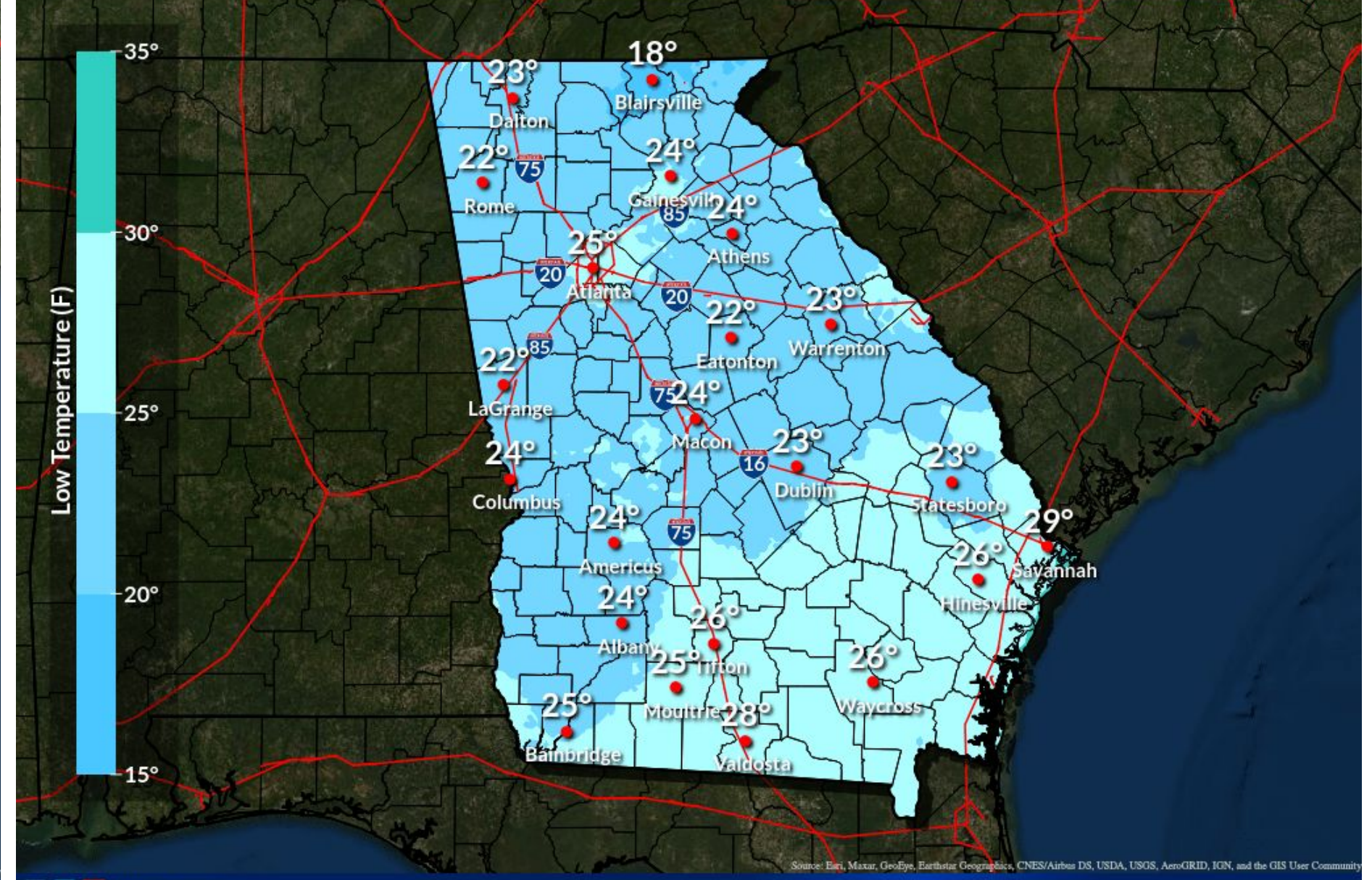
weather.gov/ffc

## Low Temperature Thursday Night

Valid Thu 8:00PM through Fri 9:00AM EST

Weather Forecast Office  
Atlanta, GA

Issued Jan 20, 2025 3:41 AM EST



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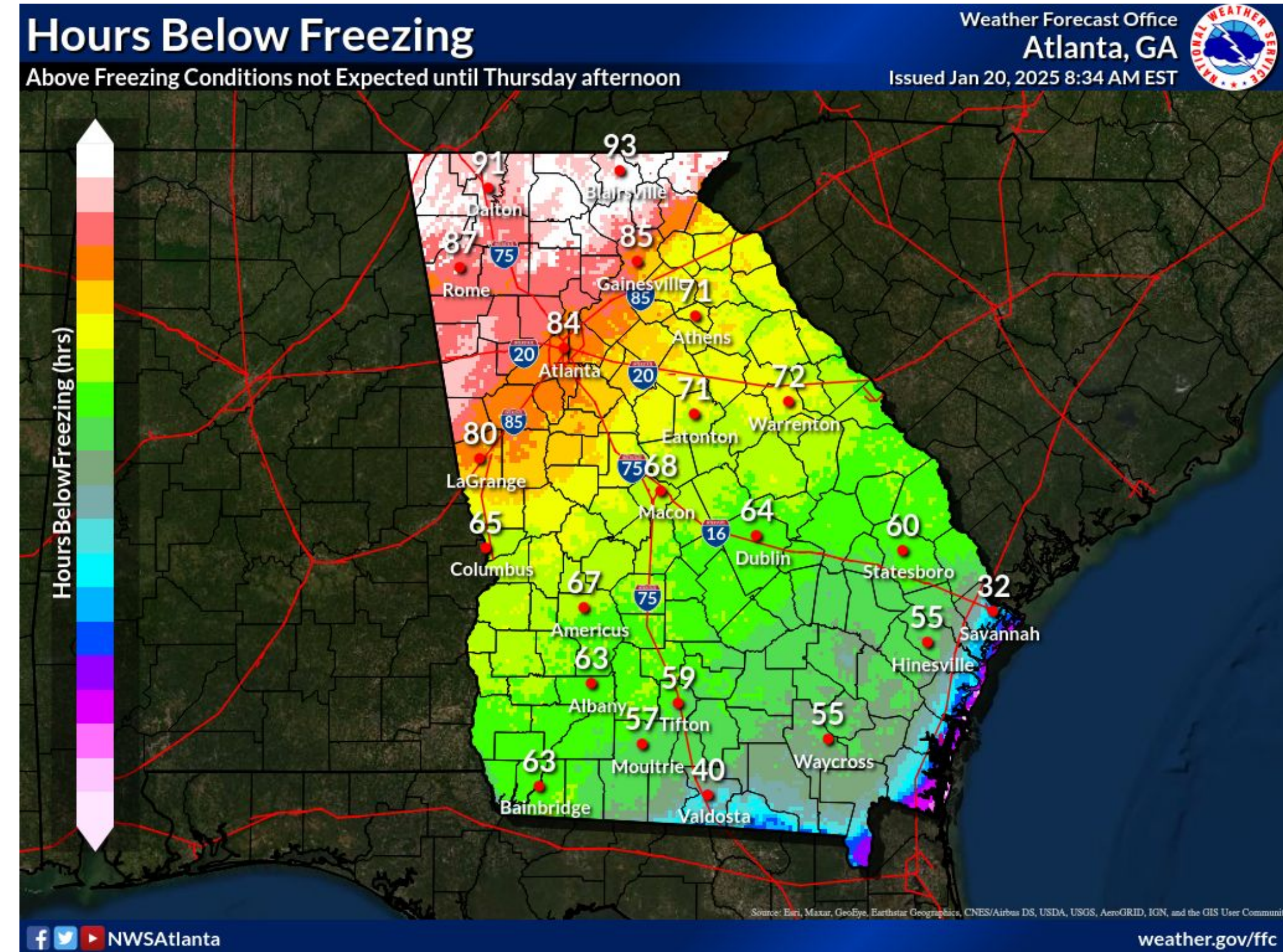




# Big Story - COLD!!

January 20, 2025  
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Potential # of HOURS Temps at or below 32F degrees (max >90)



- **Long duration cold event**
  - Past similar experiences show that problems begin after approximately 48 hours below freezing
  - Almost ALL of Georgia could exceed this 48 hour threshold
  
- **Protect the 4 Ps**
  - **Pets**
  - **Pipes**
  - **Vulnerable Populations**
  - **Plants**

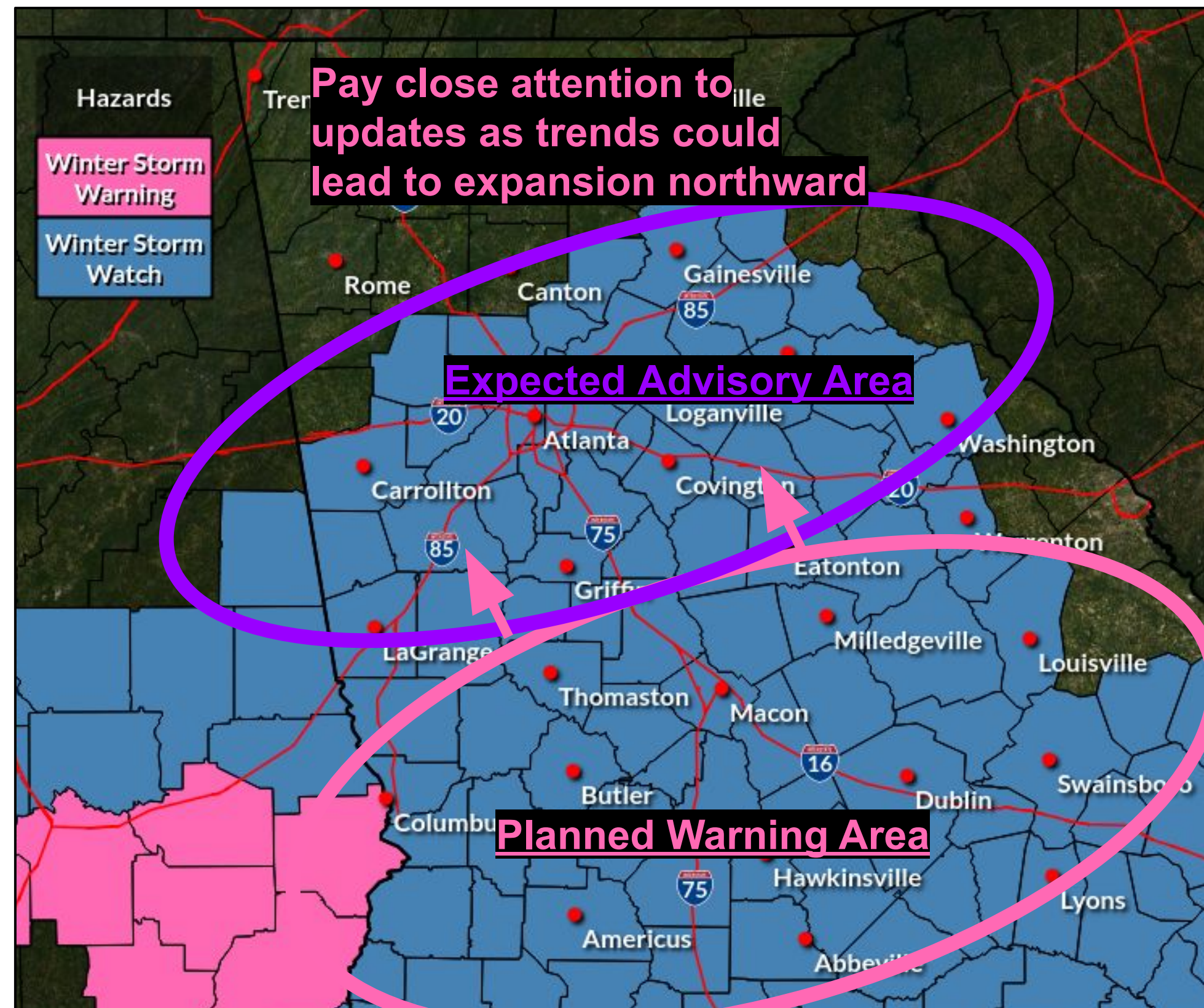




# Winter Storm Watch

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In effect from 10 AM Tuesday through 7 AM Wednesday



- Roughly along and south of a line from Carroll to Hall county
  - Includes Atlanta Metro Area, Columbus, Macon, and Athens
- Periods of snow could become moderate to heavy at times, with total accumulations of **up to 2 inches possible.**
- Light sleet and ice expected to be confined to far south-central Georgia late Tues PM/Wed AM.
  - Ice accumulations **< 0.05 inch**
- **Plan on slippery, hazardous road conditions, which could impact the Tuesday evening and Wednesday morning/evening commutes.**
- Stay tuned for updates as this event takes shape!

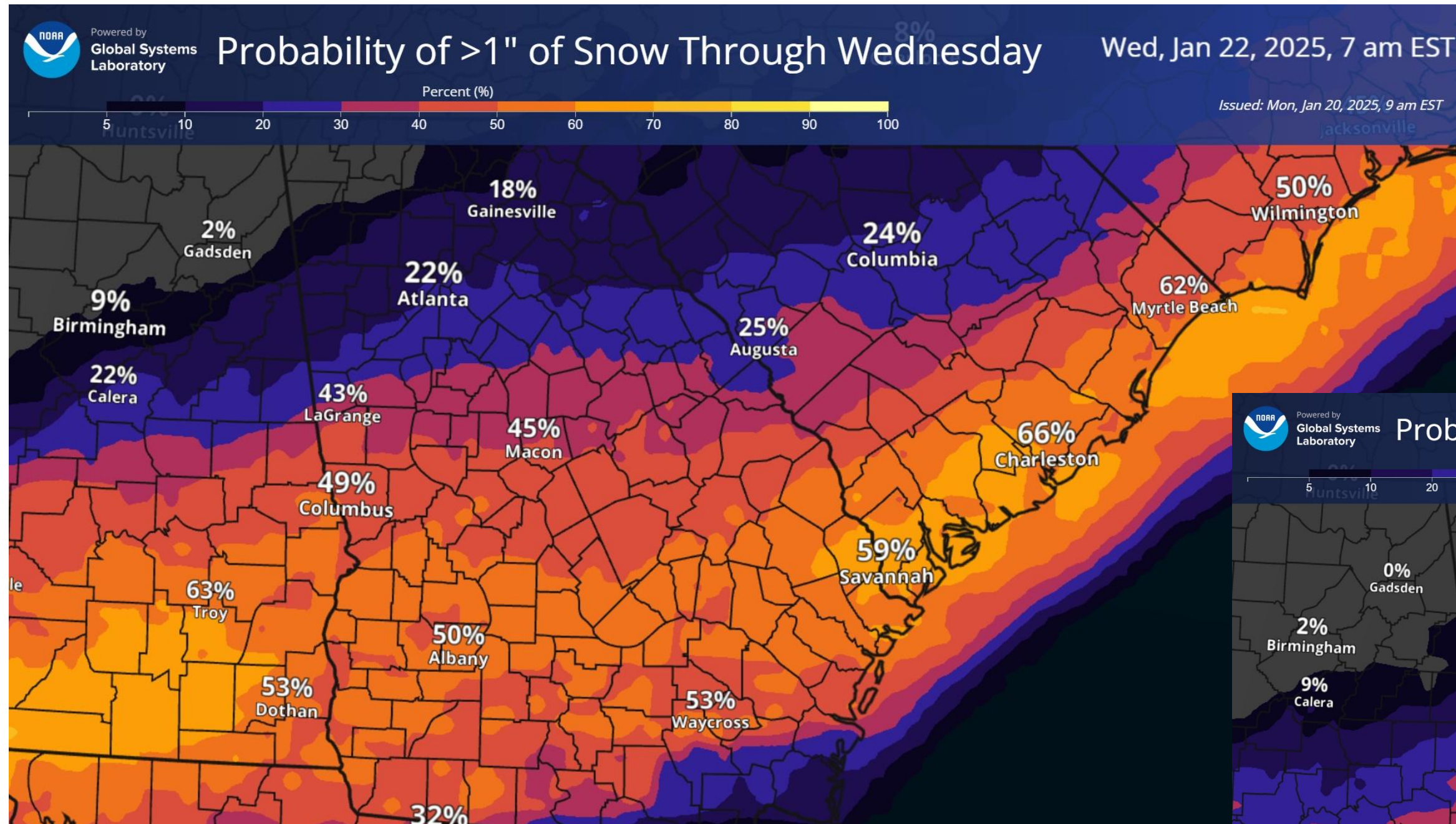




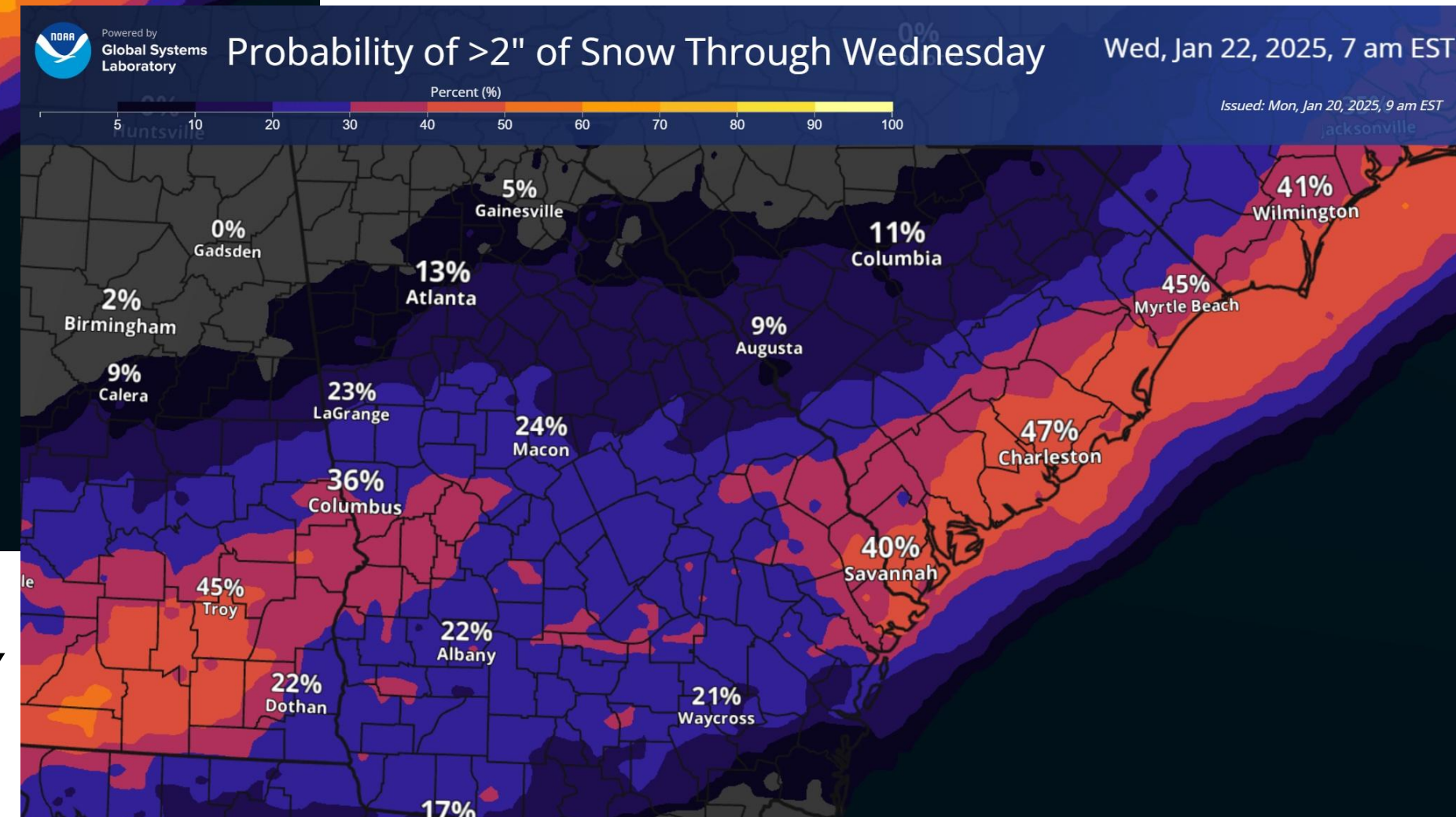
# Snow Probabilities

January 20, 2025  
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Through Wednesday Afternoon



**While trends are down in the NBM, the potential to exceed model expectation exists given dynamics.**



**Trends are towards slightly lower amounts - but ANY amounts will lead to impacts given temps**



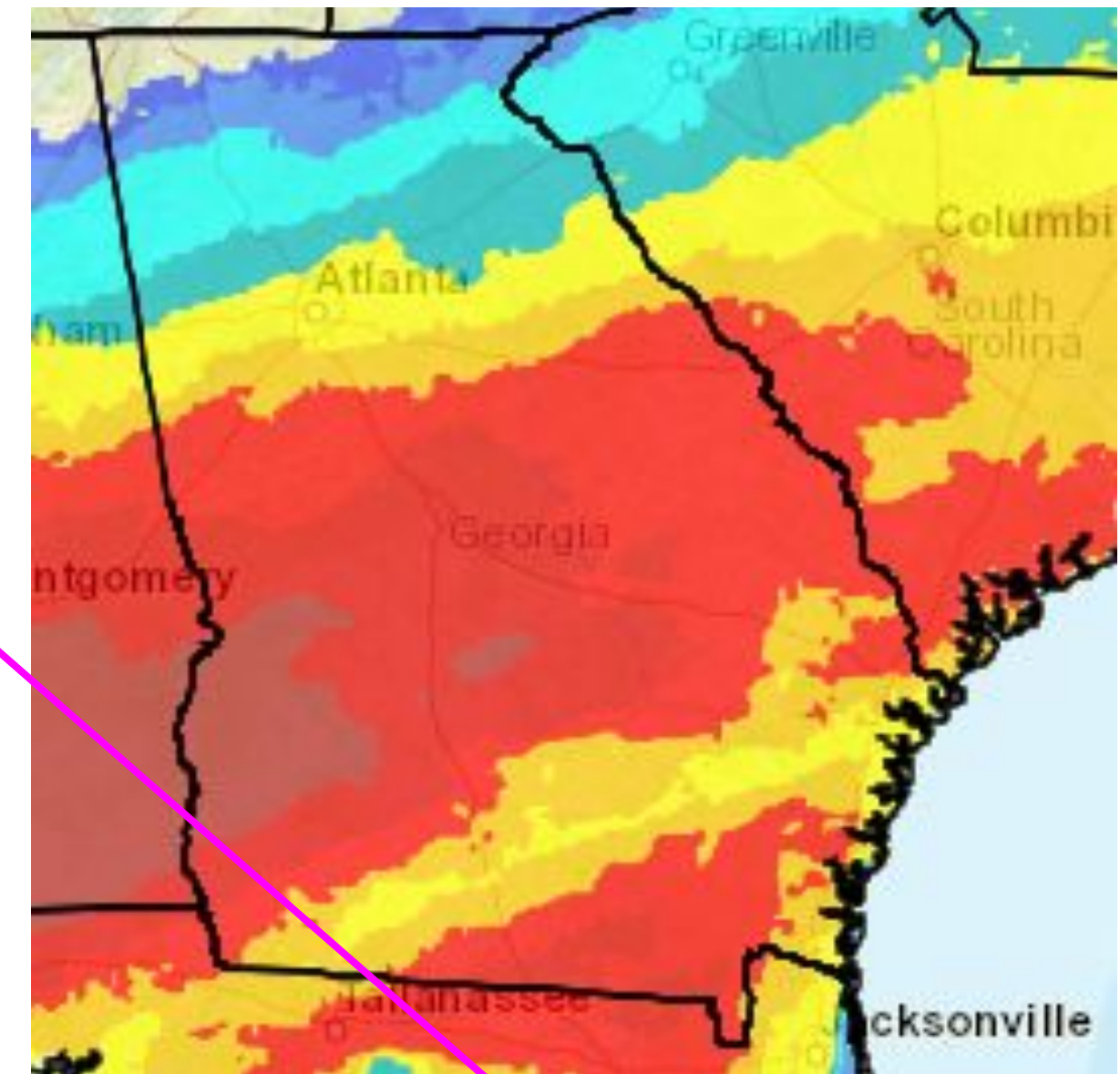
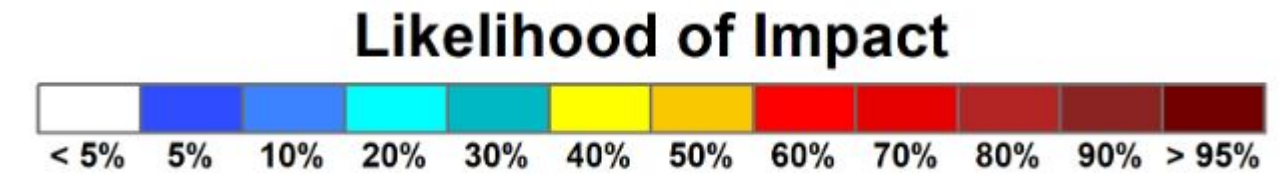


# Potential Impacts from Snow

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[https://www.wpc.ncep.noaa.gov/wwd/wssi/prob\\_wssi.php](https://www.wpc.ncep.noaa.gov/wwd/wssi/prob_wssi.php)

- Impacts to travel are expected from the metro and points south
  - Cold temperatures = impacts on roads shortly after onset...even with smaller amounts
  - Cold temps for days = impacts may linger for several days AFTER it falls



Potential Winter Storm Impacts
<b>Minor Impacts</b> Expect a few inconveniences to daily life. • Winter driving conditions. Use caution while driving.
<b>Moderate Impacts</b> Expect disruptions to daily life. • Hazardous driving conditions. Use extra caution while driving. • Closures and disruptions to infrastructure may occur.
<b>Major Impacts</b> Expect considerable disruptions to daily life. • Dangerous or impossible driving conditions. Avoid travel if possible. • Widespread closures and disruptions to infrastructure may occur.
<b>Extreme Impacts</b> Expect substantial disruptions to daily life. • Extremely dangerous or impossible driving conditions. Travel is not advised. • Extensive and widespread closures and disruptions to infrastructure may occur. • Life-saving actions may be needed.

Likelihood of Minor Impacts from WPC WSSI



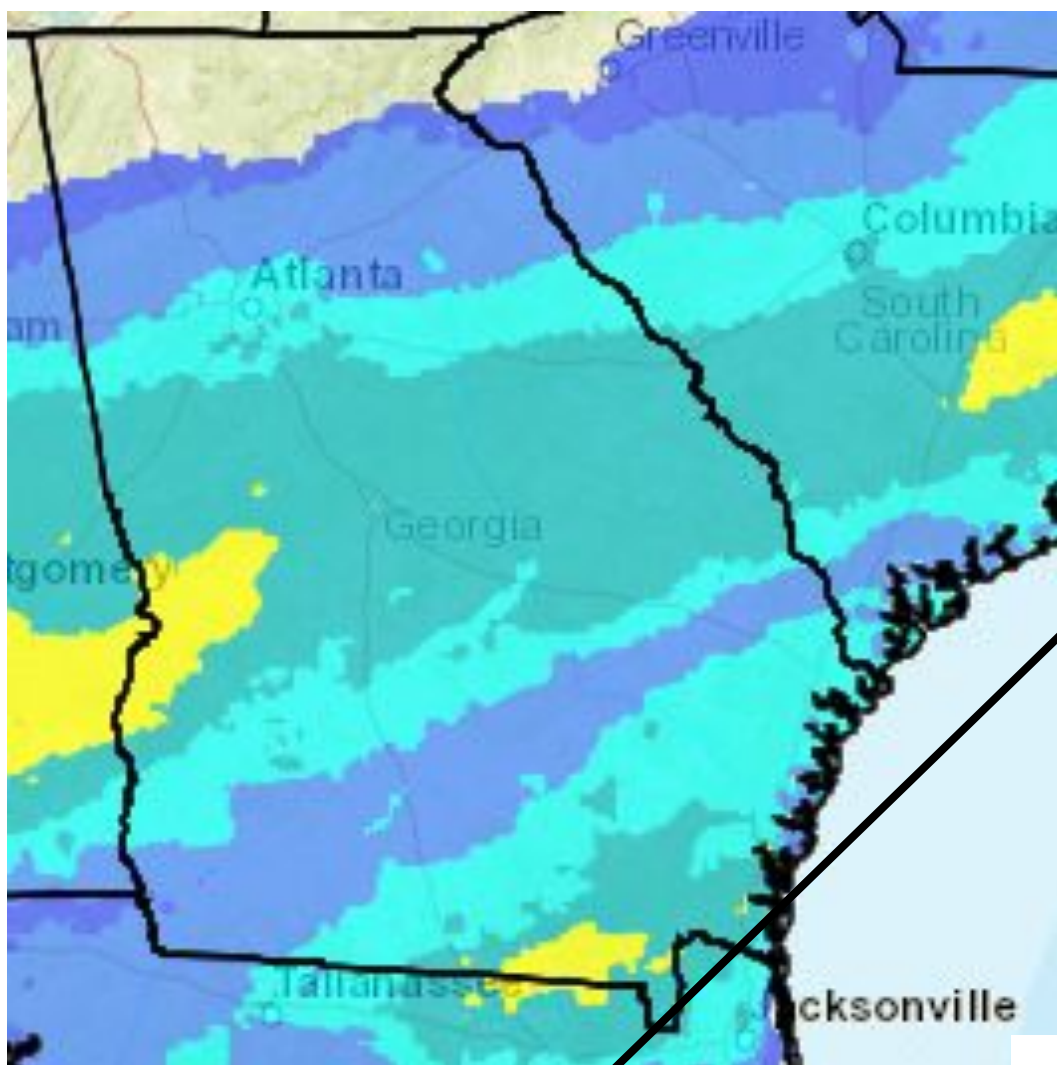


# Wintry Precipitation Potential

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[https://www.wpc.ncep.noaa.gov/wwd/wssi/prob\\_wssi.php](https://www.wpc.ncep.noaa.gov/wwd/wssi/prob_wssi.php)

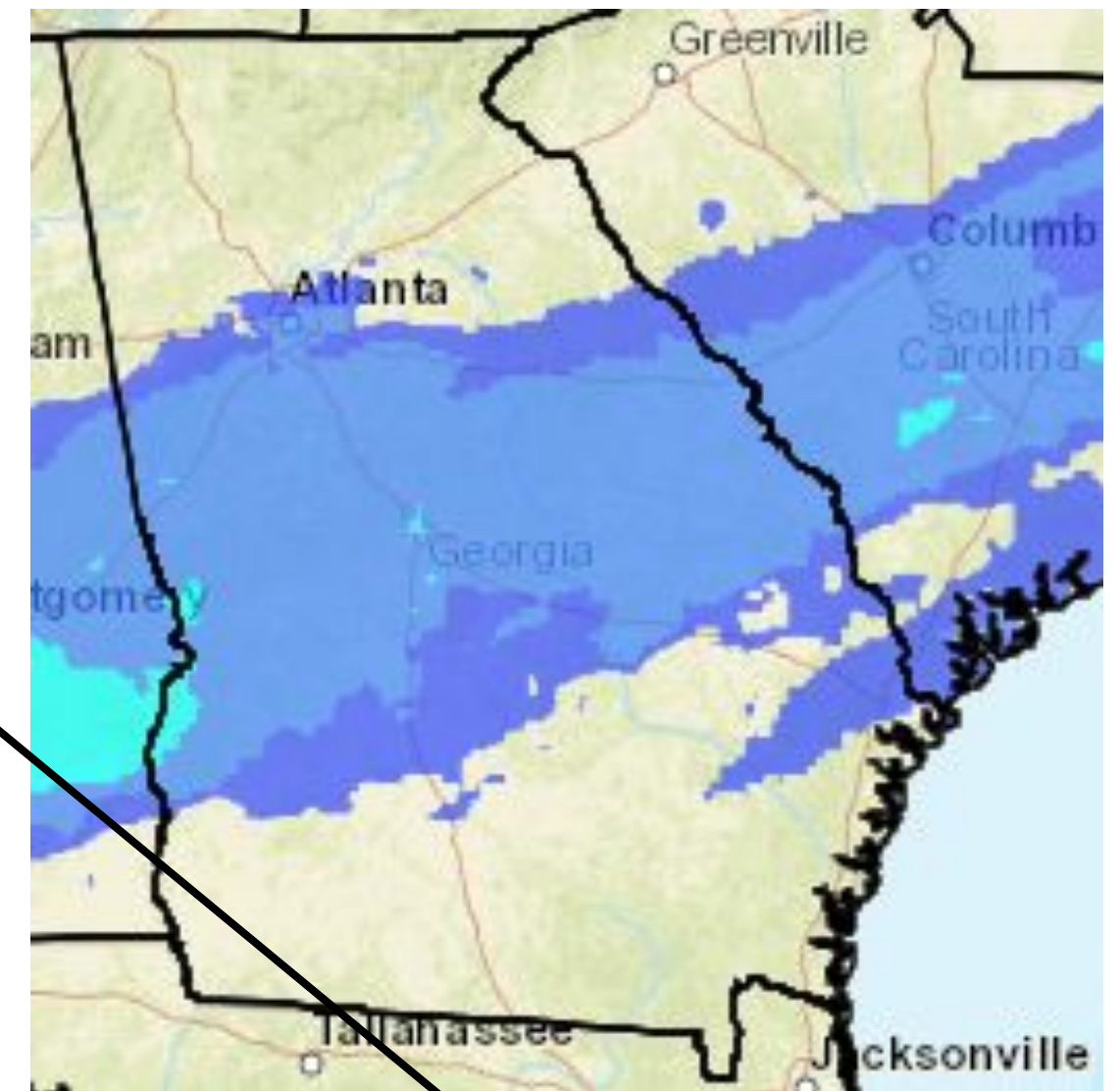
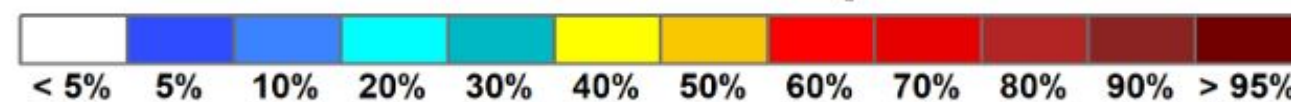
- Impacts to travel are expected from the metro and points south
  - Cold temperatures = impacts on roads shortly after onset...even with smaller amounts
  - Cold Temps for days = impacts linger for several days AFTER it falls



Likelihood of **Moderate** Impacts from WPC WSSI

Potential Winter Storm Impacts
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### Likelihood of Impact



Likelihood of **Major** Impacts from WPC WSSI



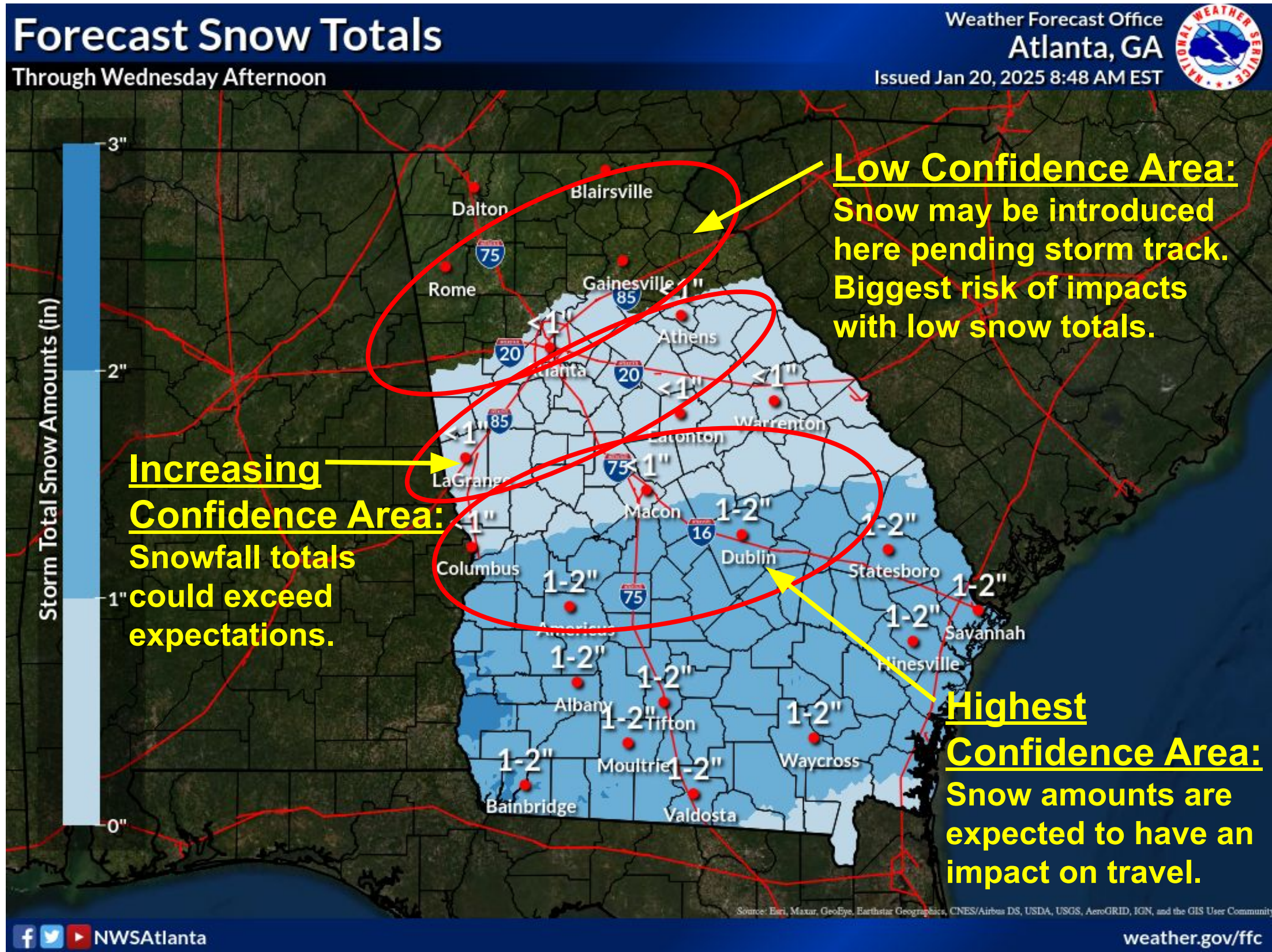




# Current Forecast Snow Totals

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From Tuesday into Wednesday Morning



- There remains lack of confidence in snowfall totals.
  - Errors in precipitation amounts (QPF) are magnified by 10x - 15x because snow to liquid ratios are high.
    - *Example:*  
Forecast 0.10" of liquid = 1.5" of snow,  
Forecast 0.15" of liquid = 2.25" snow,  
Forecast 0.05" of liquid = 0.75" snow
  - **Even the worst case scenarios could be under-doing the snowfall potential.**
  - However, dry air aloft could reduce snowfall amounts.





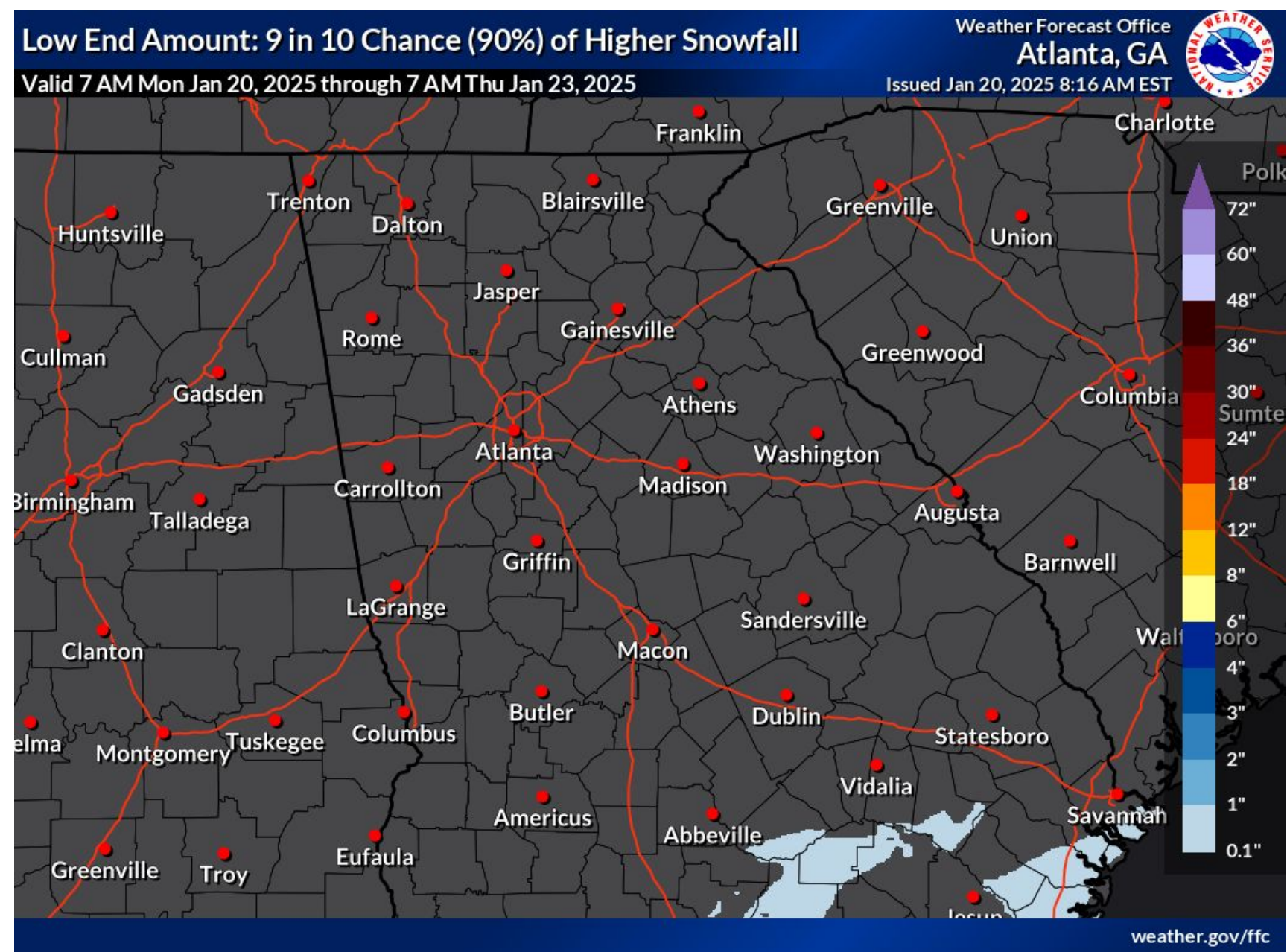
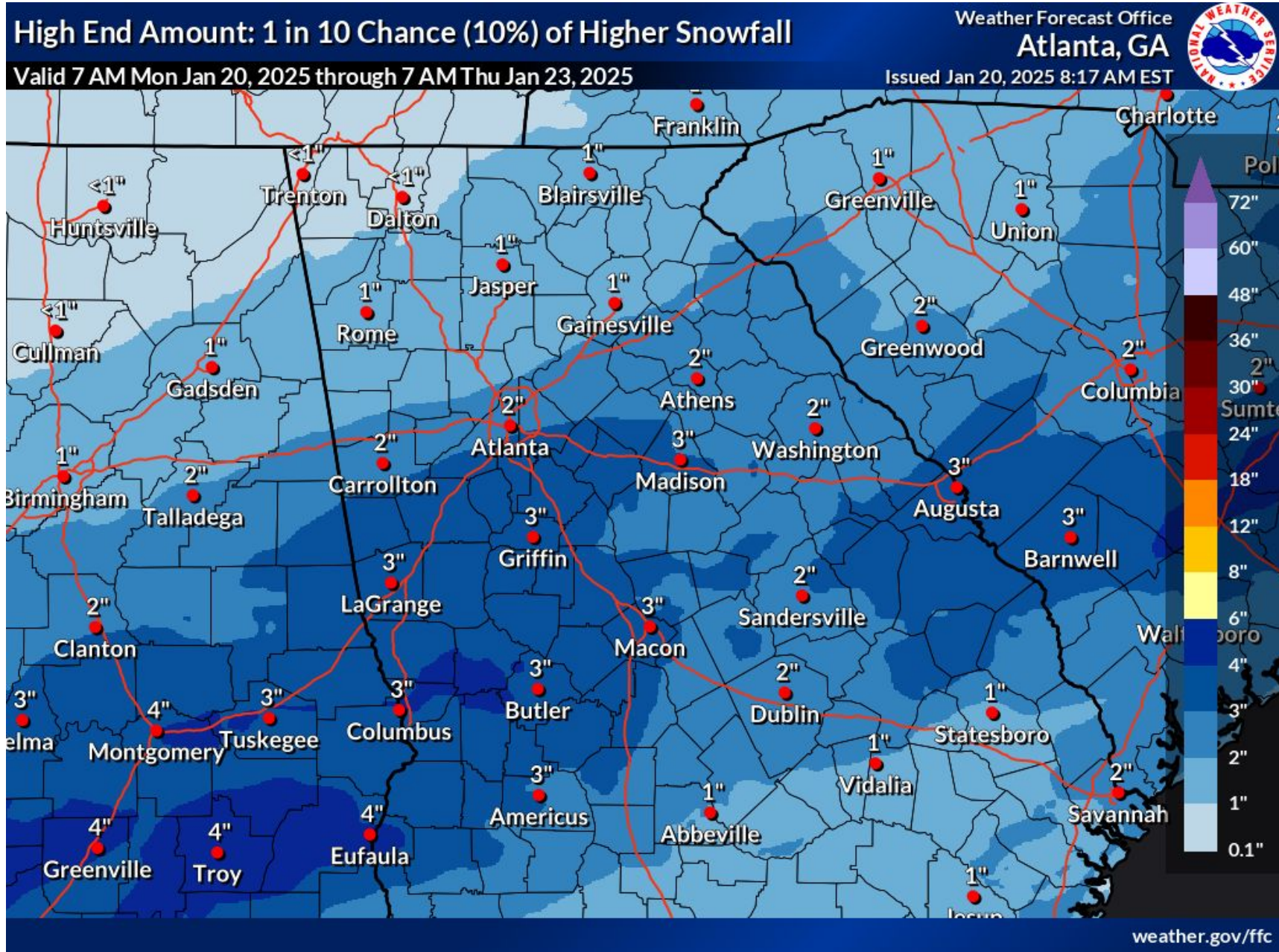
# High-end / Low-end Snow Potential

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## Tuesday Snowfall - Boom / Bust Potential Remains

Reasonable Worst Case: 10% of seeing this much or more

Best case? 10% chance of seeing nothing still!



This event has a higher ceiling due to the dynamics in play for snow in the first place. It also means that there is the real possibility of seeing **NOTHING** at all (*although that chance is decreasing*).

Source: NBM snow probabilities





# Winter Precip Timing & Uncertainty (A)

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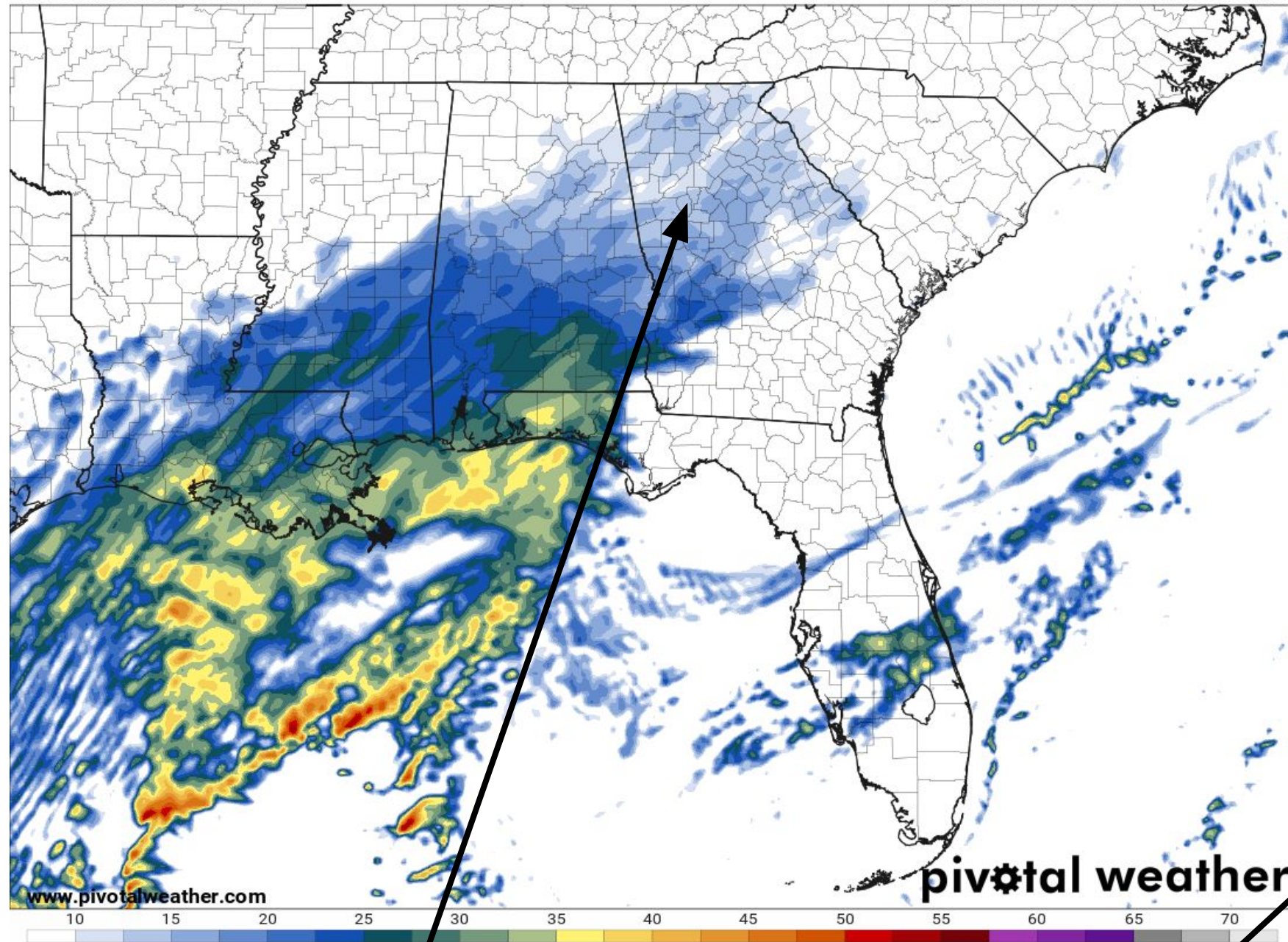
**EARLIEST ONSET:** This is only ONE model. Snow may begin in western GA between 9am and noon.

## 10-11AM Tuesday - Image snapshot

### -Composite Reflectivity

Composite Reflectivity (dBZ)  
F028 Valid: Tue 2025-01-21 16z

Init: Mon 2025-01-20 12z HRW WRF-ARW

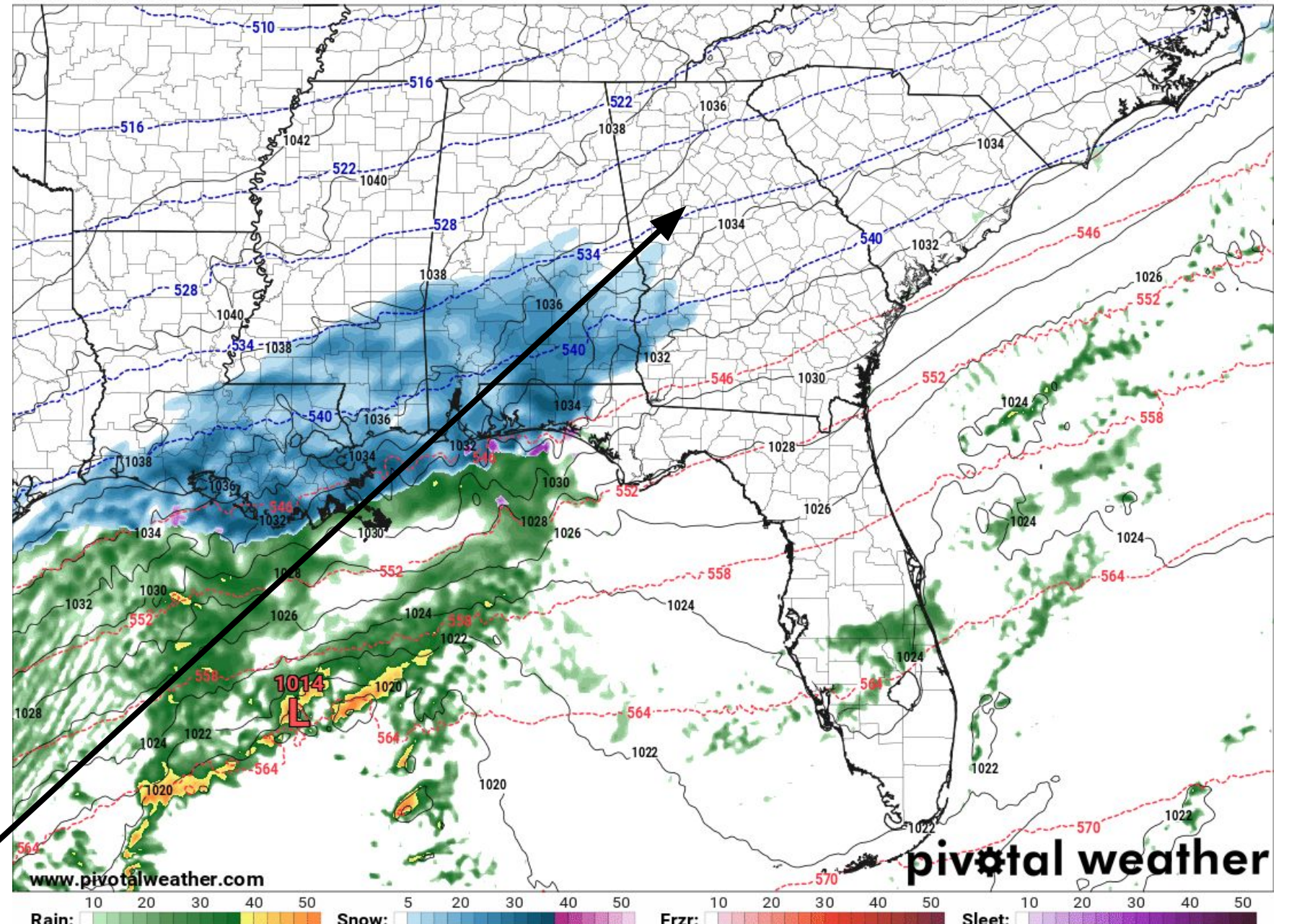


## 10-11AM Tuesday - Image snapshot

### -Precip type

1 km AGL Reflectivity (dBZ), Type, 1000-500 mb Thickness (dam)  
F028 Valid: Tue 2025-01-21 16z

Init: Mon 2025-01-20 12z HRW WRF-ARW



**Same Model - What does this tell us: It tells us that the models are struggling with precip falling from higher levels into drier air near the surface**







# Winter Precip Timing & Uncertainty (B)

January 20, 2025  
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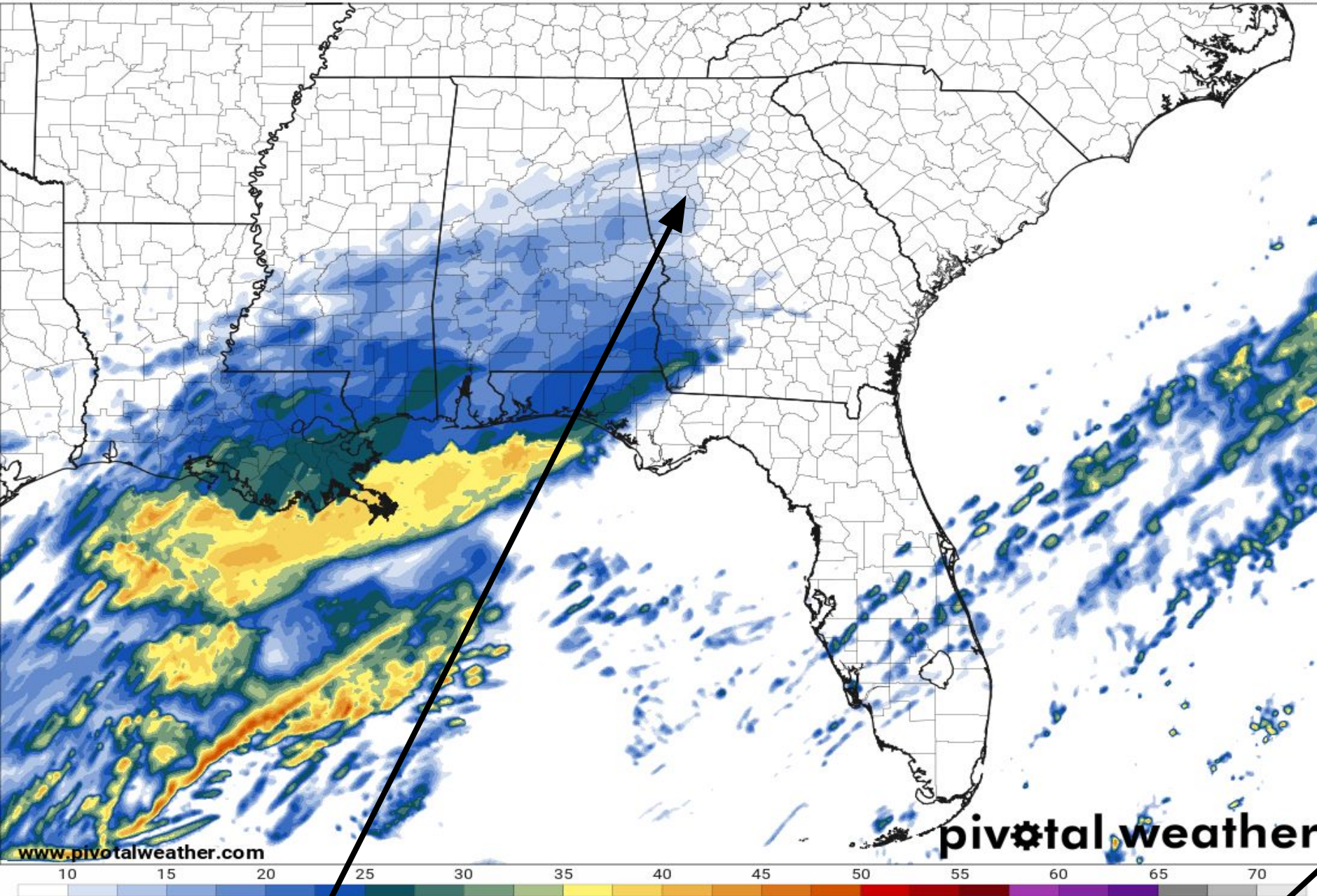
LATER ONSET: This is only ONE model. Snow may begin in western GA as late as 1 - 3 PM

## 1 - 2 PM Tuesday - Image snapshot

### -Composite Reflectivity

Composite Reflectivity (dBZ)  
F031 Valid: Tue 2025-01-21 19z

Init: Mon 2025-01-20 12z HRRR

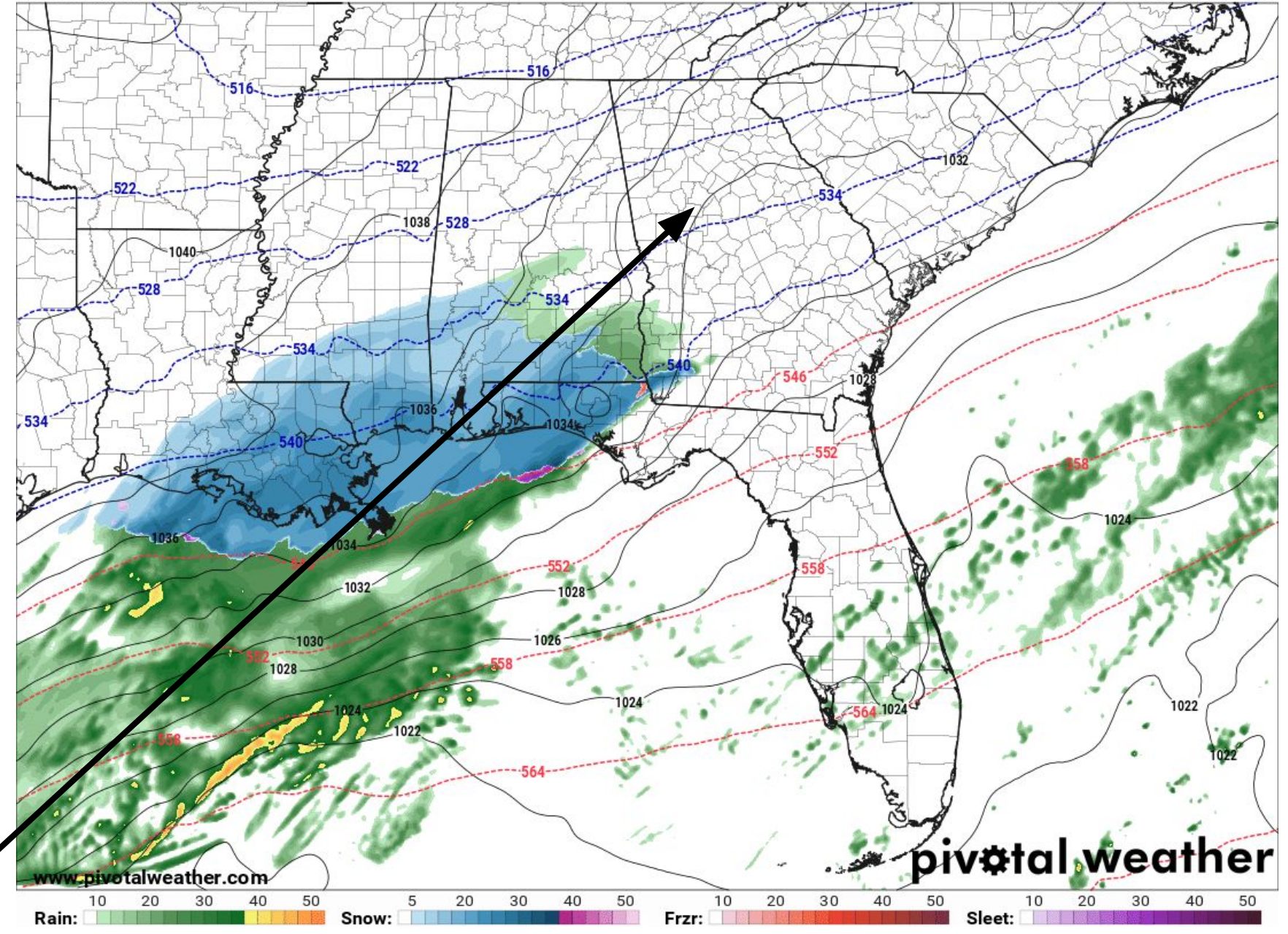


## 1 - 2PM Tuesday - Image snapshot

### -Precip type

1 km AGL Reflectivity (dBZ), Type, 1000-500 mb Thickness (dam)  
F031 Valid: Tue 2025-01-21 19z

Init: Mon 2025-01-20 12z HRRR



Same Model - What does this tell us: It tells us that the models are struggling with precip falling from higher levels into drier air near the surface







# Winter Precip Timing & Uncertainty (C)

January 20, 2025  
12:25 PM

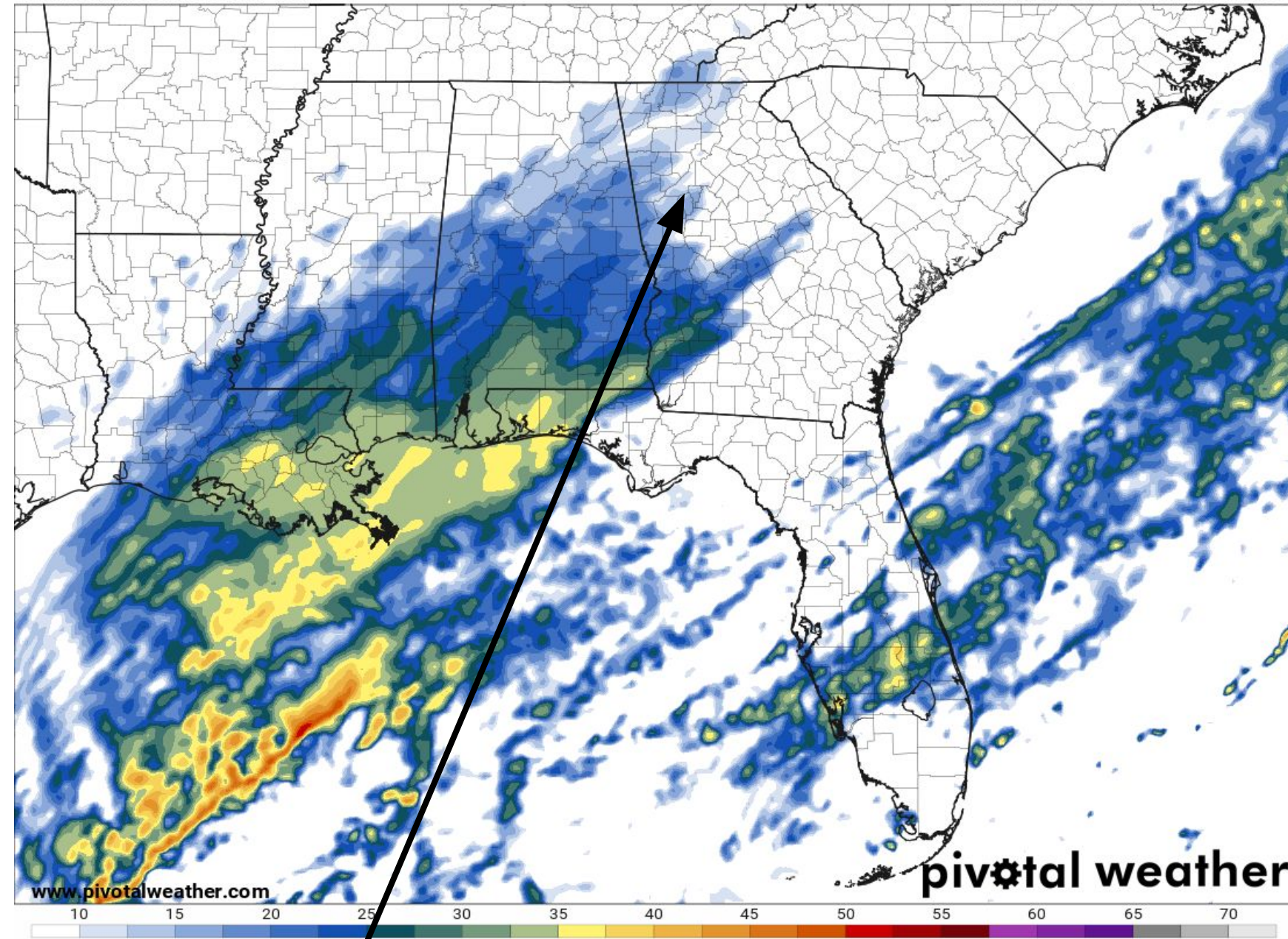
Another Example: This is only ONE model. Snow may begin in western GA as 12 - 3 PM

## 1 - 2 PM Tuesday - Image snapshot

### -Composite Reflectivity

Composite Reflectivity (dBZ)  
F031 Valid: Tue 2025-01-21 19z

Init: Mon 2025-01-20 12z HRW FV3

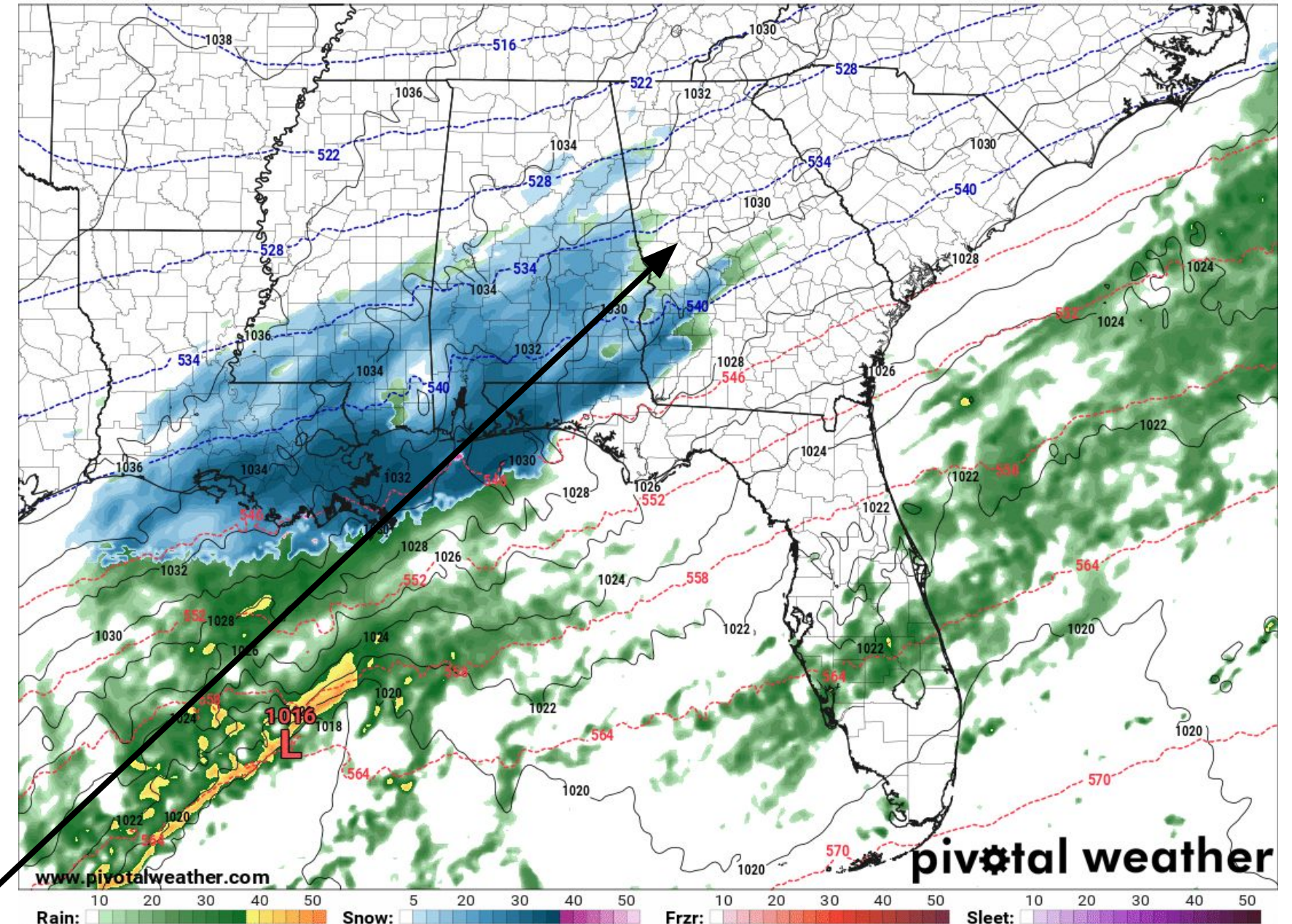


## 1 - 2PM Tuesday - Image snapshot

### -Precip type

1 km AGL Reflectivity (dBZ), Type, 1000-500 mb Thickness (dam)  
F031 Valid: Tue 2025-01-21 19z

Init: Mon 2025-01-20 12z HRW FV3



Same Model - What does this tell us: It tells us that the models are struggling with precip falling from higher levels into drier air near the surface







# Winter Precip- Northern Extent Uncertainty

January 20, 2025  
12:25 PM

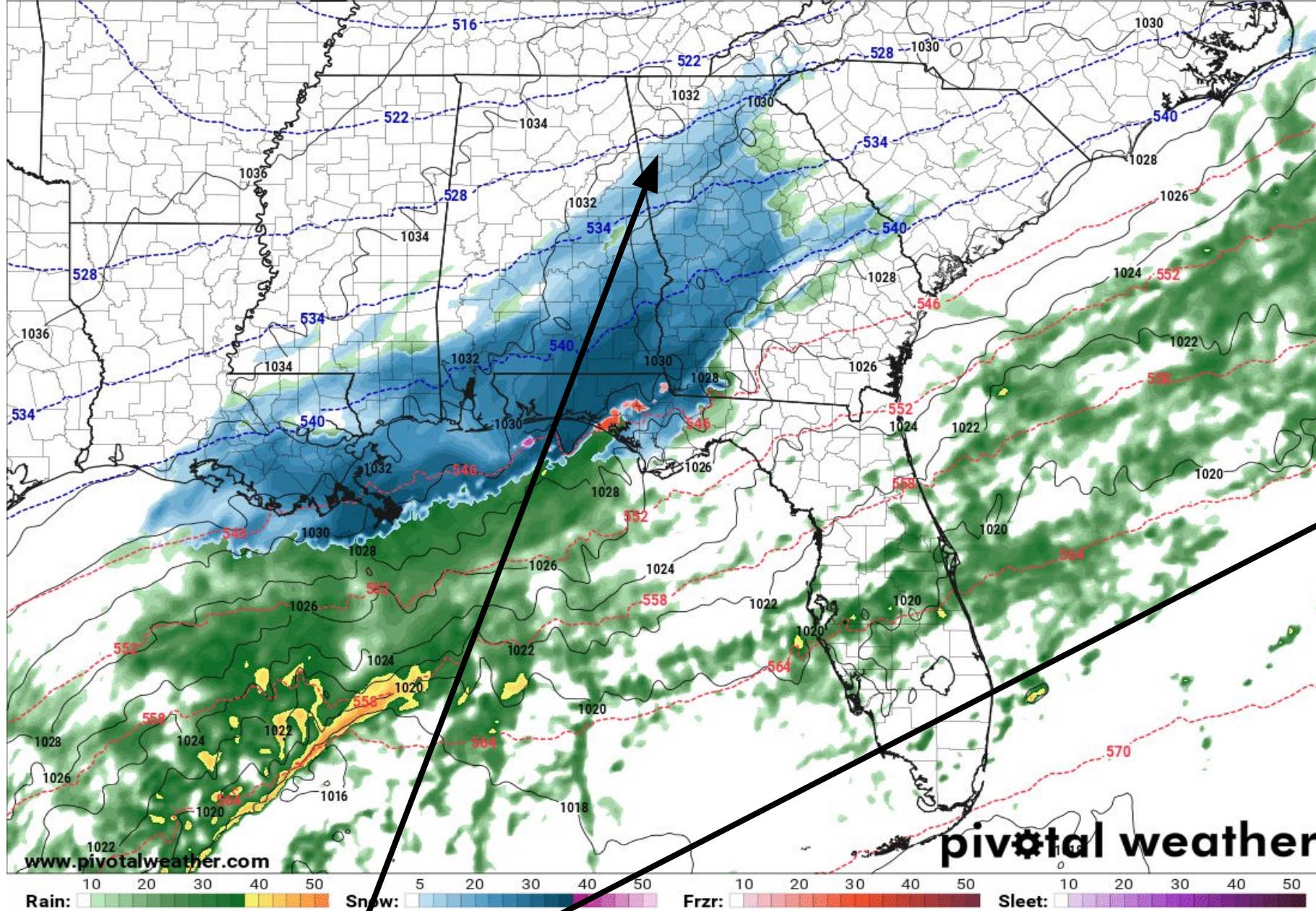
Worse Case: "Concern" This is only ONE model.

## 3 - 4 PM Tuesday - Image snapshot

-Precip Type

1 km AGL Reflectivity (dBZ), Type, 1000-500 mb Thickness (dam)  
F033 Valid: Tue 2025-01-21 21z

Init: Mon 2025-01-20 12z HRW FV3

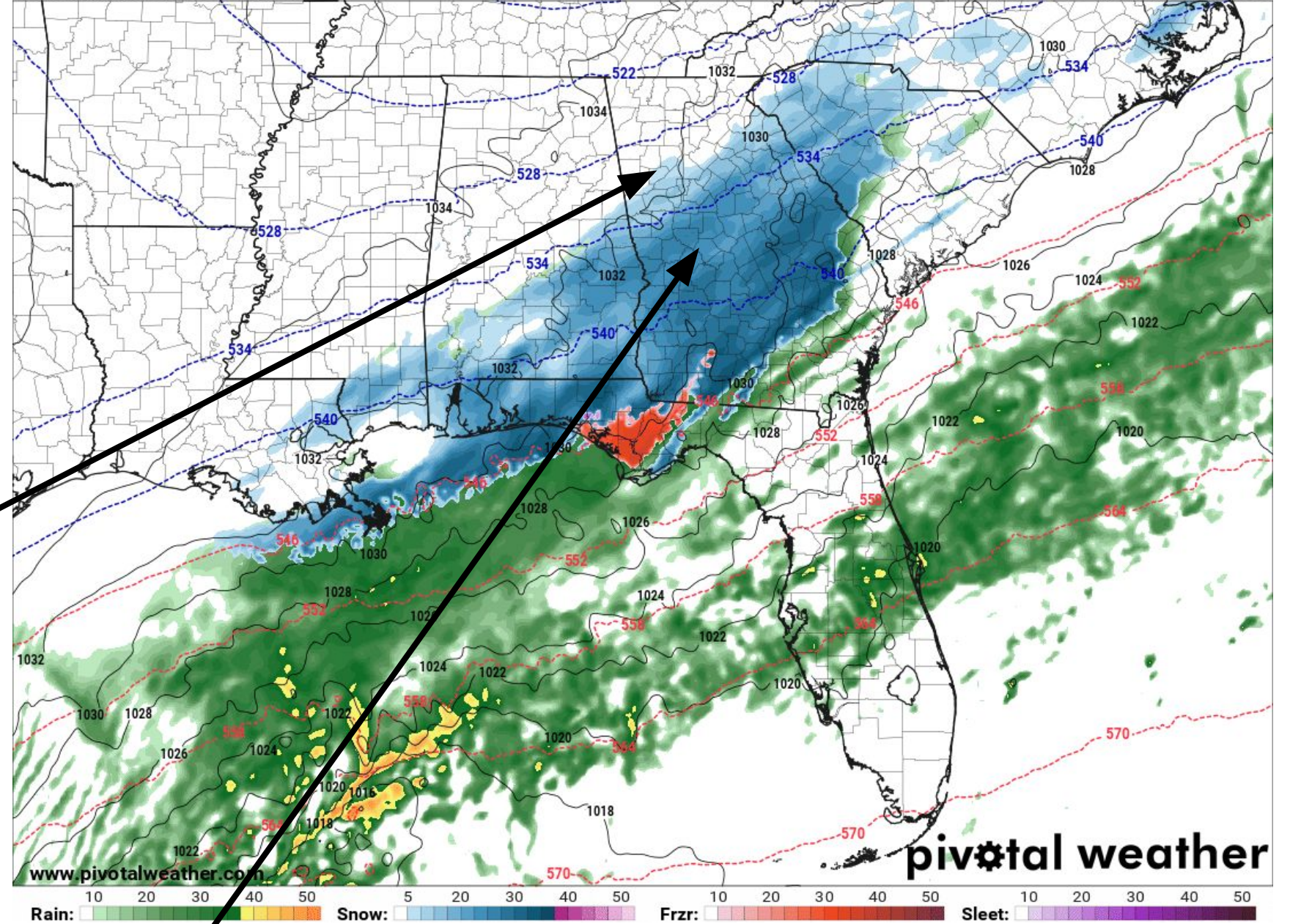


## 5 - 6 PM Tuesday - Image snapshot

-Precip type

1 km AGL Reflectivity (dBZ), Type, 1000-500 mb Thickness (dam)  
F035 Valid: Tue 2025-01-21 23z

Init: Mon 2025-01-20 12z HRW FV3



Back edge a little more Northwest meaning model "sees" snow reaching ground  
NW flank shifting Southeast ; Heaviest snow middle GA







# Winter Precip- Timing

January 20, 2025  
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Biggest Concern is Northern Extent

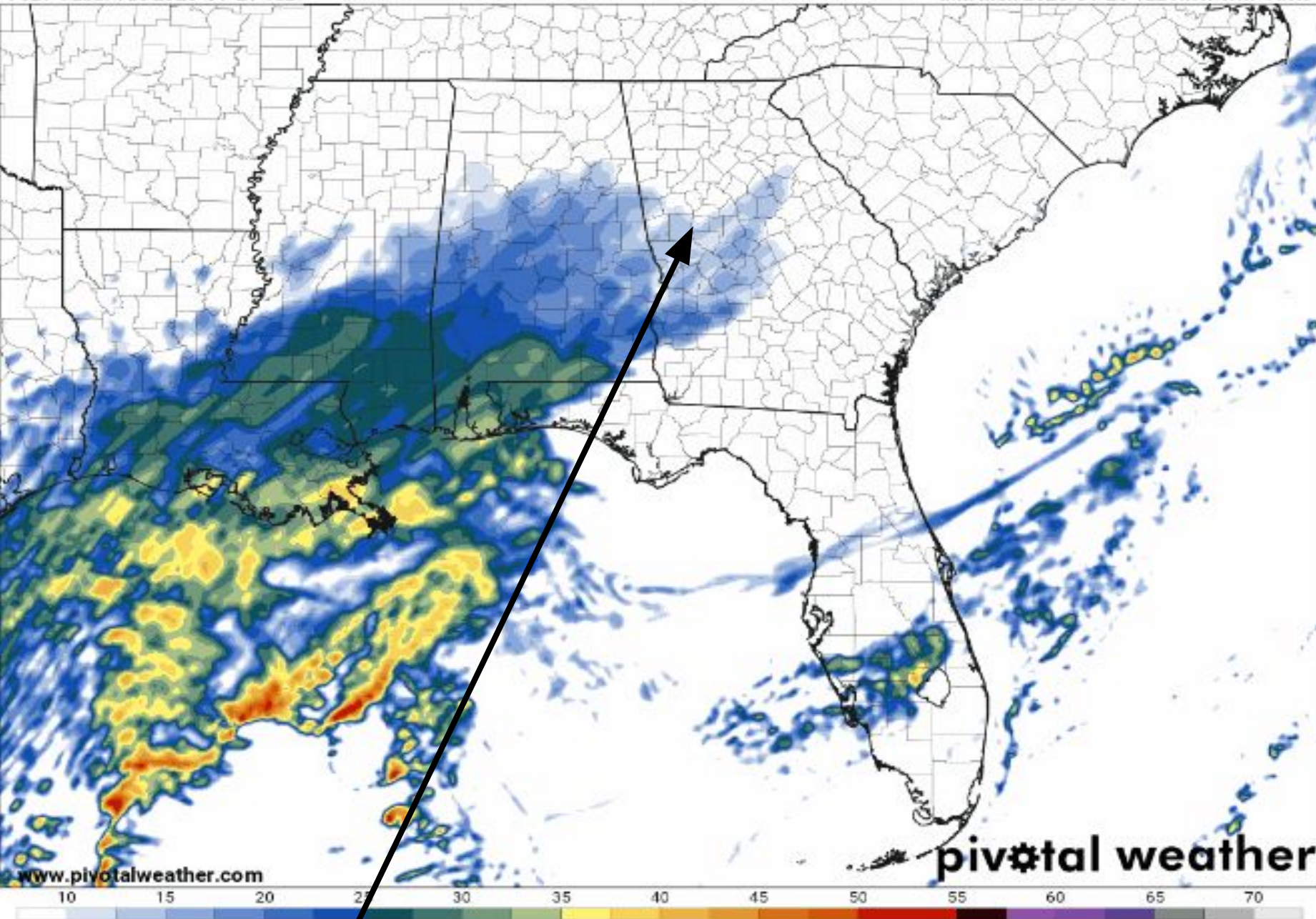
**Earliest Reasonable: Enters GA ~9AM**

Loop ends 10PM

Composite Reflectivity (dBZ)

F027 Valid: Tue 2025-01-21 15z

Init: Mon 2025-01-20 12z HRW WRF-ARW



**Leading Edge (some precip reaching ground) at loop start**

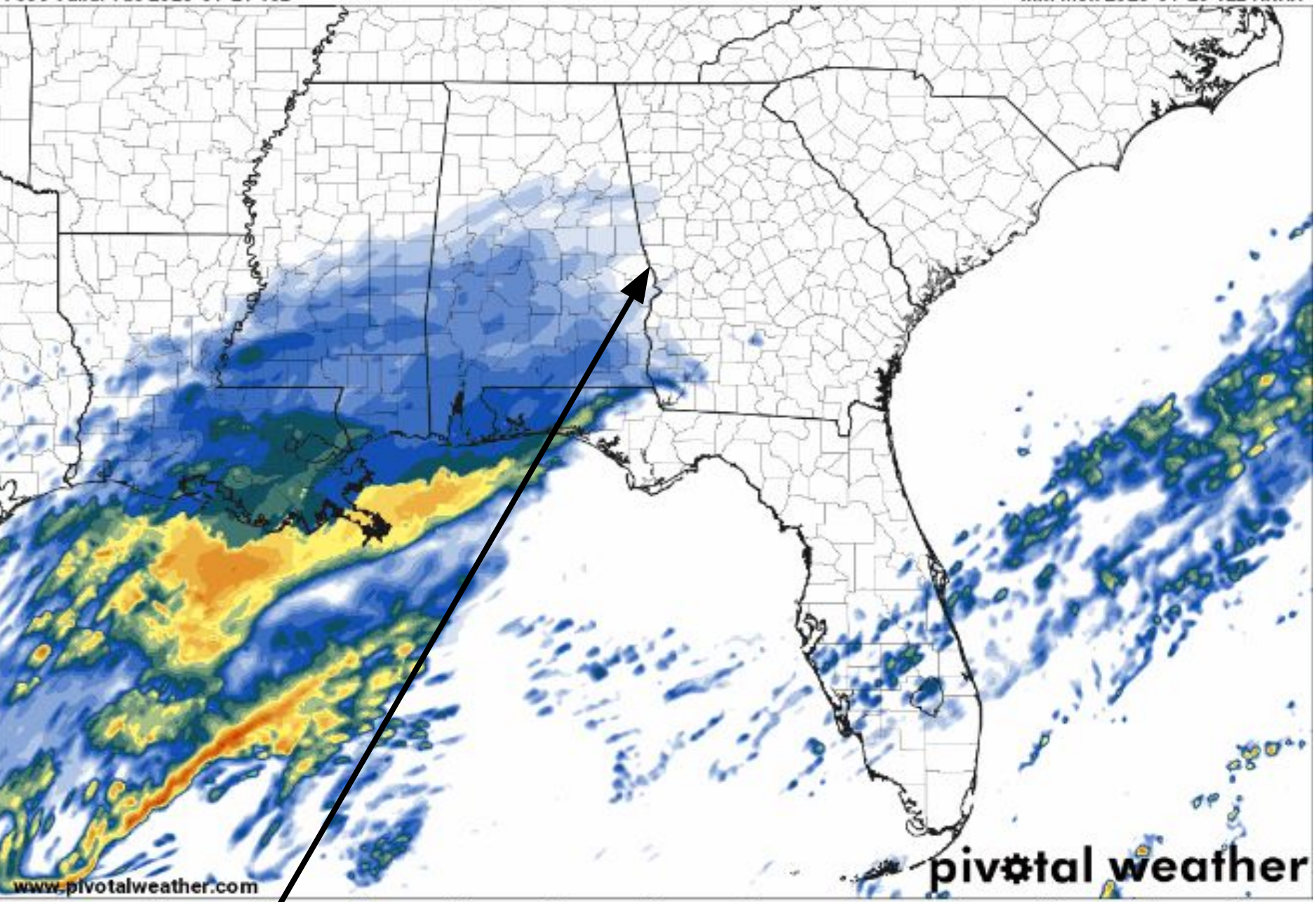
**Latest Reasonable: Enters GA ~1PM**

Loop ends 1 AM Wednesday

Composite Reflectivity (dBZ)

F030 Valid: Tue 2025-01-21 18z

Init: Mon 2025-01-20 12z HRRR



**Later Start time, dry air works in faster reducing the northern extent**





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  - A **Winter Storm Watch** is in effect from 10am Tuesday until 7 am Wednesday generally along and south of I-85, including much of metro Atlanta
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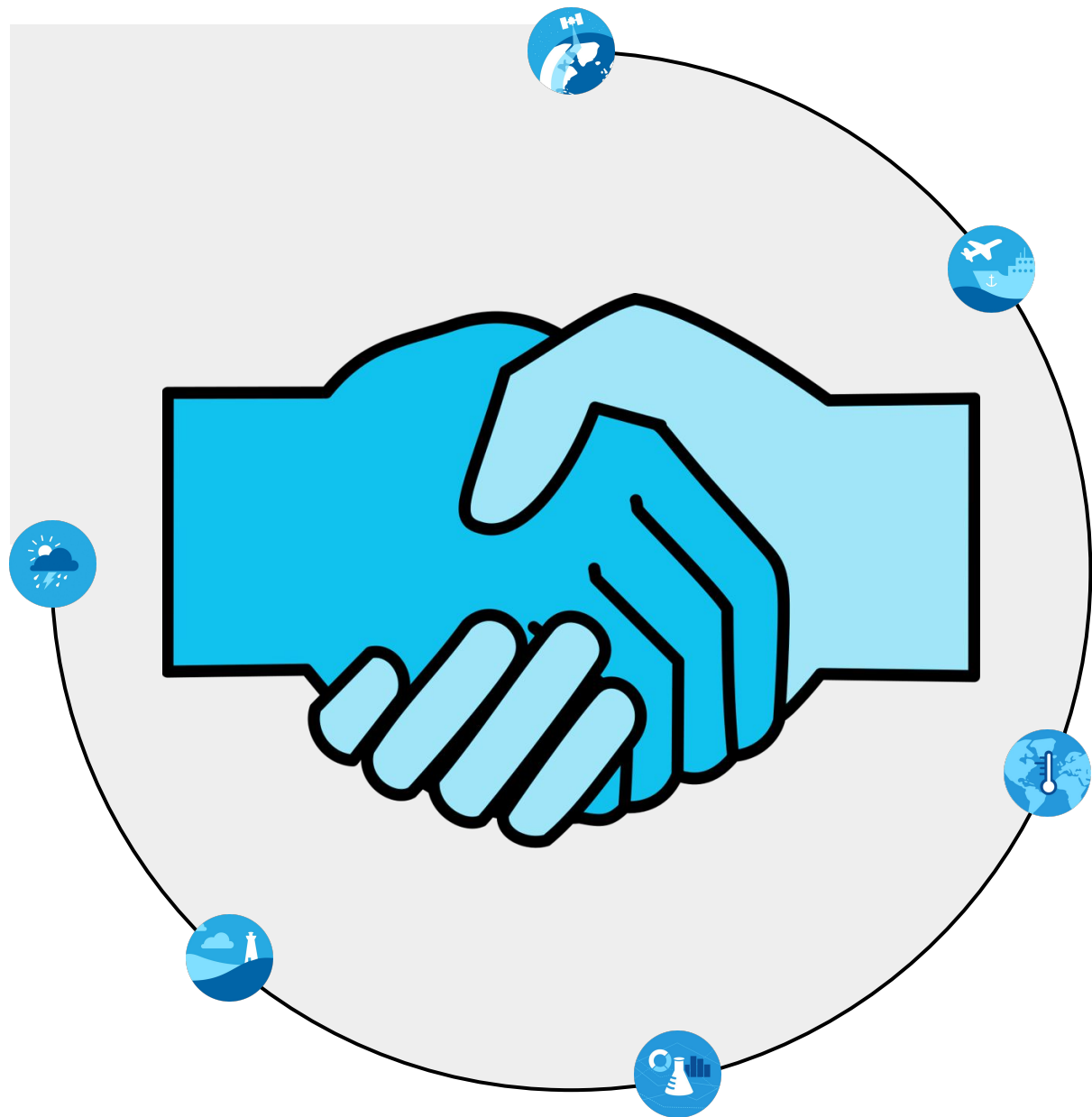






# Contact Info & Additional Briefings

January 20, 2025  
12:25 PM



## Additional Briefings?

YES       NO

## Contact Information & Reporting

**Phone:** 770-486-1133

**Email:** [sr-ffc.mets@noaa.gov](mailto:sr-ffc.mets@noaa.gov)

**NWS Chat:** For EMs, Media & Approved Partners

**Reporting Hotline:** 866-763-4466 (Voicemail if busy)

**NWS Atlanta Winter Page:** [www.weather.gov/ffc/winter](http://www.weather.gov/ffc/winter)

