

Main Points



Thursday Severe Threat

- Potential for severe weather throughout the day on Thursday.
- Highest severe risk is along and south of I-20
- Two possible rounds of severe thunderstorms
 - Line of strong to severe thunderstorms with potential to produce widespread damaging winds expected in the morning and early afternoon.
 - Second round of severe storms capable of producing tornadoes, hail, and damaging wind expected in the late afternoon and night.
- Primary Impacts:
 - Tornadoes (a few strong, long-track possible)
 - Damaging Wind Gusts (could down trees/powerlines)
 - Hail (primarily in west Georgia)
- Heavy rainfall will lead to flash flooding and river flooding concerns.

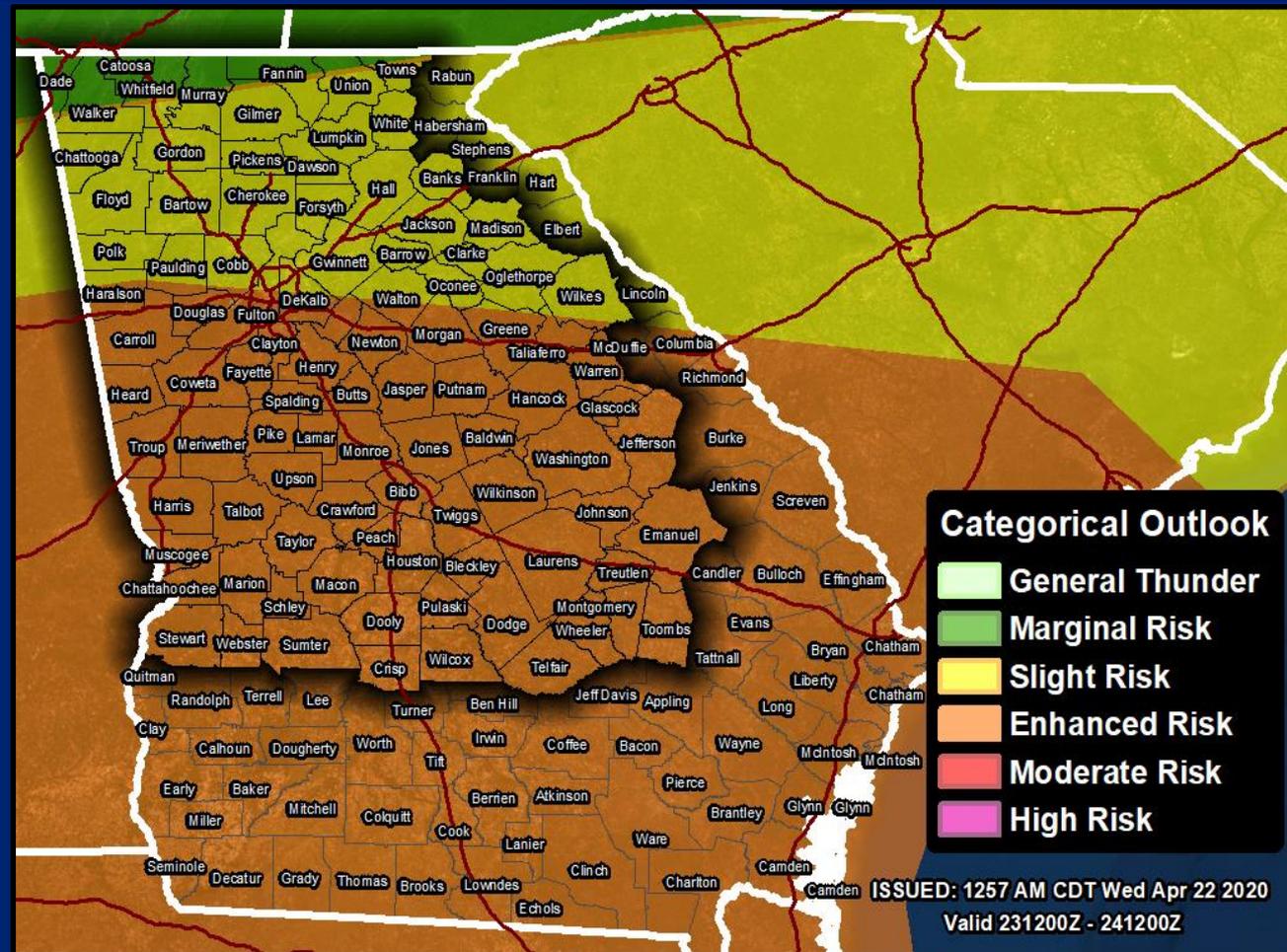


SPC Outlook - Thursday



Subject to change with later forecasts

- **Enhanced Risk (level 3) along and south of I-20**
- **Slight Risk (level 2) over much of far north Georgia**
- **Timing:**
 - Round 1 (morning/early afternoon)
 - Round 2 (late afternoon/night)
- **Main Threats:**
 - Tornadoes
 - Damaging Winds
 - Hail
 - Flash Flooding



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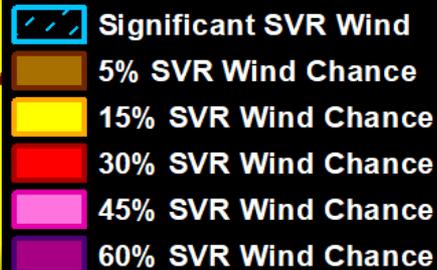


Damaging Wind Risk

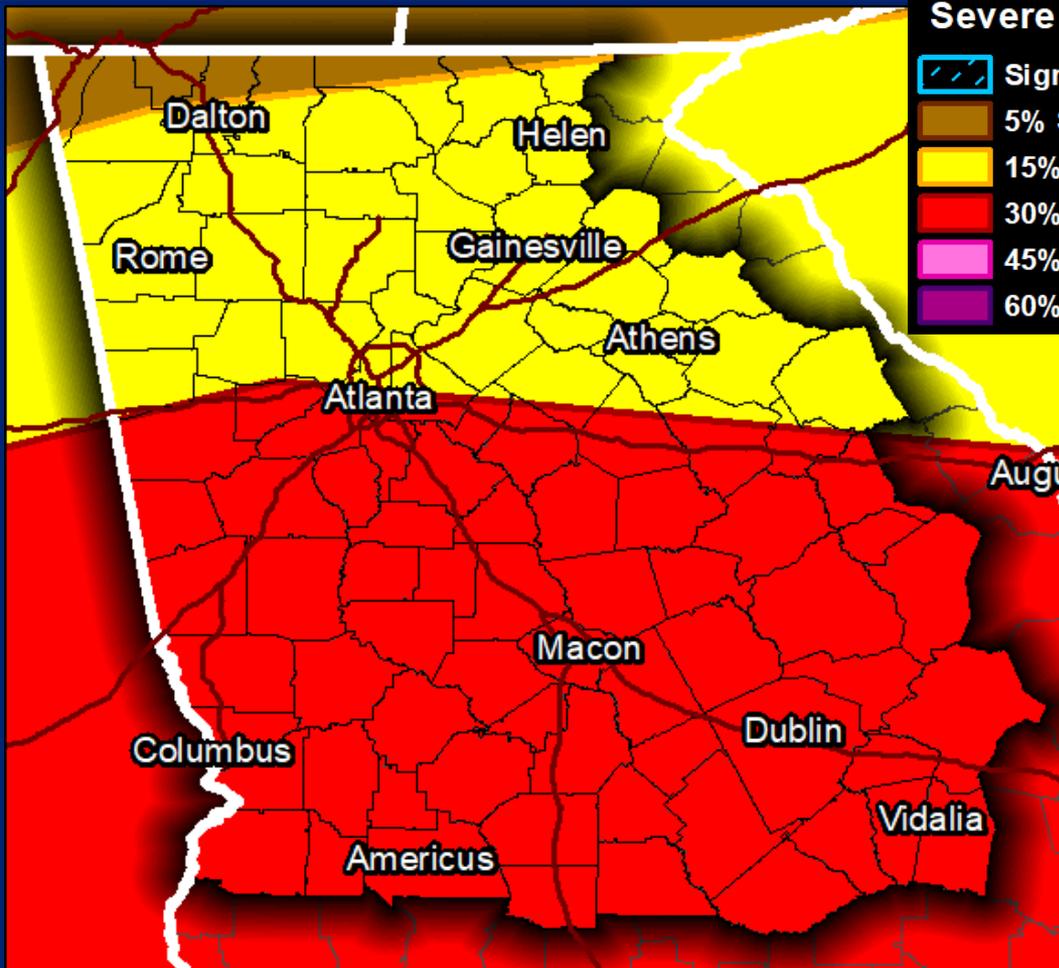


Likely to change w/ later forecasts

Severe Wind Probability



- Highest Probability along and south of I-20
- Wind gusts up to 60-70 mph possible
 - Damaging wind gusts could bring down trees and power lines



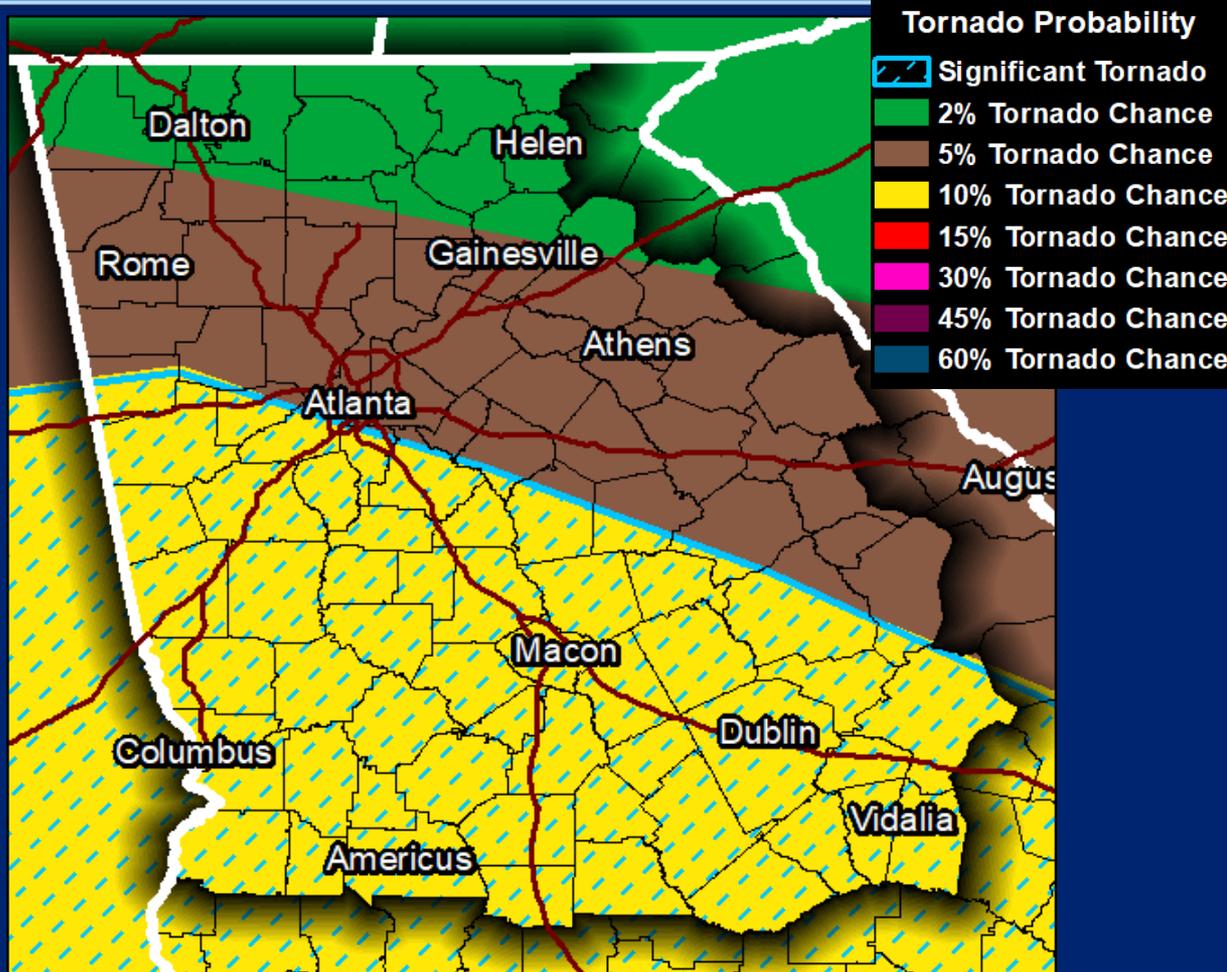
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Tornado Risk



Likely to change w/ later forecasts



- **Highest Probability Over Central Georgia**

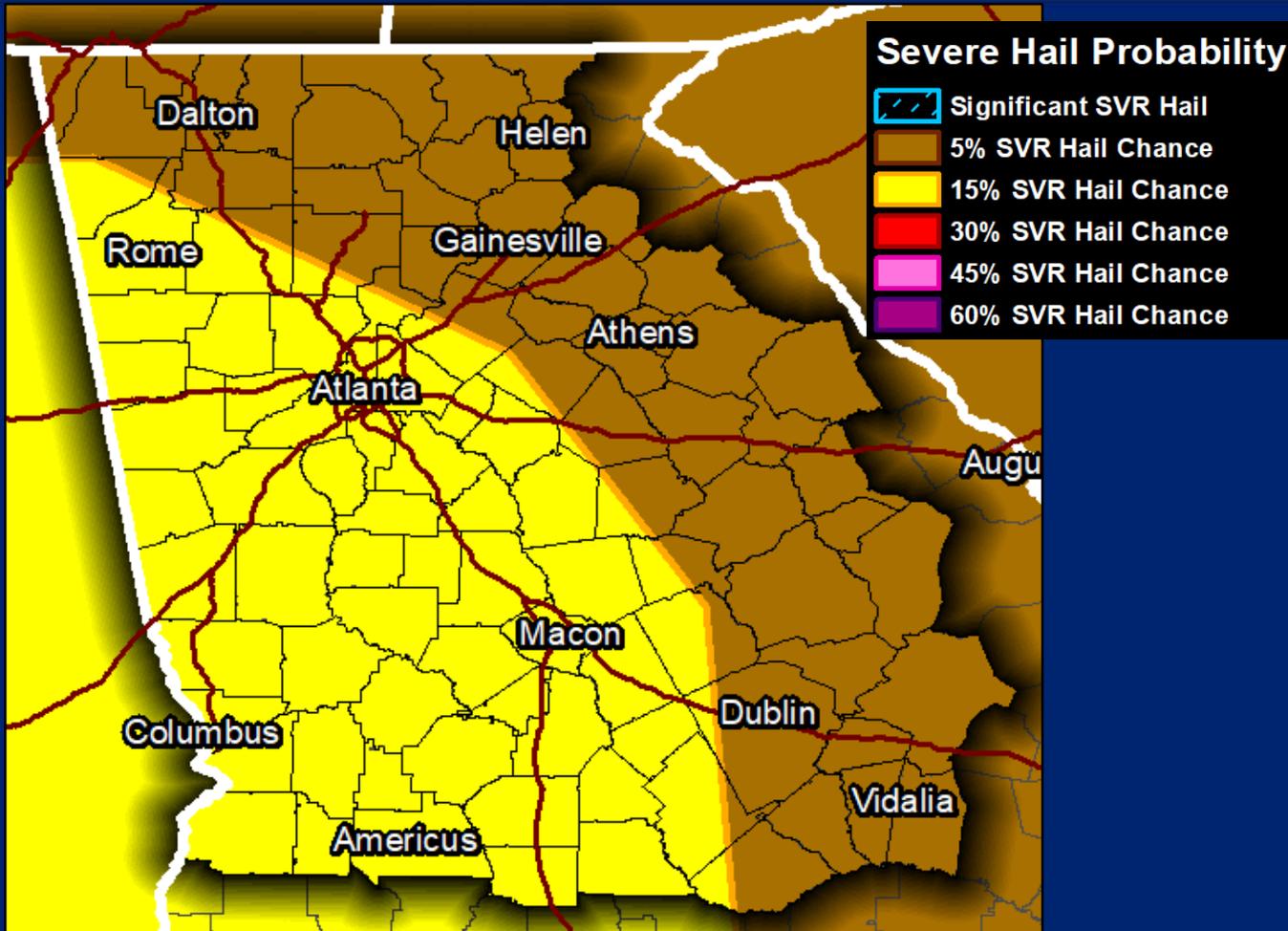
Hatched area is for “significant tornado event”

- A few strong, long-track tornadoes possible in this area

Hail Risk



Likely to change w/ later forecasts

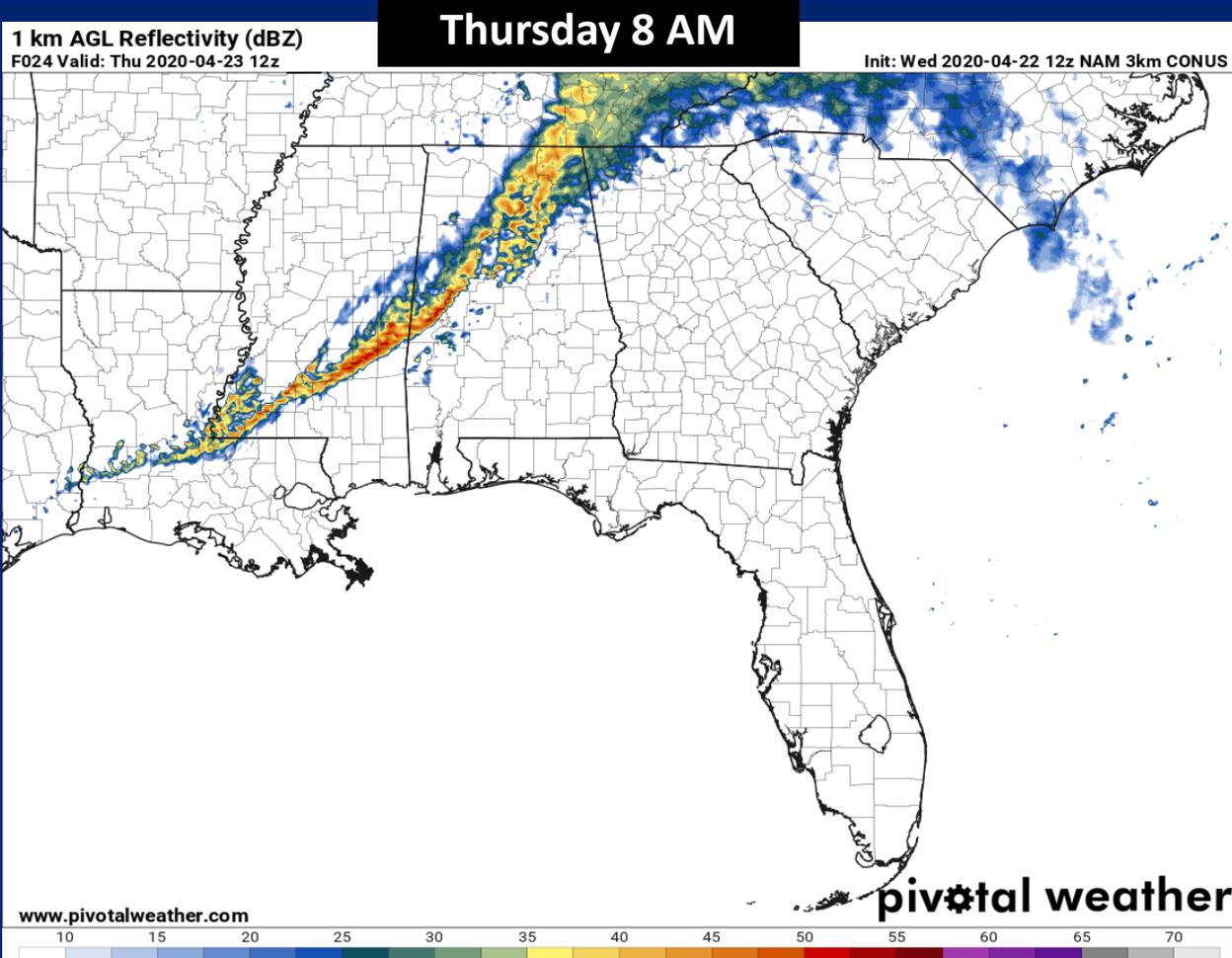


- Highest Probability over portions of west and central Georgia
- Large hail over 1" in diameter possible, especially western portion of the area.

Thunderstorm Timing



Don't focus on exact timing/location or one model solution.

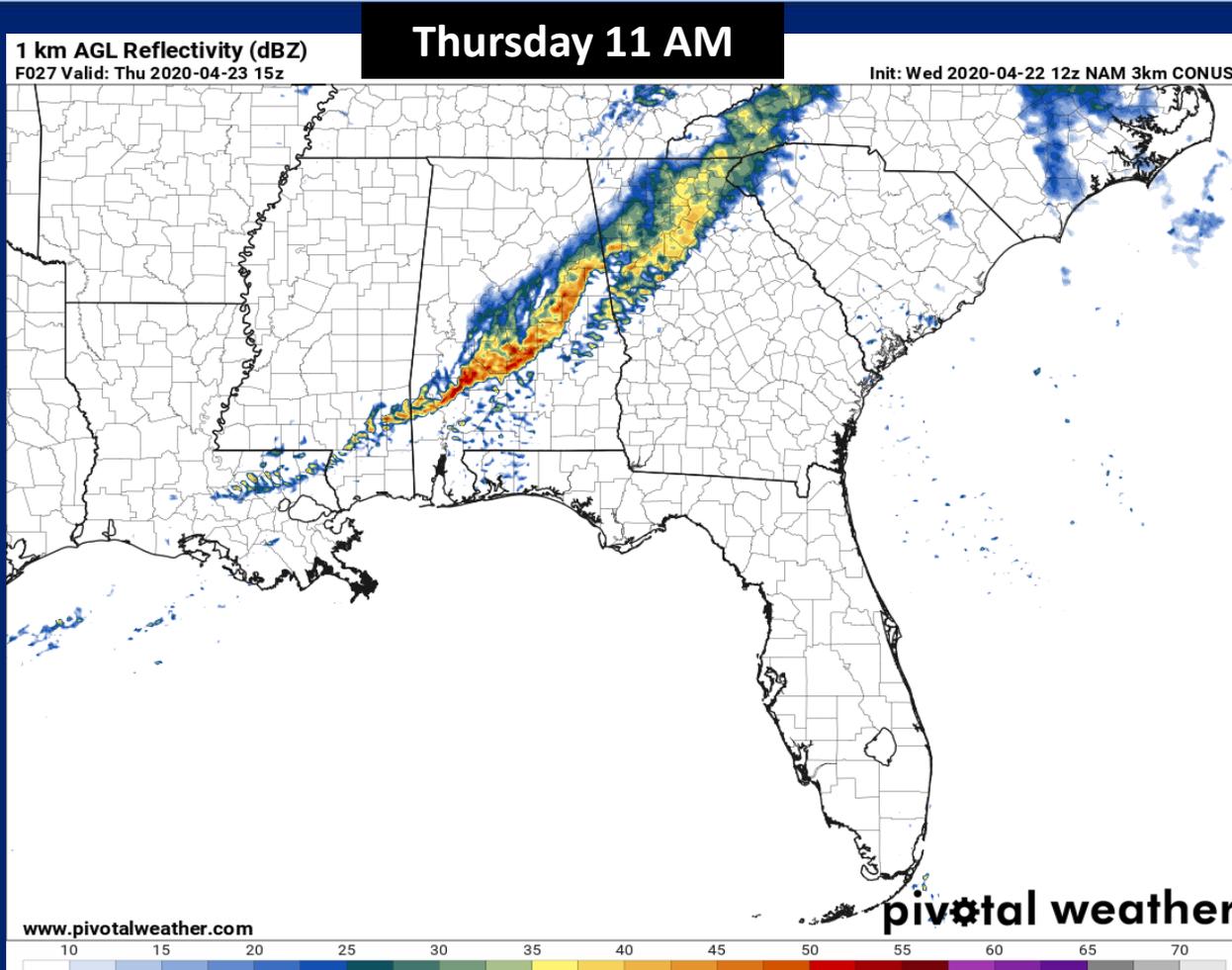


- Morning/Early Afternoon: An initial line of strong to severe thunderstorms will push through the area.
 - Damaging winds will be the primary concern with the line.
 - Tornado threat will be low in morning, but “non-zero”

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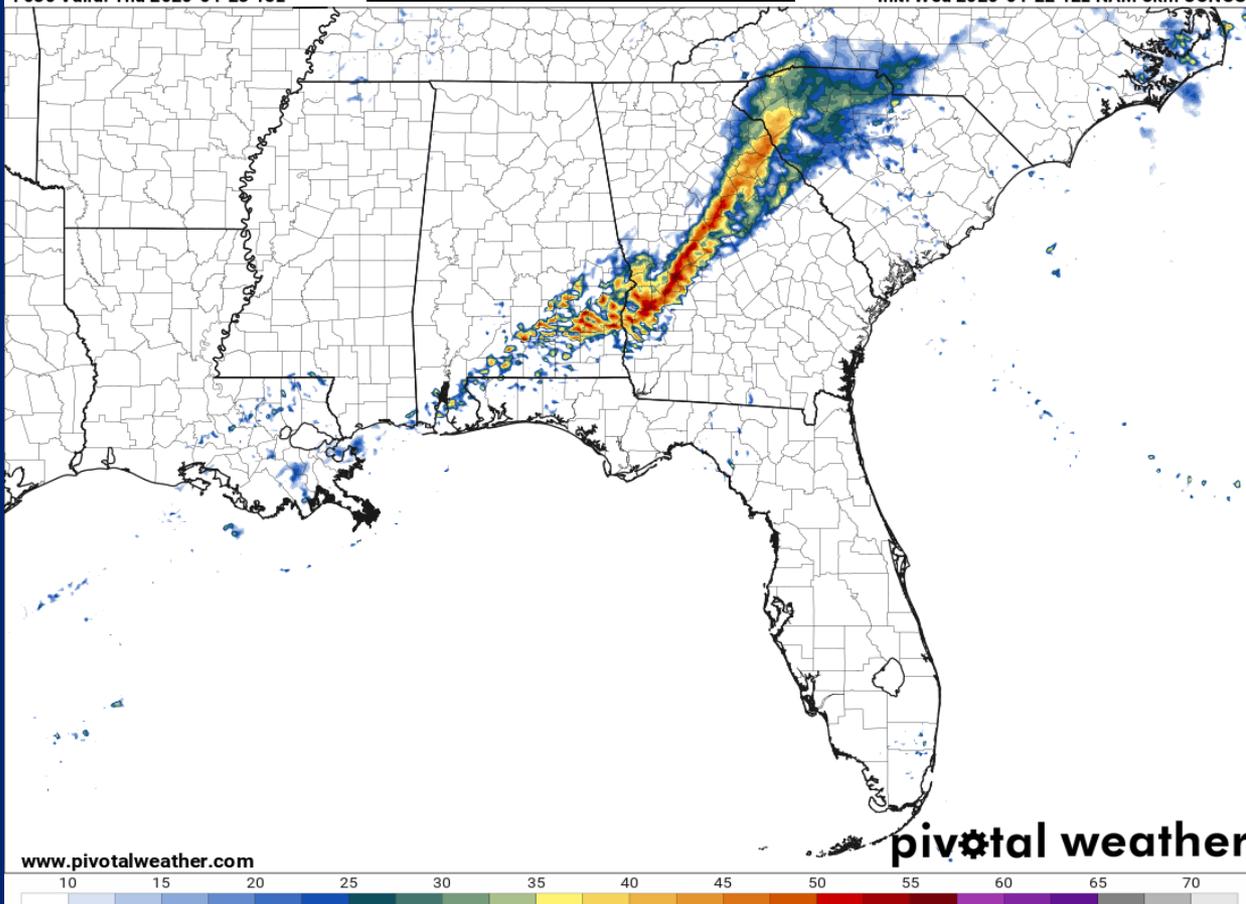


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Thursday 2 PM

1 km AGL Reflectivity (dBZ)
F030 Valid: Thu 2020-04-23 18z

Init: Wed 2020-04-22 12z NAM 3km CONUS



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- **Mid-Afternoon:** Line of storms will quickly push into east-central Georgia before exiting our area.
 - Damaging winds/heavy rain still possible
 - Clearing behind the line could lead to warming and destabilization.
 - May only take a few hours for “worked over” airmass to recover

Thunderstorm Timing

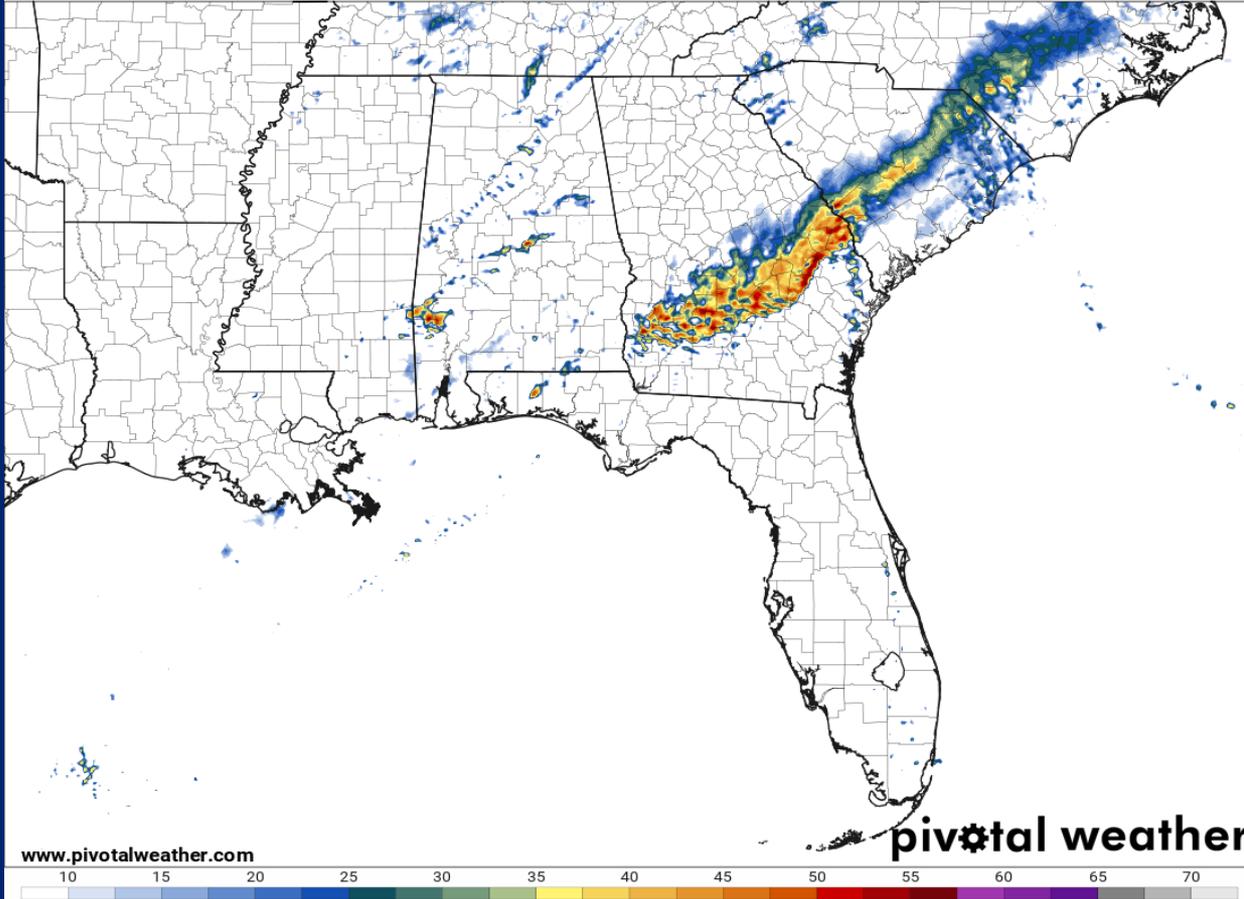


Don't focus on exact timing/location or one model solution.

Thursday 5 PM

1 km AGL Reflectivity (dBZ)
F033 Valid: Thu 2020-04-23 21z

Init: Wed 2020-04-22 12z NAM 3km CONUS



- Late Afternoon: First round of storms should clear the area, with warming and destabilization ongoing across north and central Georgia.
- Redevelopment of storms beginning across south/central Alabama, and approaching Georgia

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Thunderstorm Timing

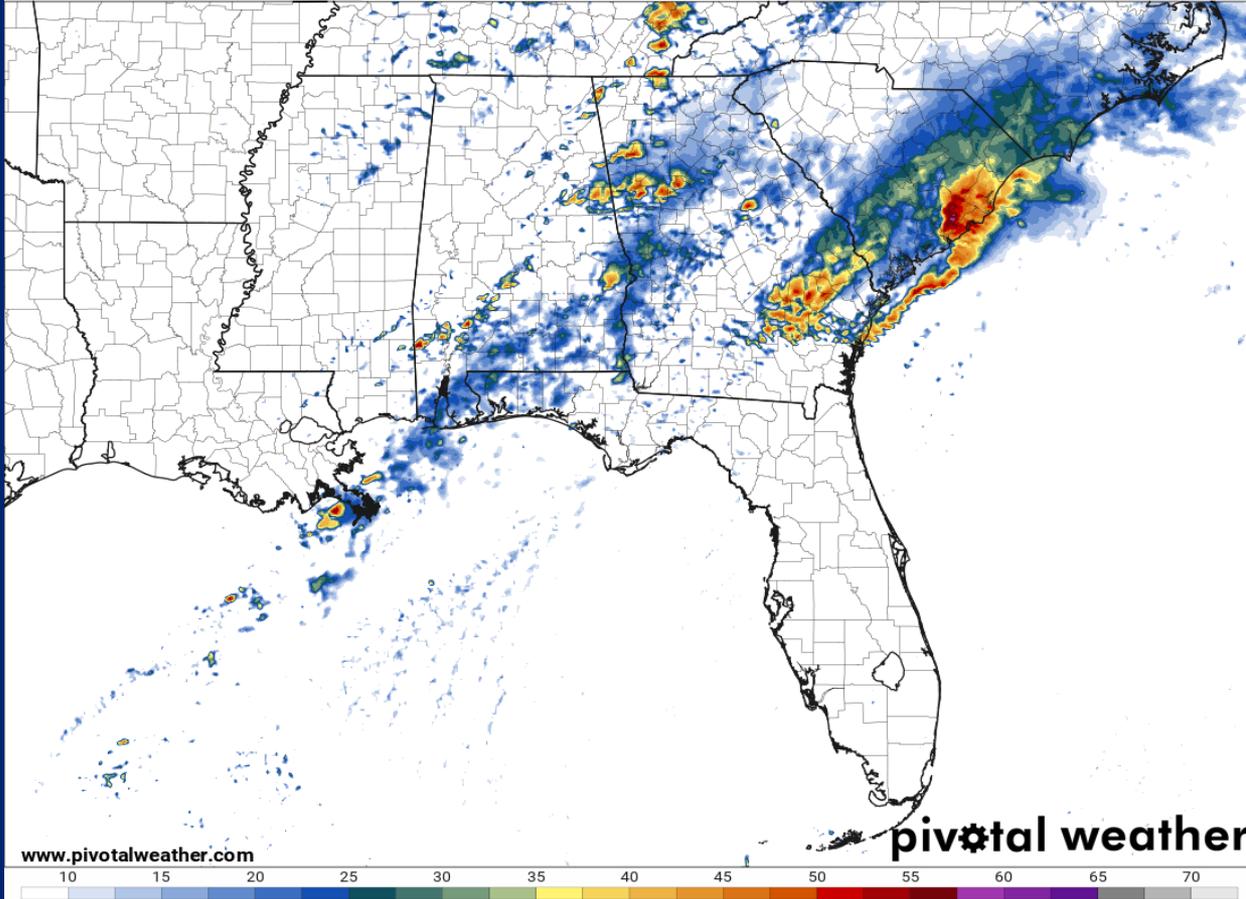


Don't focus on exact timing/location or one model solution.

Composite Reflectivity (dBZ)
F036 Valid: Fri 2020-04-24 00z

Thursday 8 PM

Init: Wed 2020-04-22 12z NAM 3km CONUS



- Late Thursday Afternoon/Thursday Night: Second round of thunderstorms arrives in the area ahead of the cold front between 5-8 PM.
 - Supercells capable of producing tornadoes, hail, and damaging winds will be a higher possibility.
 - Will be dependent upon afternoon heating.

Thunderstorm Timing

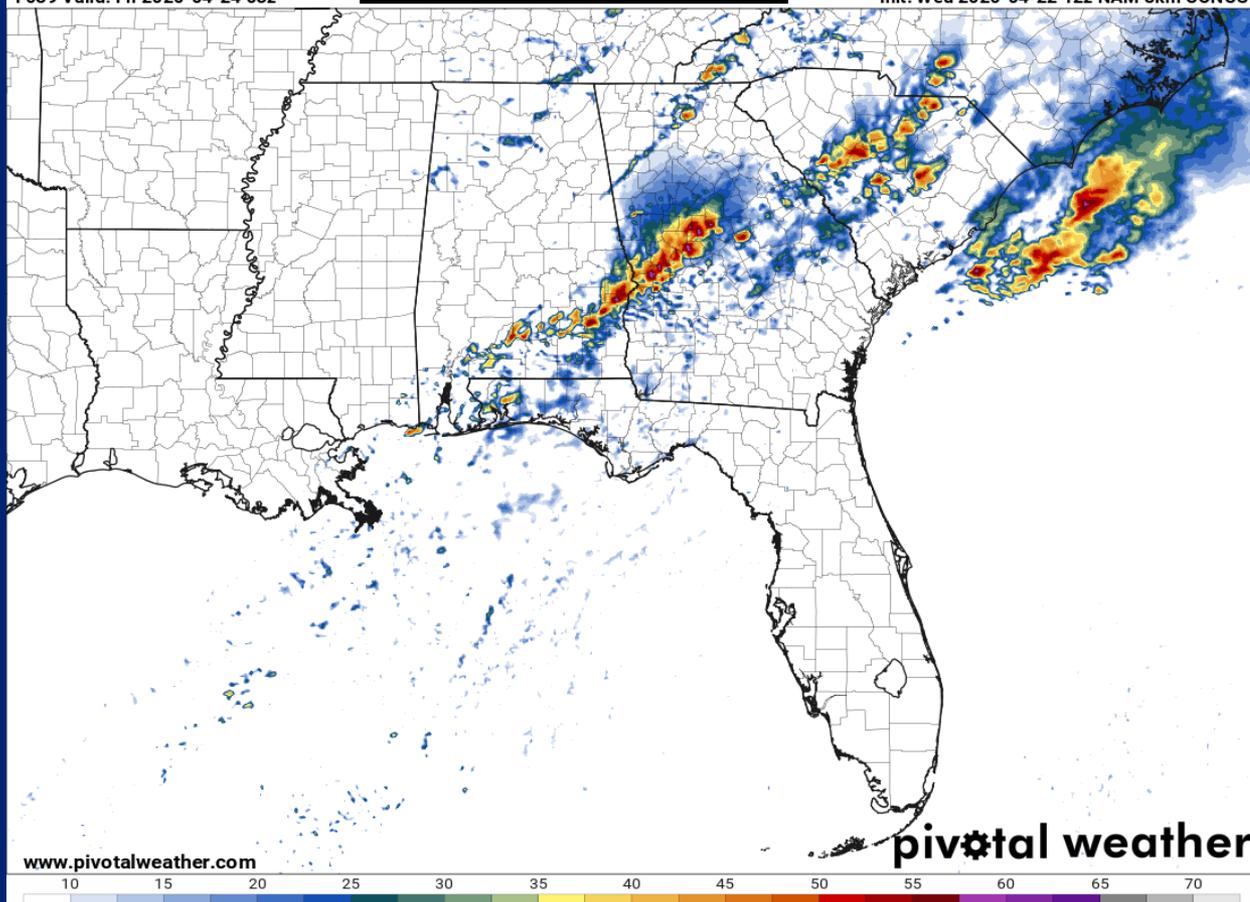


Don't focus on exact timing/location or one model solution.

Composite Reflectivity (dBZ)
F039 Valid: Fri 2020-04-24 03z

Thursday 11 PM

Init: Wed 2020-04-22 12z NAM 3km CONUS



- Late Thursday Night:
The second round of thunderstorms pushes into central Georgia.
 - Supercells capable of producing tornadoes, hail, and damaging winds will still be a higher possibility.



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Thunderstorm Timing

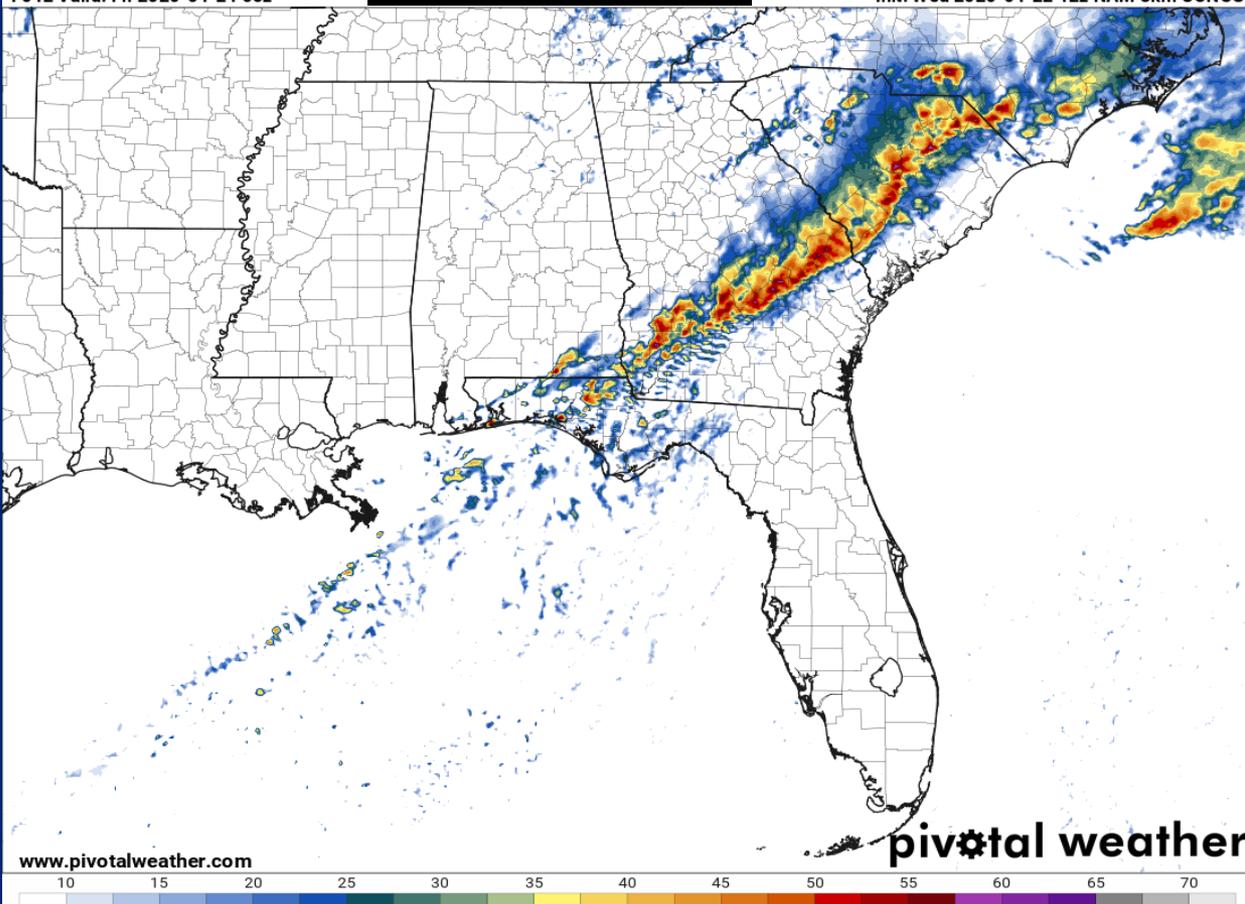


Don't focus on exact timing/location or one model solution.

Composite Reflectivity (dBZ)
F042 Valid: Fri 2020-04-24 06z

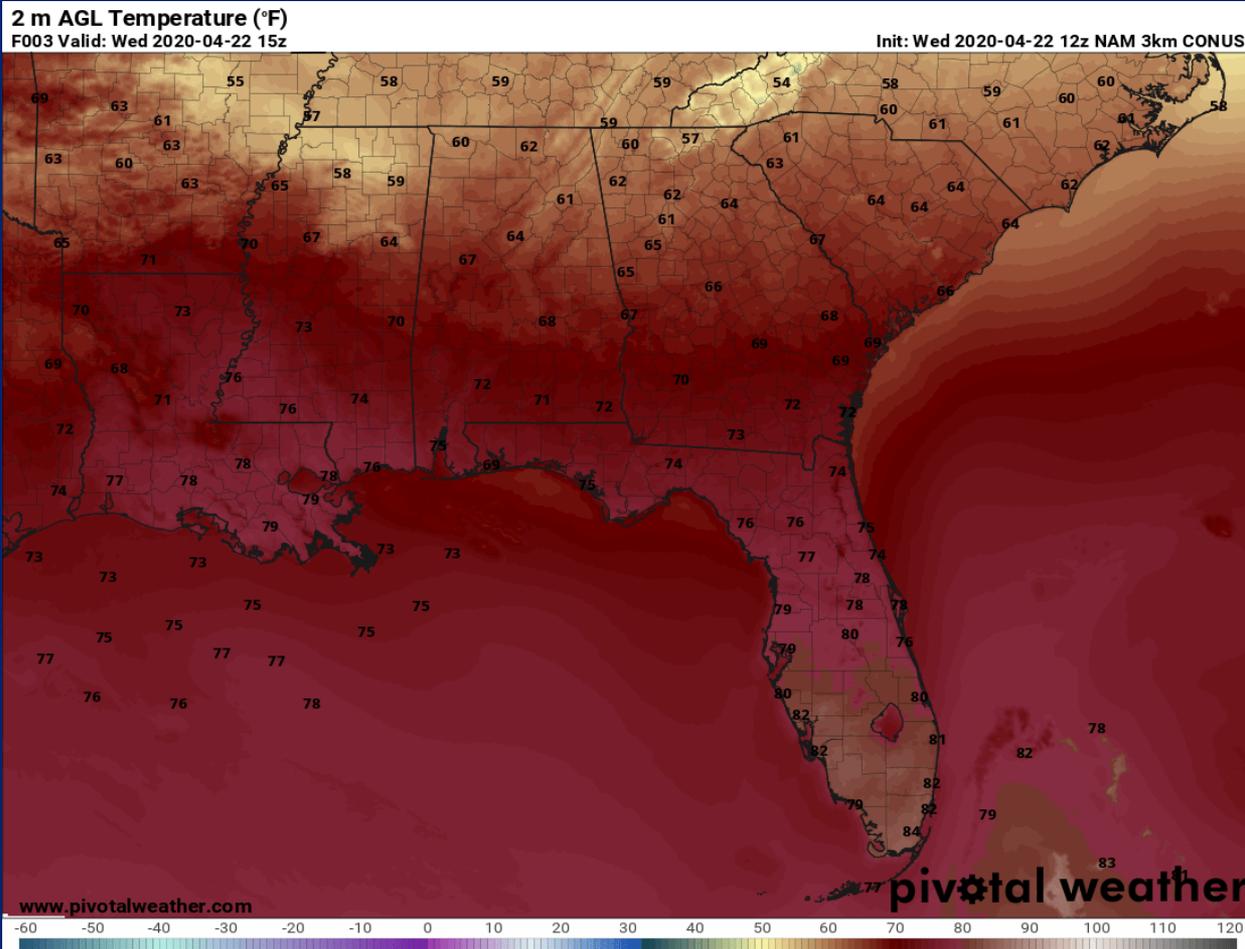
Friday 2 AM

Init: Wed 2020-04-22 12z NAM 3km CONUS



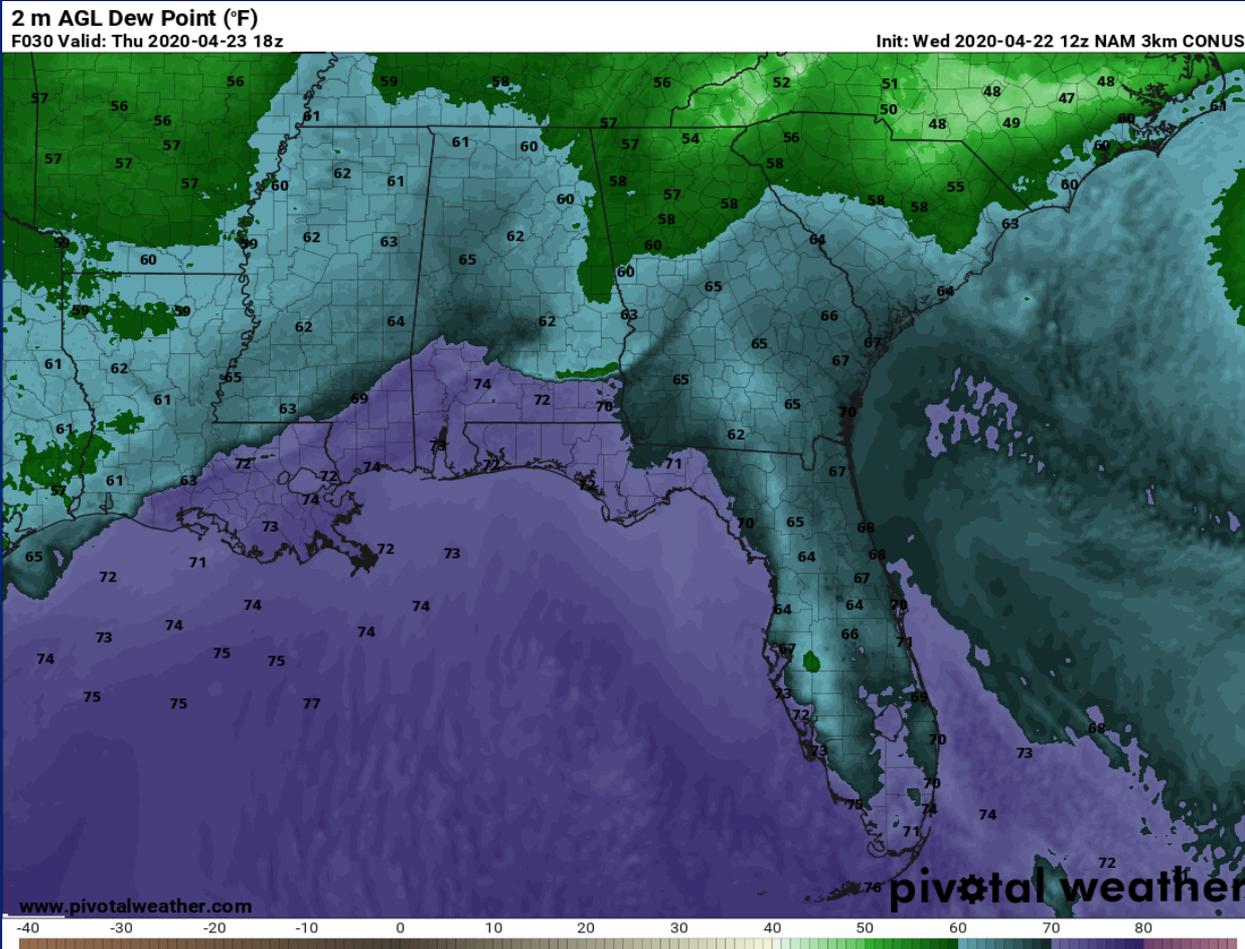
- Early Friday Morning: Severe threat is expected to come to an end after midnight as storms push out of our area.
- Note: This representation is just one model solution, and timing could certainly change.

Biggest Uncertainty – Afternoon Warming



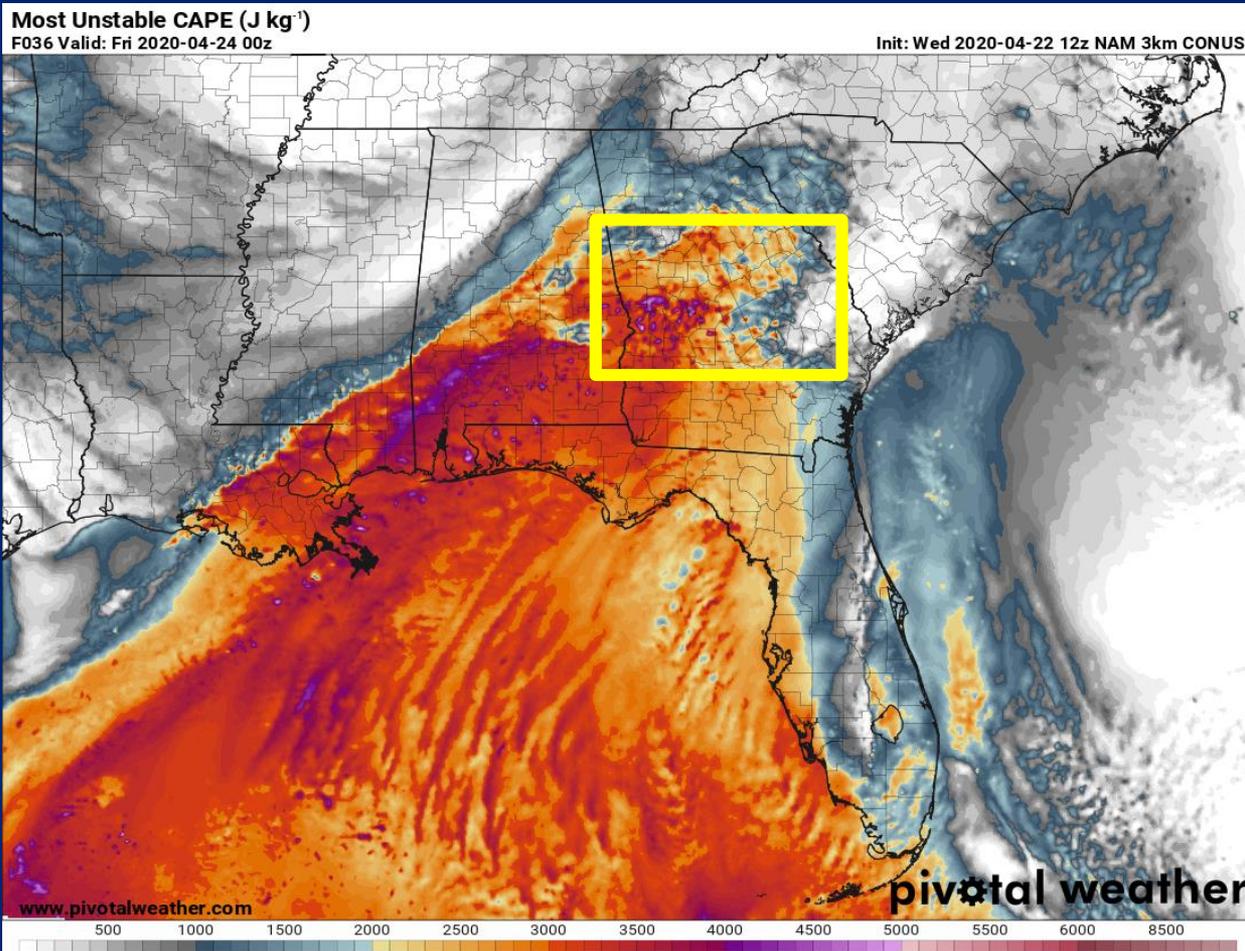
- Uncertainty remains regarding how much temps/dewpoints could climb between the two rounds
 - Will help determine severe potential of second round
 - Higher severe threat where most warming occurs
- Central Georgia: Favored location for supercell thunderstorms

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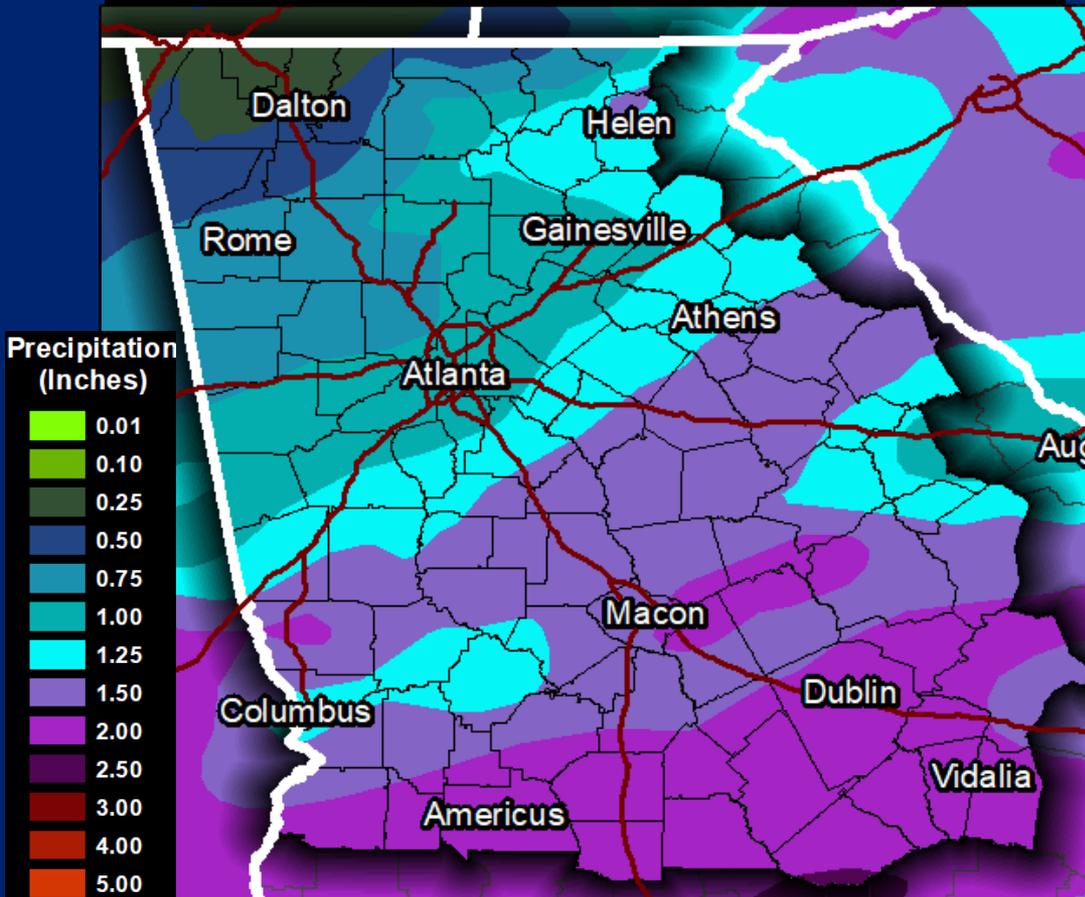


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Heavy Rainfall & Flooding Threat

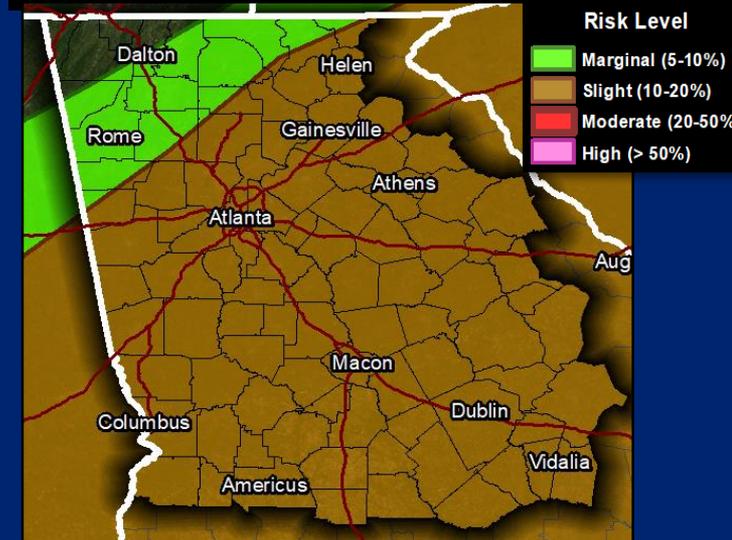


Wednesday PM and Thursday Rainfall Totals



- Potential **Flash Flood Watch** in central Georgia for Thursday.
- 1- 2" with locally higher amounts possible where strong storms occur
- Rainfall forecast is subject to change, so don't focus on exact area.

Day 2 Excessive Rainfall Risk



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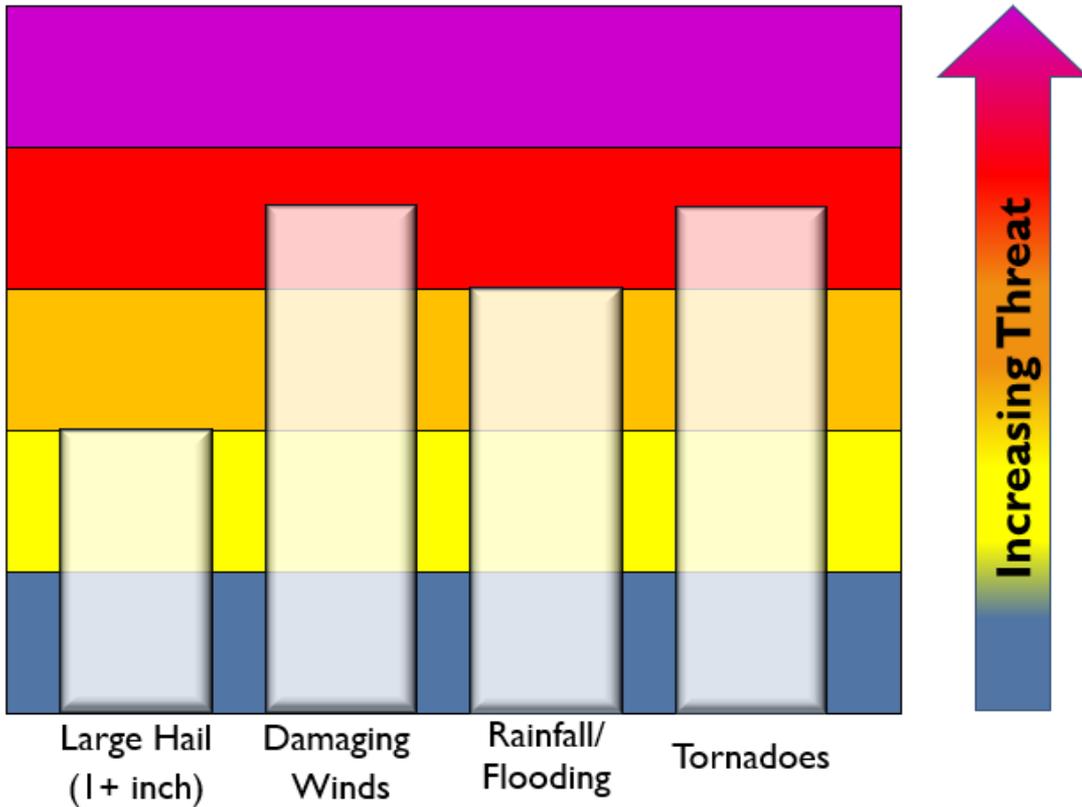
Threat Levels & Confidence

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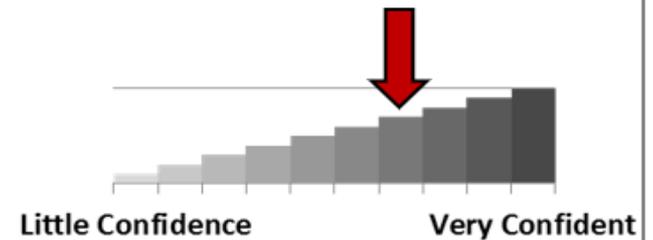
Thursday Severe Weather



Atlanta/Peachtree City
WEATHER FORECAST OFFICE



Forecast Confidence



* Higher confidence on impacts, but lower confidence on timing and location of the storms as the system evolves throughout the day.

Primary Threats:

(Highest risk is currently anticipated during the afternoon and early evening hours)

- Tornadoes (a few strong/long-track)
- Damaging Winds
- Heavy Rainfall/Flooding
- Hail

4/22/2020 11:28 AM

www.weather.gov/Atlanta



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Summary



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