

# Main Points



## Tornado and Severe Wind Threat on Sunday into Monday

- **Severe thunderstorm outbreak likely.**
  - For much of the SE US
  - Including All of North and Central GA
- **This is Likely to Be a Multiple Round Event**
  - **Persisting Sunday through Sunday night and into Monday morning.**
- **Main Impacts:**
  - Tornadoes (Strong/long-track tornadoes possible)
  - Damaging Winds (could down trees/powerlines)
  - Hail
  - Heavy Rain (localized flooding possible)



# Potential Watches



- **Tornadoes**

- **Tornado Watch AND/OR Severe Thunderstorm Watch Likely Sunday afternoon into Monday Morning**

- **Flooding**

- **Potential for a Flash Flood Watch Sunday (N and NE GA)**



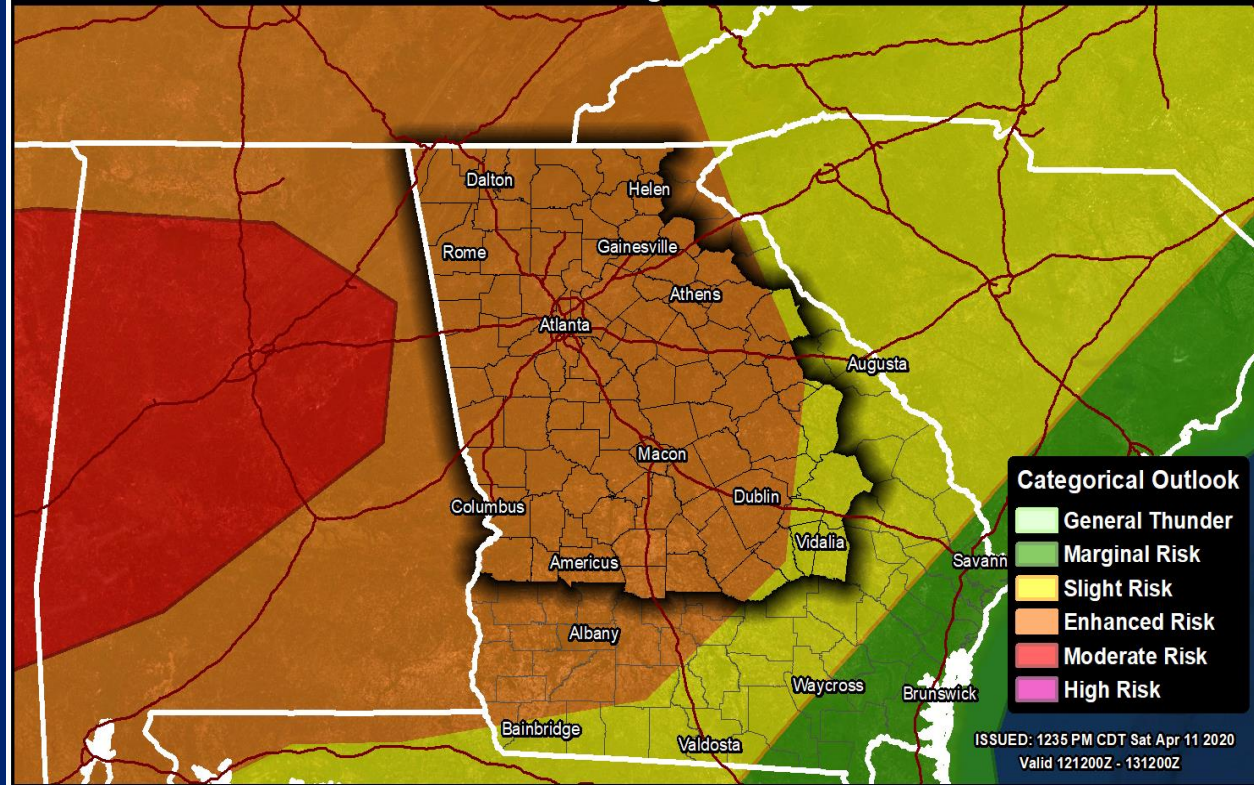
# SPC Outlook - Sunday



Subject to change w/ later forecasts

## Storm Prediction Center Day 2 Convective Outlook North and Central Georgia

Weather Forecast Office  
Atlanta, GA



ISSUED: 1235 PM CDT Sat Apr 11 2020  
Valid 121200Z - 131200Z

NWSAtlanta

[weather.gov/ffc](http://weather.gov/ffc)

- Enhanced Risk (level 3) over NW GA
- Slight Risk (level 2) over the rest of E GA
- **Timing:** Sunday afternoon/evening into early Monday
- **Main Threats:**
  - Tornadoes
  - Damaging Winds
  - Hail
  - Flash Flooding



**NATIONAL WEATHER SERVICE**  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



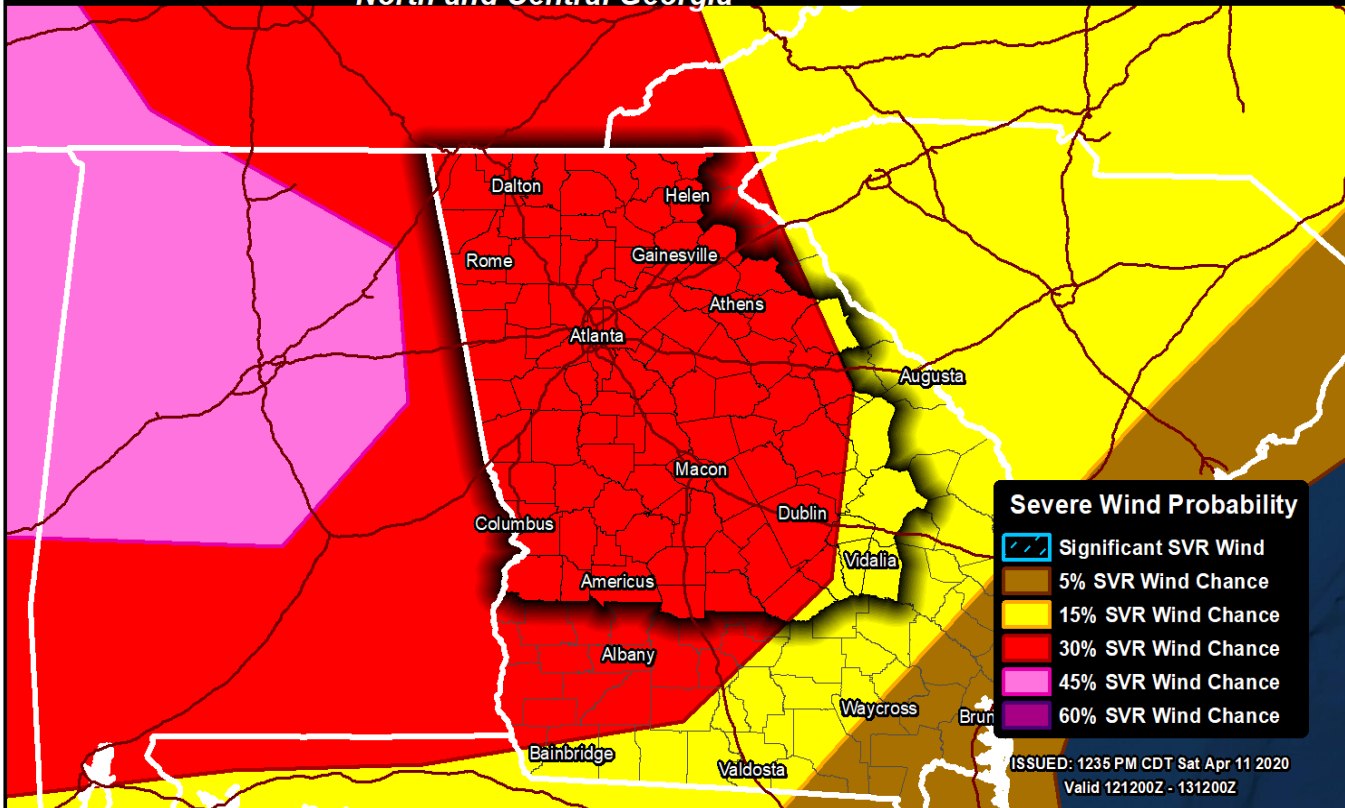
# SPC Severe Wind Risk Sunday



Likely to change w/ later forecasts

## Storm Prediction Center Day 2 Severe Wind Probability North and Central Georgia

Weather Forecast Office  
Atlanta, GA



ISSUED: 1235 PM CDT Sat Apr 11 2020  
Valid 121200Z - 131200Z

NWSAtlanta

[weather.gov/ffc](http://weather.gov/ffc)

- Highest Probability Over West Central GA at 30%



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION





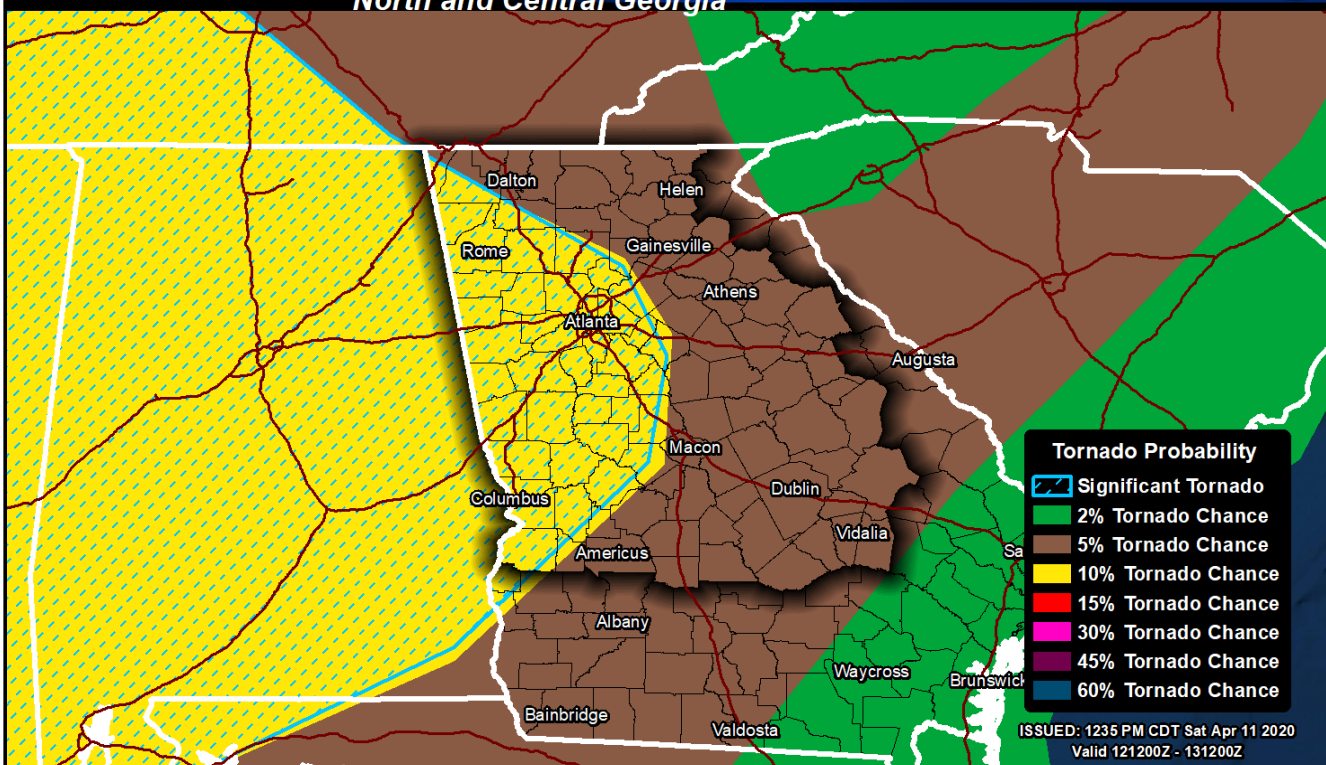
# SPC Tornado Risk Sunday



Likely to change w/ later forecasts

Storm Prediction Center Day 2 Tornado Probability  
North and Central Georgia

Weather Forecast Office  
Atlanta, GA



ISSUED: 1235 PM CDT Sat Apr 11 2020  
Valid 121200Z - 131200Z

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weather.gov/ffc

- Highest Probability Over West Central GA at 10%
- Hatched area is for “significant tornado event”
  - Strong long-track tornadoes

# SPC Hail Risk Sunday



Likely to change w/ later forecasts

Storm Prediction Center Day 2 Severe Hail Probability  
North and Central Georgia

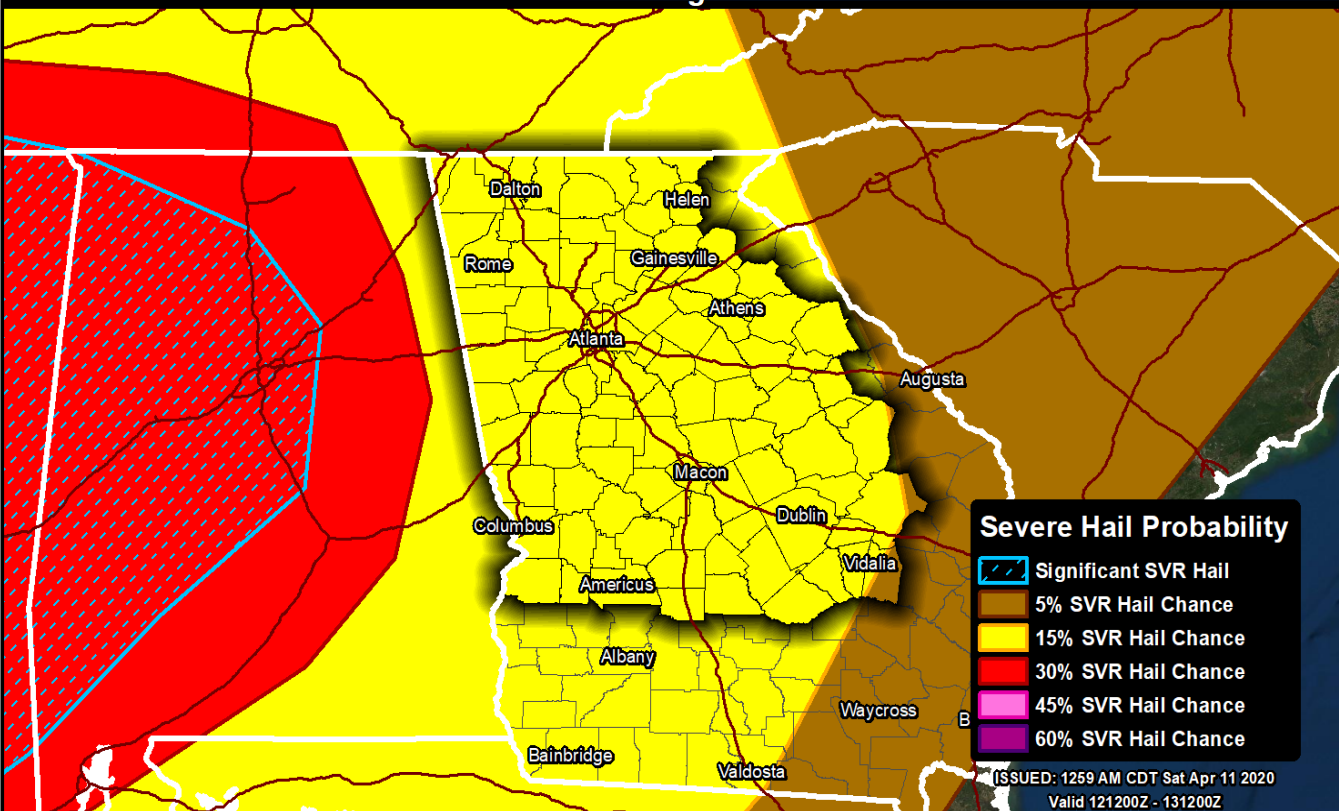
Weather Forecast Office  
Atlanta, GA



Highest Probability  
Over Entire Area at  
15%

Hatched area is for  
“significant hail  
event”

- Looks like the largest of the hail will remain west of the area but up to 1 and a half inch hail still possible.



Severe Hail Probability	
	Significant SVR Hail
	5% SVR Hail Chance
	15% SVR Hail Chance
	30% SVR Hail Chance
	45% SVR Hail Chance
	60% SVR Hail Chance

ISSUED: 1259 AM CDT Sat Apr 11 2020  
Valid 121200Z - 131200Z

f NWSAtlanta

weather.gov/ffc



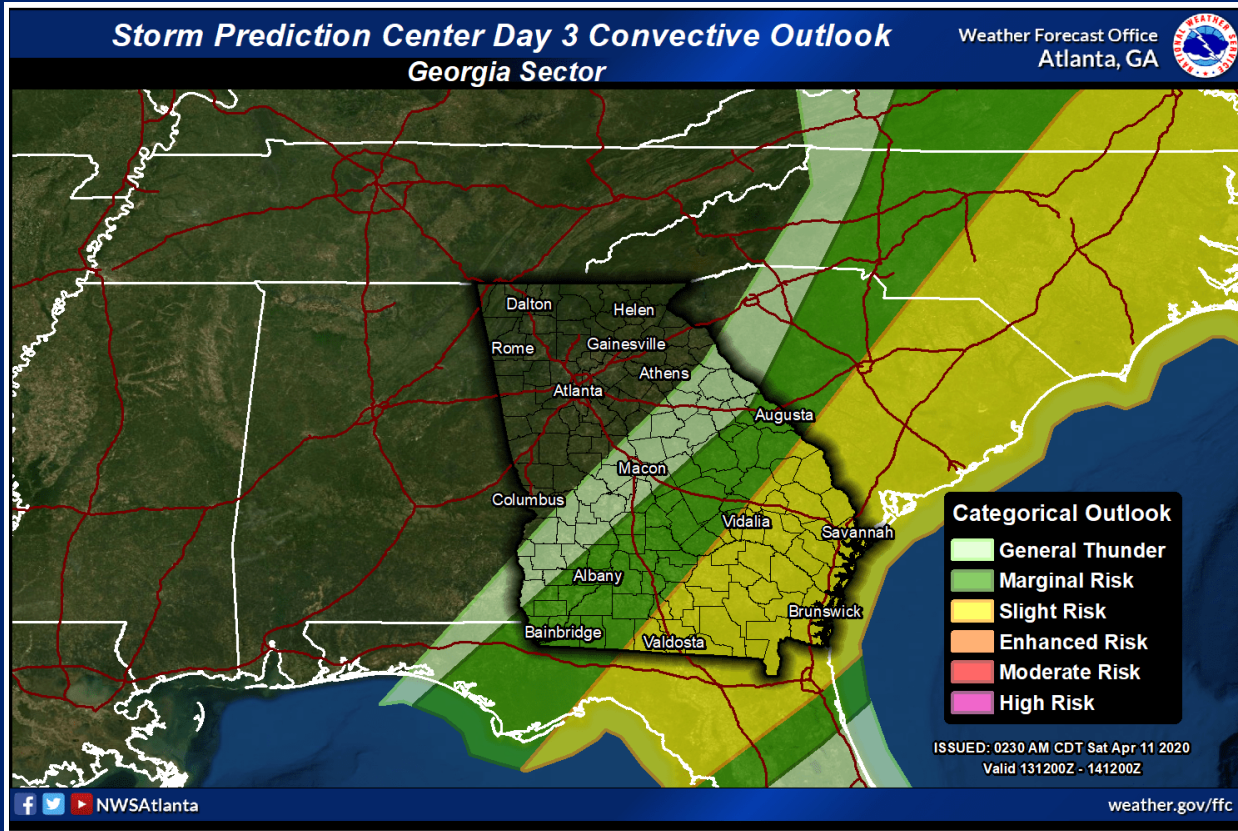
NATIONAL WEATHER SERVICE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



# SPC Outlook - Monday



Subject to change w/ later forecasts



- **Slight Risk**
- **Timing:** early Monday with the system exiting
- **Main Threats:**
  - Damaging Winds
  - Tornadoes





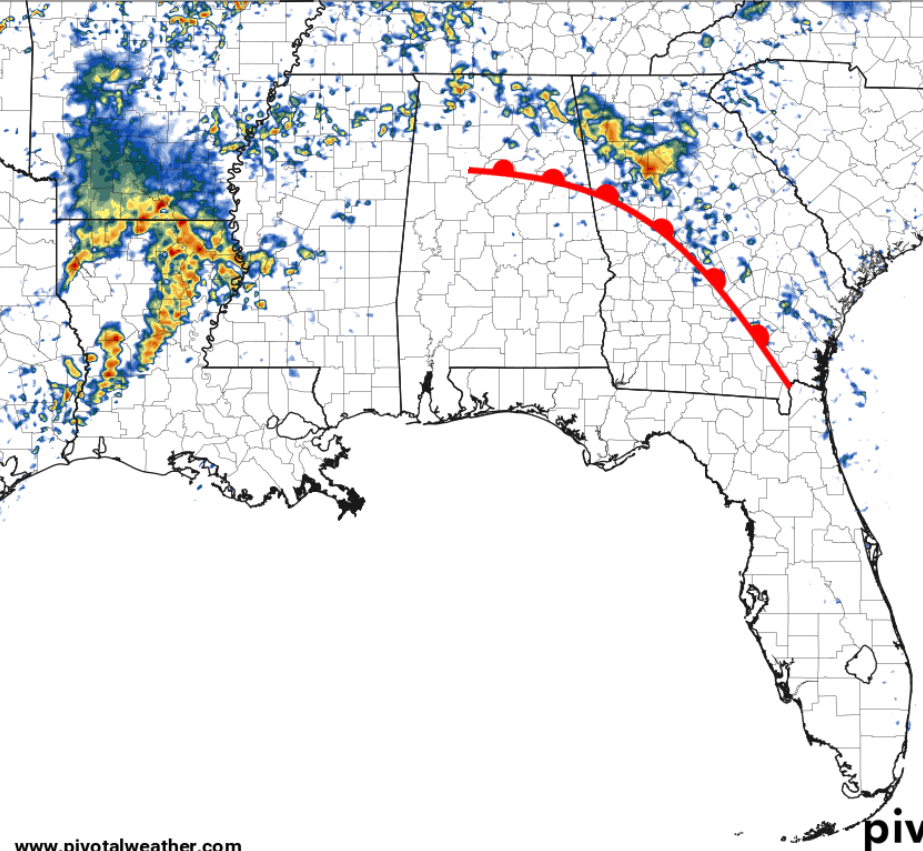
# Timing for Storms



\*\*\*Just ONE model outlook. Likely to shift\*\*\*

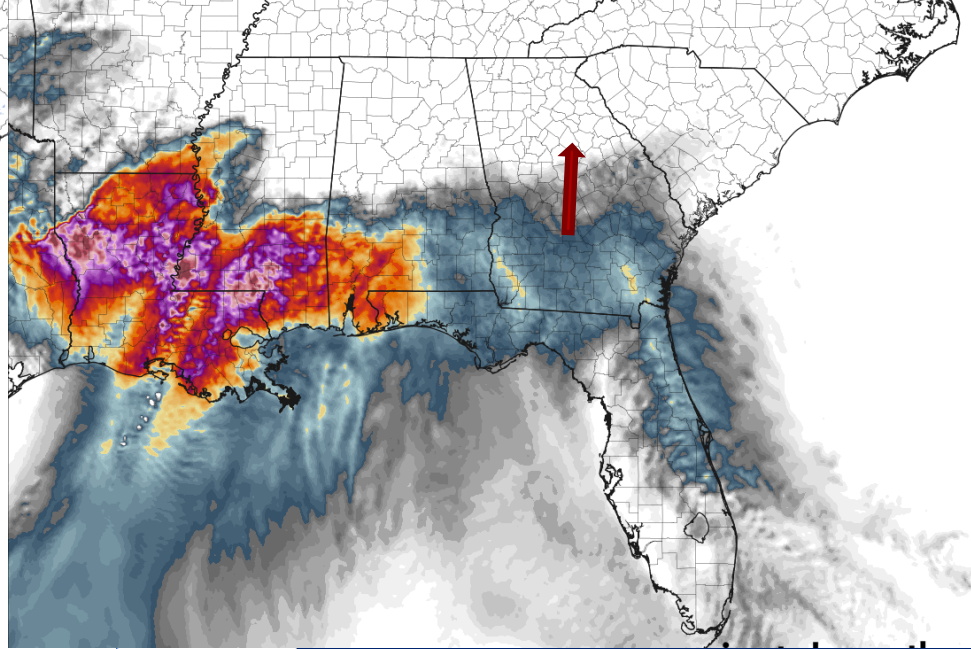
1 km AGL Reflectivity (dBZ)  
F027 Valid: Sun 2020-04-12 15z

Init: Sat 2020-04-11 12z NAM 3km CONUS



Significant Tornado Parameter (Fixed Layer)  
F030 Valid: Sun 2020-04-12 18z

Init: Sat 2020-04-11 12z NAM 3km CONUS

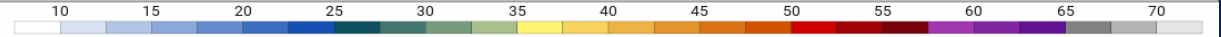


Tornado Energy

Sunday Morning

www.pivotalweather.com

pivotal weather



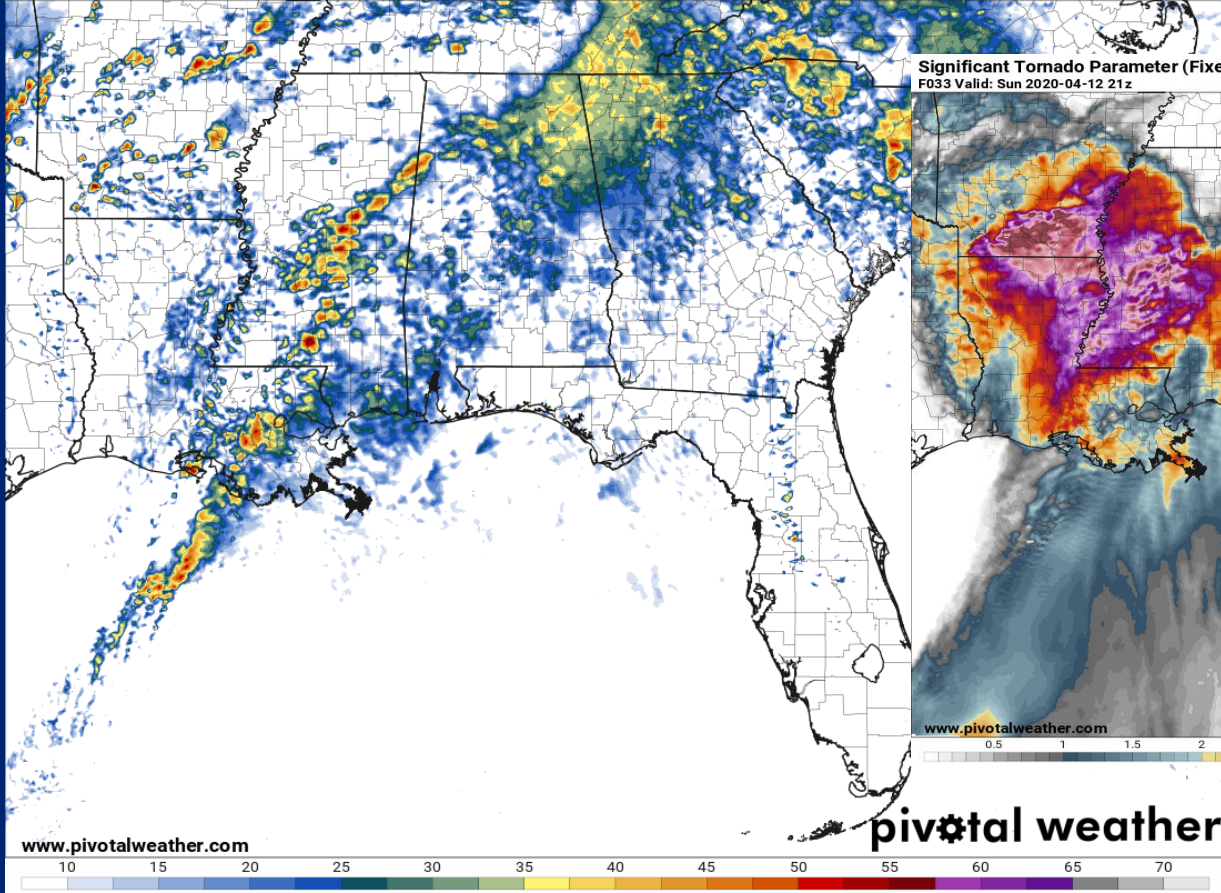


# Timing for Storms



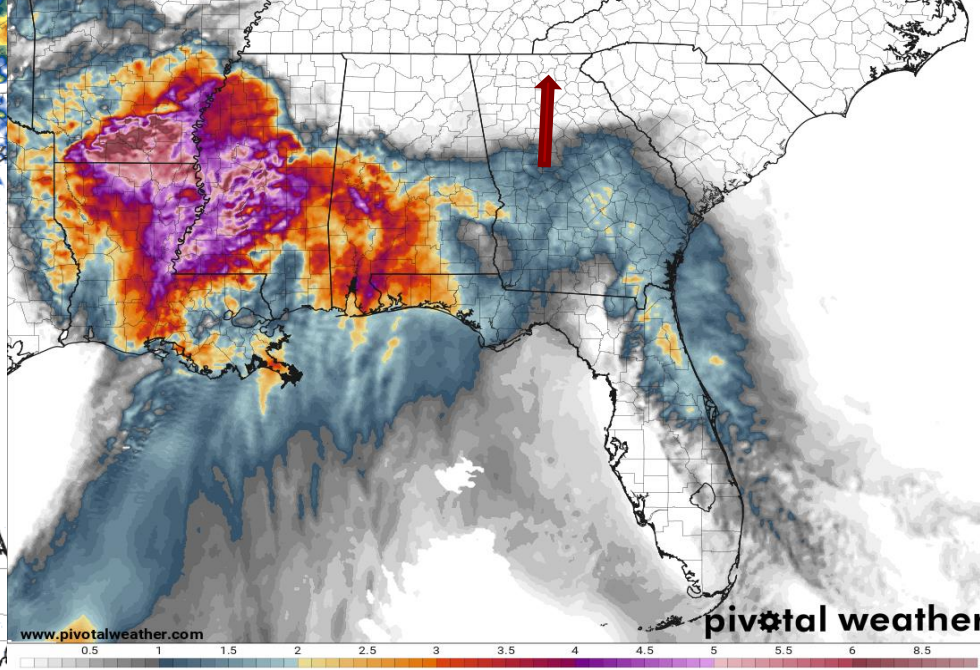
\*\*\*Just ONE model outlook. Likely to shift\*\*\*

Composite Reflectivity (dBZ)  
F033 Valid: Sun 2020-04-12 21z  
Init: Sat 2020-04-11 12z NAM 3km CONUS



Tornado Energy

Significant Tornado Parameter (Fixed Layer)  
F033 Valid: Sun 2020-04-12 21z  
Init: Sat 2020-04-11 12z NAM 3km CONUS



Sunday Afternoon

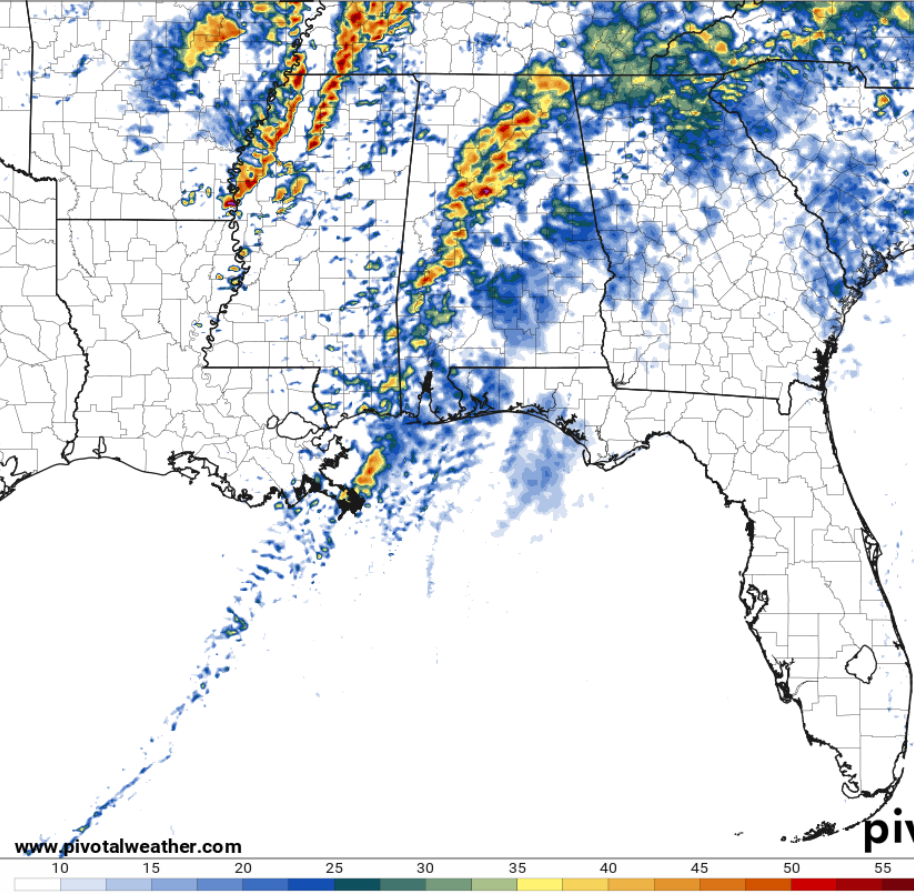
# Timing for Storms



\*\*\*Just ONE model outlook. Likely to shift\*\*\*

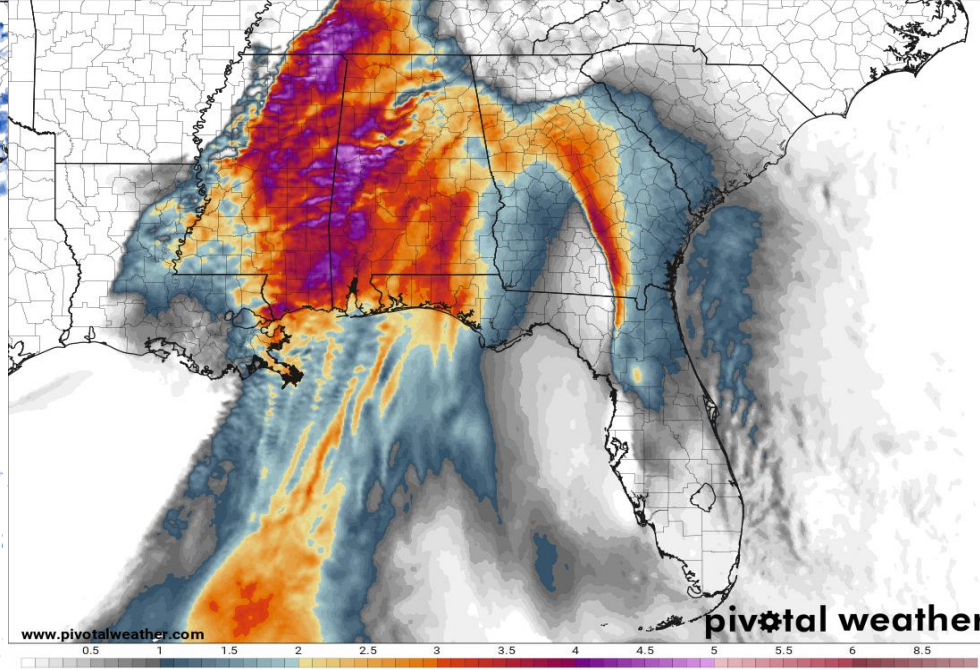
Composite Reflectivity (dBZ)  
F039 Valid: Mon 2020-04-13 03z

Init: Sat 2020-04-11 12z NAM 3km CONUS



Significant Tornado Parameter (Fixed Layer)  
F039 Valid: Mon 2020-04-13 03z

Init: Sat 2020-04-11 12z NAM 3km CONUS



Tornado Energy

Sunday Evening

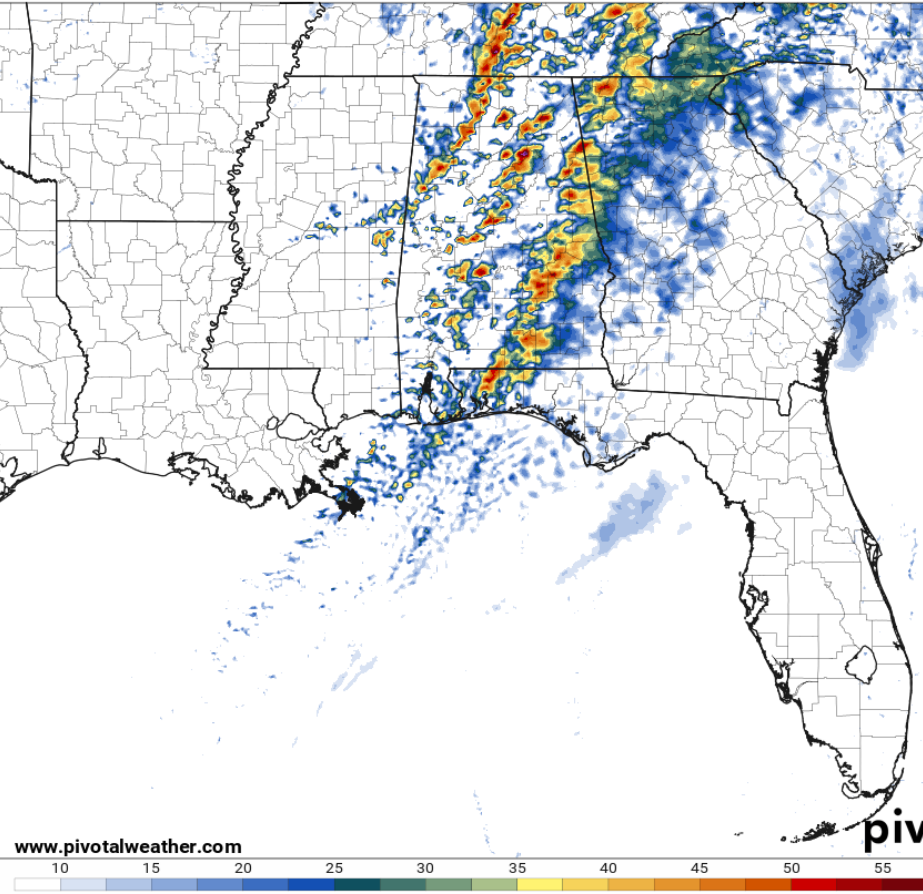


# Timing for Storms

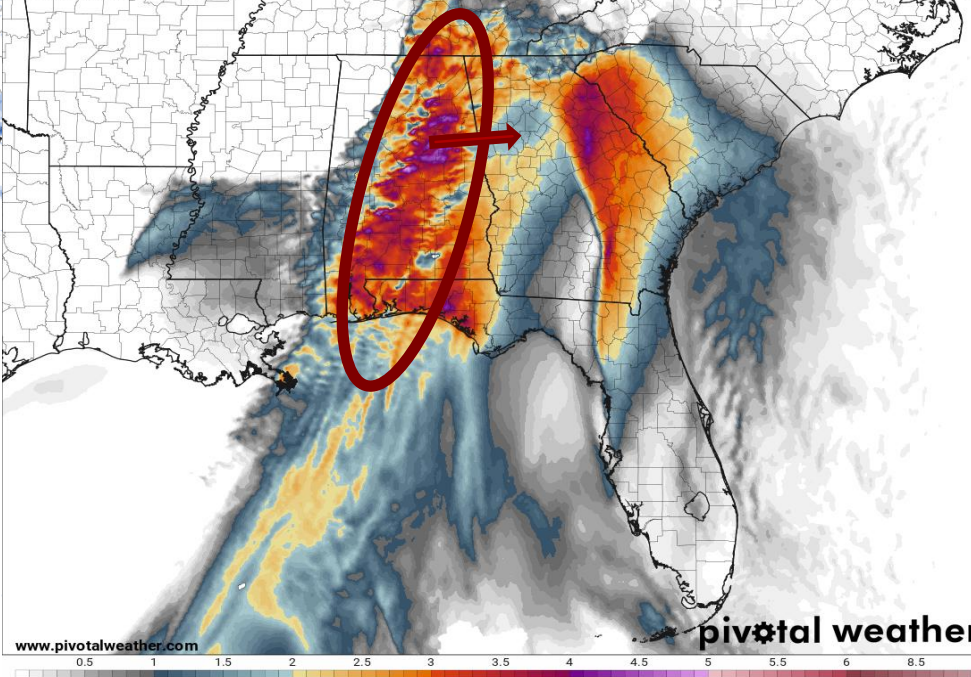


\*\*\* Just ONE model outlook. Likely to shift \*\*\*

Composite Reflectivity (dBZ)  
F042 Valid: Mon 2020-04-13 06z  
Init: Sat 2020-04-11 12z NAM 3km CONUS



Significant Tornado Parameter (Fixed Layer)  
F042 Valid: Mon 2020-04-13 06z  
Init: Sat 2020-04-11 12z NAM 3km CONUS



Tornado Energy

www.pivotalweather.com  
10 15 20 25 30 35 40 45 50 55 60 65 70

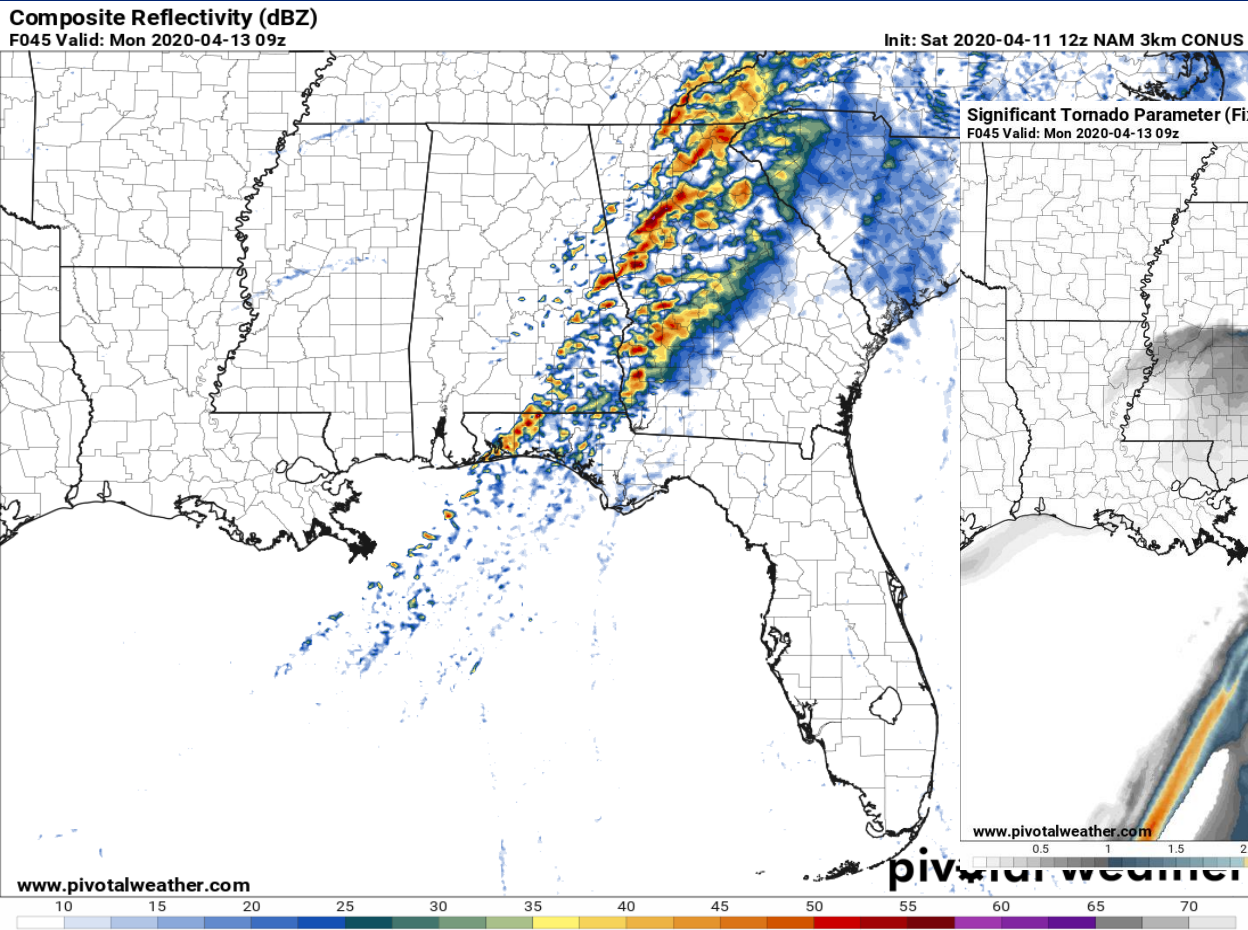
Around Midnight



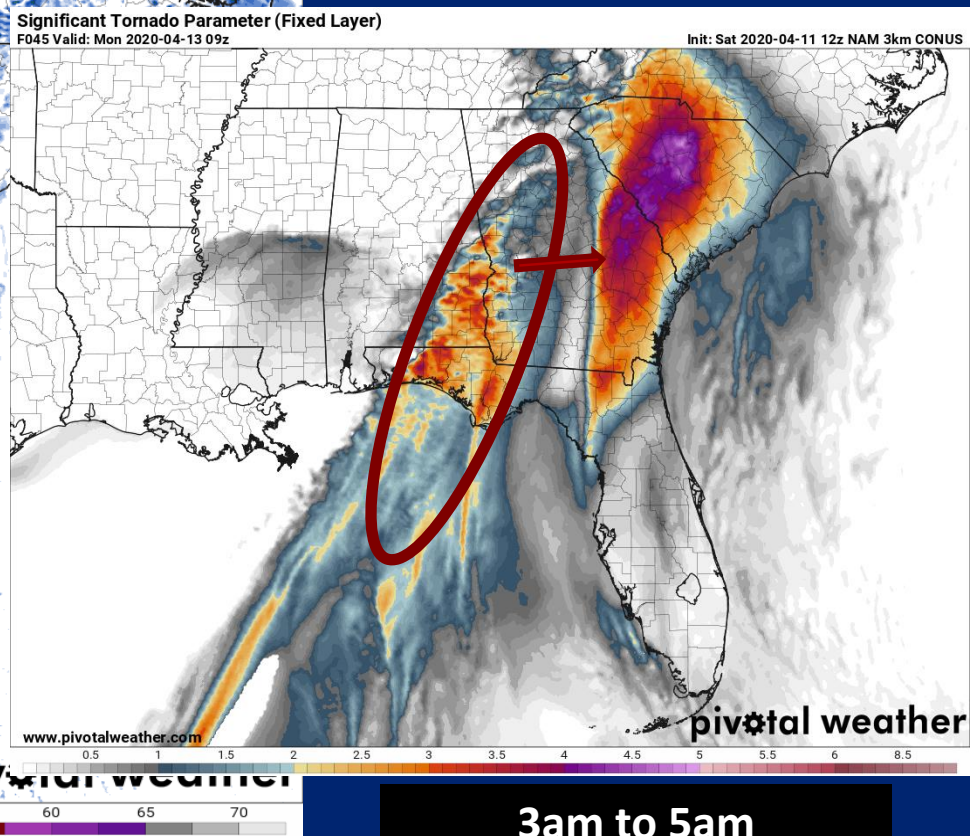
# Timing for Storms



\*\*\*Just ONE model outlook. Likely to shift\*\*\*



**Tornado Energy**

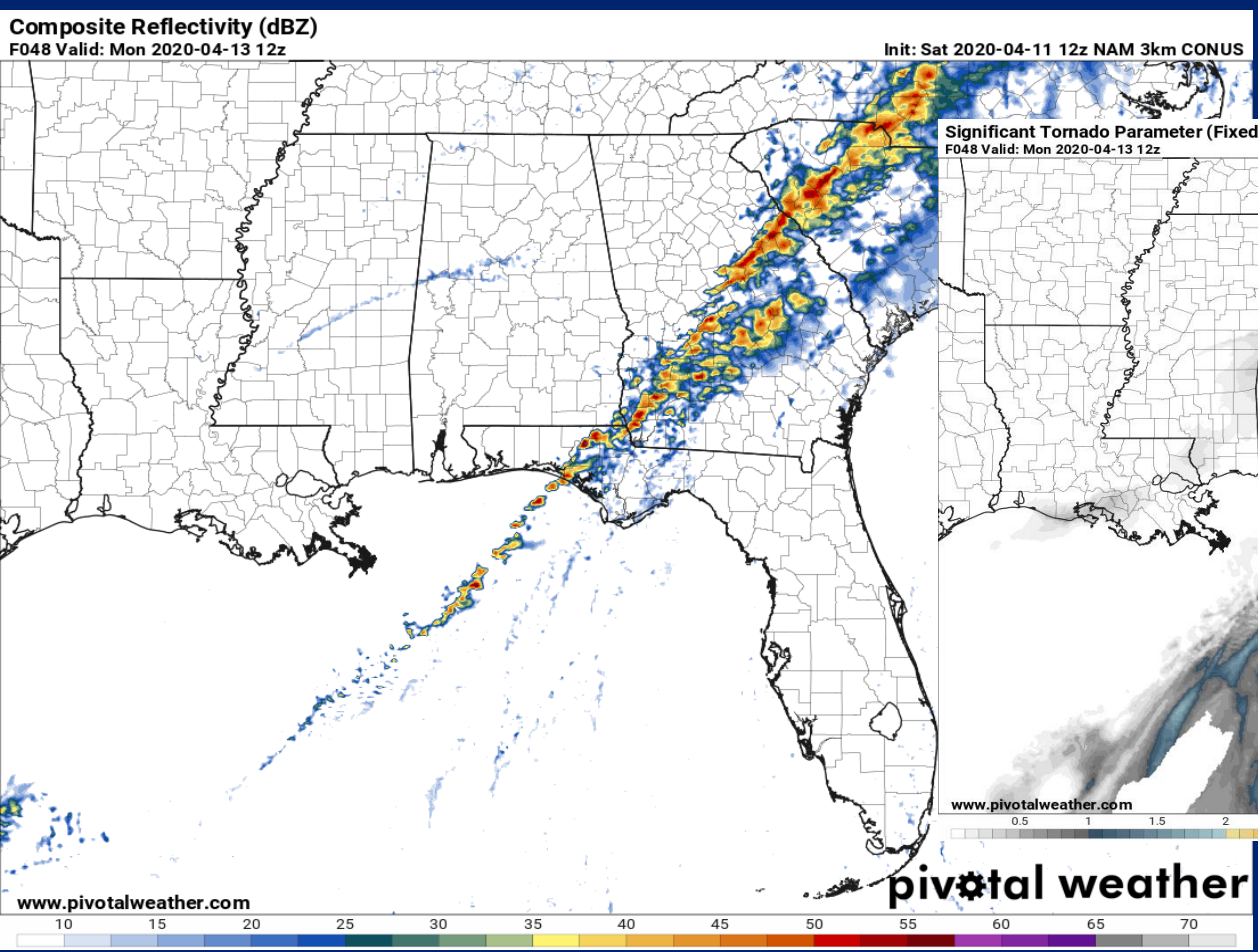


**3am to 5am**

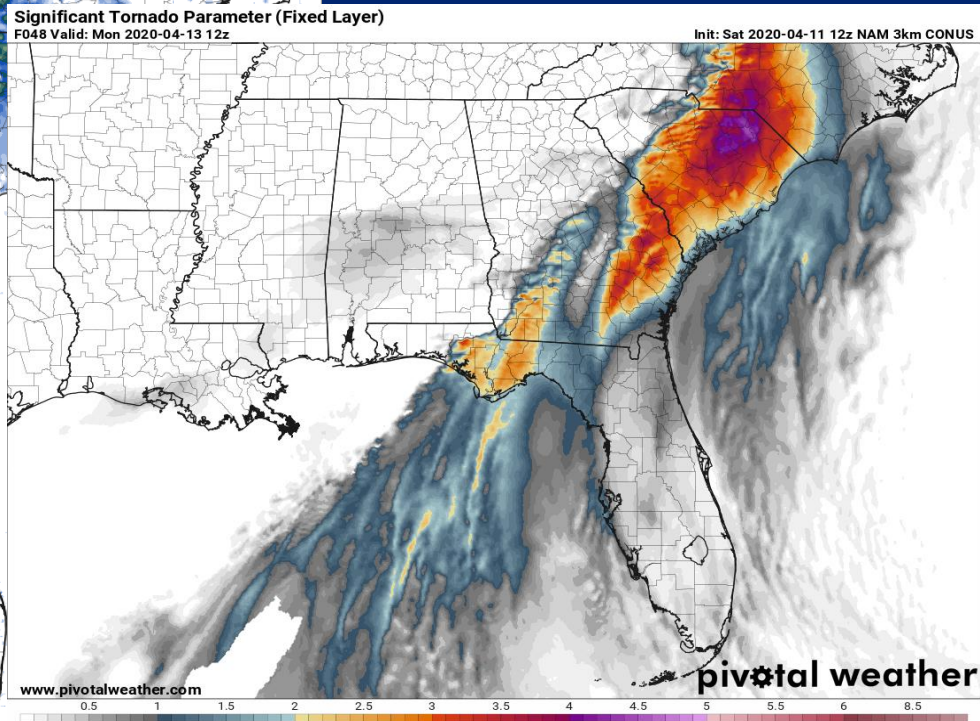
# Timing for Storms



\*\*\*Just ONE model outlook. Likely to shift\*\*\*



Tornado Energy



7am Monday

# Threat Levels & Confidence

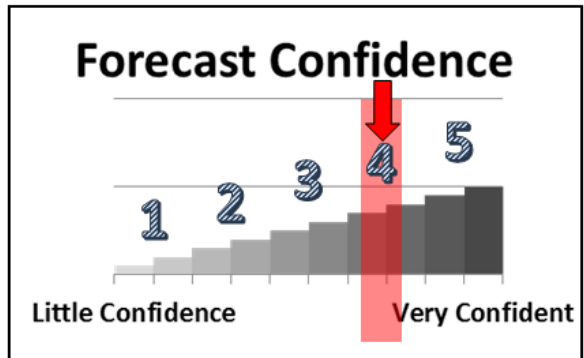
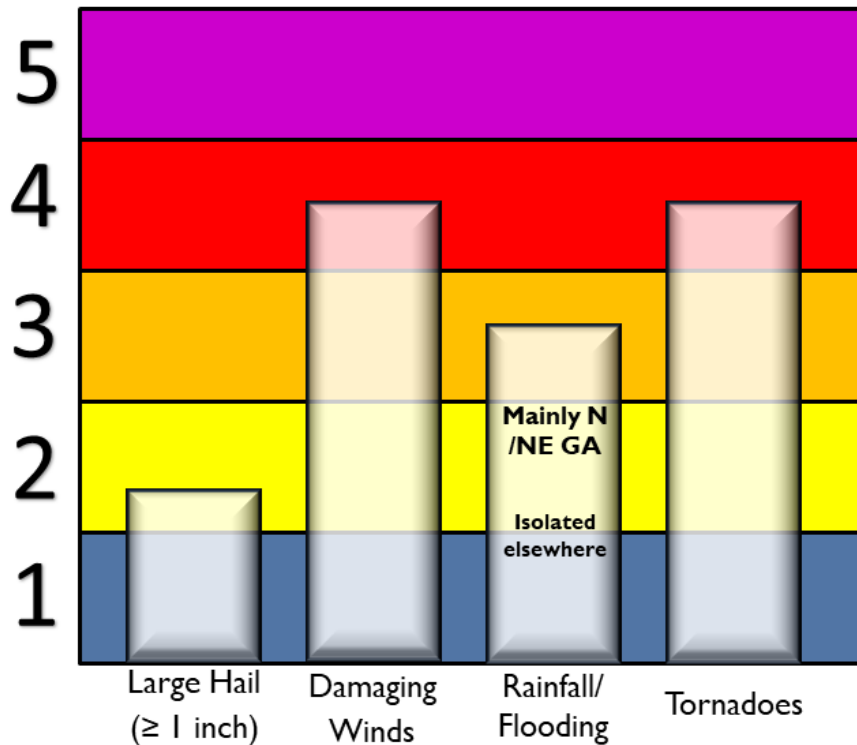


## Threat Levels & Confidence

Sunday into Monday



Peachtree City/Atlanta  
WEATHER FORECAST OFFICE



### Main Threats

- Damaging winds
- Brief tornado
- Potential flooding
- Hail

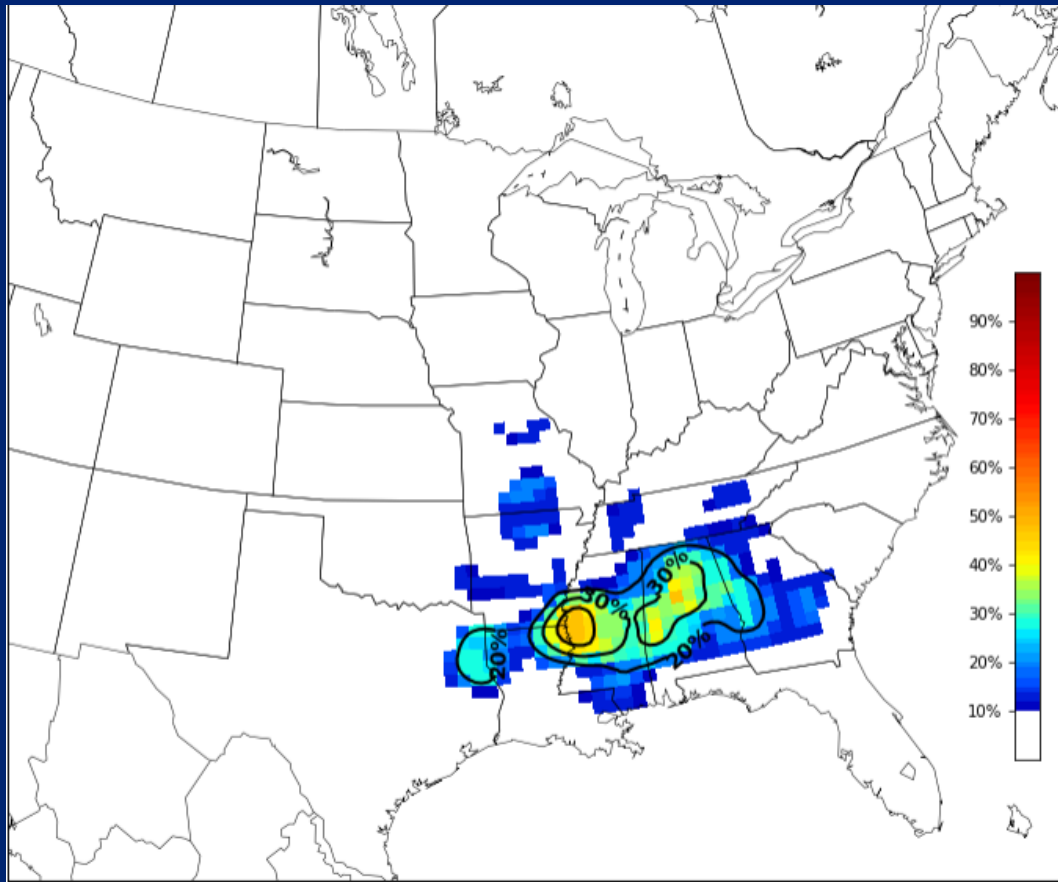
Confidence low due to timing.  
\*Could break threats into separate rounds\*

4/11/2020 11:35 AM





# History and Context



Percentage [%] of Top 15 Analogs Exceeding 1 Long-Track Tornado [ $>10$  km] Report Within 110 km of Grid Point Using NAM212 20200411/1200F036 and Valid at 20200413/0000 on the SE Domain

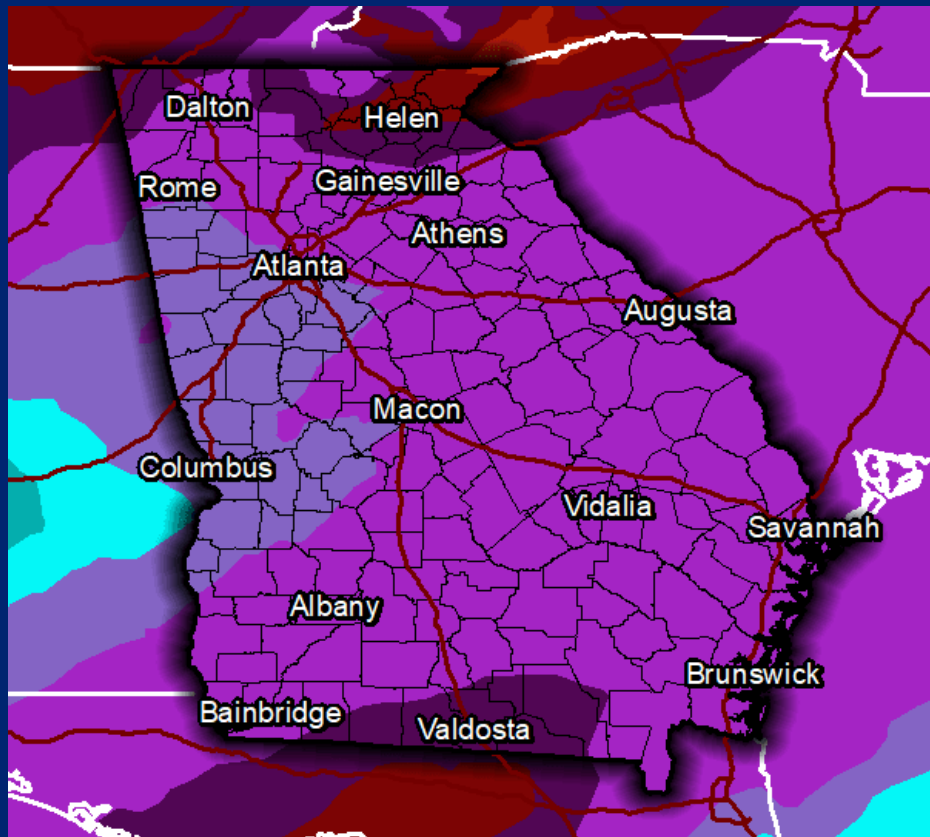
- The 15 most Similar Environments Tell Us An Outbreak Is Likely
- Question Is How Far East Will It Translate.
- **Has The Potential To Be In The Top 5 For Most Significant Severe Events In The Last 10 Years**
- Last Moderate risk for the area was April 5<sup>th</sup>, 2017



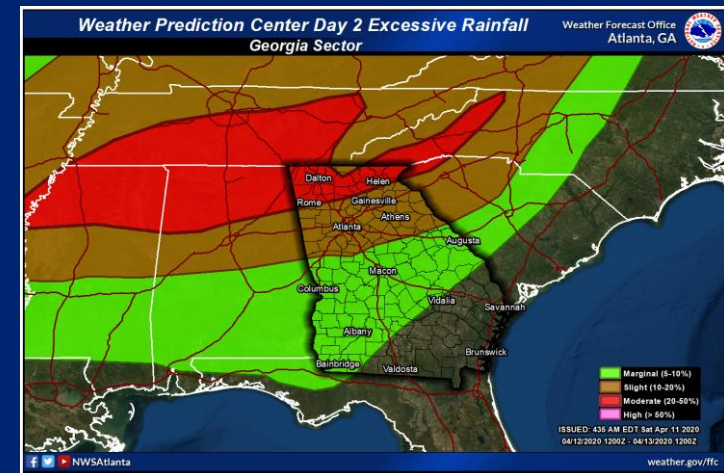
# Rainfall Through Monday Morning



Precipitation  
(Inches)



- 1" to 3+" with locally higher amounts possible across N GA
- Heaviest period is expected to be late Sunday/early Monday



# Summary



## Tornado and Severe Wind Threat on Sunday into Monday

- **Severe thunderstorm outbreak likely.**
  - For much of the SE US
  - Including All of North and Central GA
- **This is Likely to Be a Multiple Round Event**
  - **Persisting Sunday through Sunday night and into Monday morning.**
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