



Tropical Storm Chantal Briefing

6:00 PM

Saturday, July 5, 2025

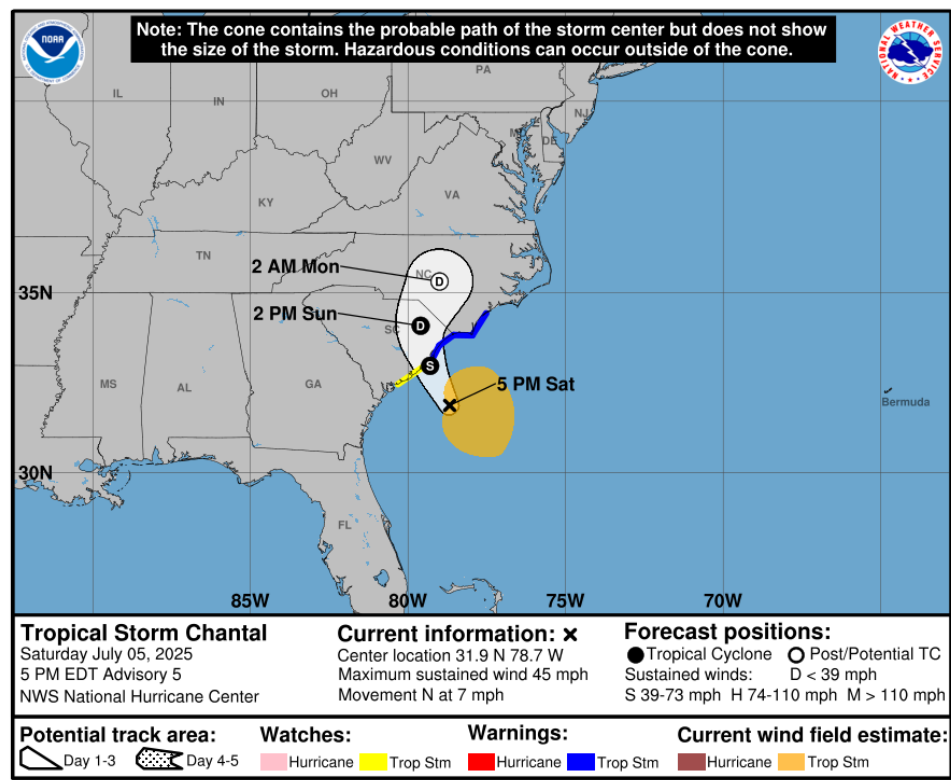
Changes since last briefing:

- Increased rainfall (especially across the western Piedmont)
- Updated ERO Graphics showing greater coverage of slight risk (level 2 of 4) for excessive rainfall.



Situation Overview

Tropical Storm Chantal



Tropical Storm Chantal was located approximately 95 miles southeast of Charleston, SC as of 5 PM EDT today.

On the forecast track, the center of the storm is expected to move over the coast of South Carolina on Sunday morning before moving northward across central NC.

The primary hazard across central NC will be 2 to 4 inches of rain, with locally higher amounts that may result in flash flooding. The heaviest rain and greatest flood risk will be across the Piedmont south and west of Raleigh. There is also a very limited risk of an isolated tornado as well.

Additionally, note that life-threatening rip currents and dangerous surf are expected for NC and SC beaches.



Situation Overview



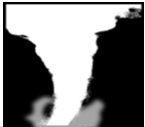
Tropical Storm Chantal

- Heavy rainfall and isolated to scattered flooding is possible on Sunday into early Monday. The heaviest rain and greatest risk for flash flooding now looks like it will be from Raleigh south and westward. 2 to 4 inches of rainfall, with locally higher amounts, is now expected across portions of central NC, esp south and west of Raleigh.
- Wind gusts up to 25 mph are possible on Sunday and into Monday.
- Isolated tornadoes can't be ruled out, especially for areas southeast of Raleigh.



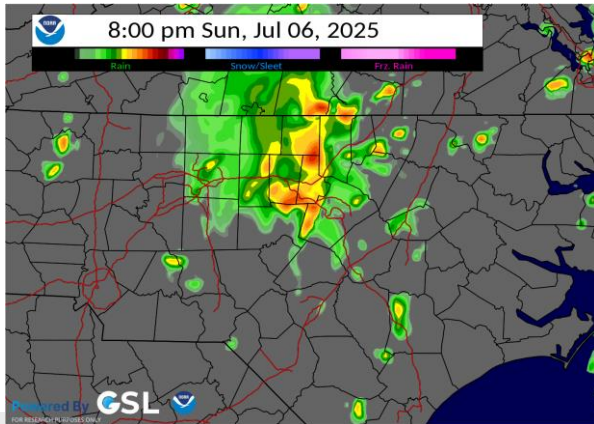
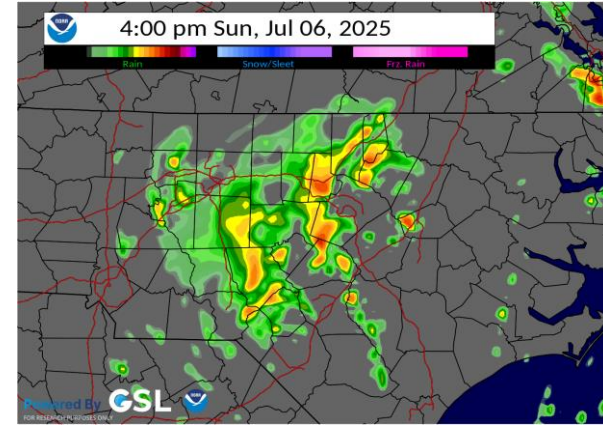
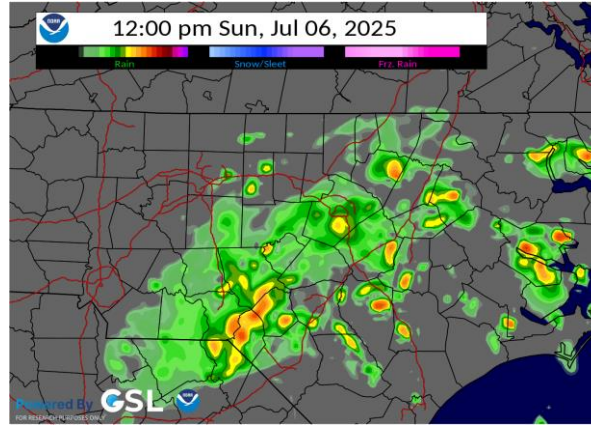
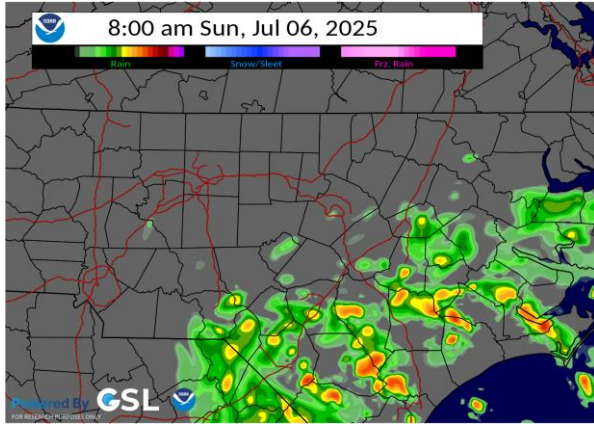
Situation Overview

Tropical Storm Chantal

| Hazard | Impacts | Location | Timing |
|---|--|---|-------------------------------|
|  Wind | Wind gusts up to 25 mph are possible. | Mainly from Raleigh south and eastward. | Sunday and into early Monday. |
|  Flooding Rain | 2 to 4 inches of rain with locally higher amounts, which may result in flash flooding. | Heaviest rain and greatest flood risk will be across the Piedmont south and west of Raleigh | Sunday through early Monday. |
|  Tornado | Isolated tornadoes possible. | Mainly southeast of Raleigh | Sunday into Sunday night. |



Radar Simulations for Timing





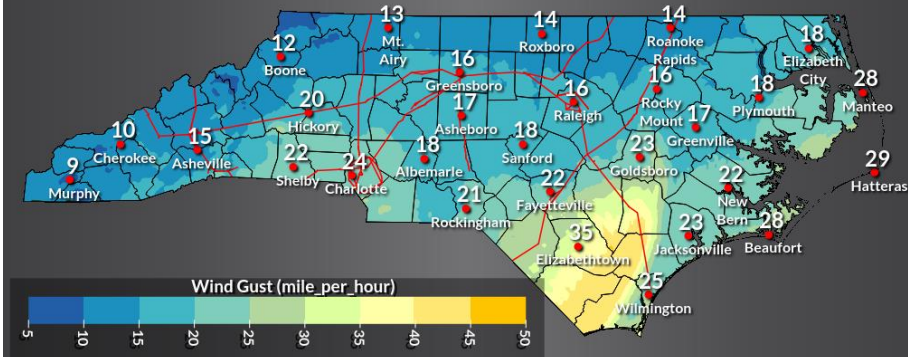
Max Wind Gusts Sunday and Monday

24-hour Max Wind Gust

Valid Sunday Jul 06, 2025

Weather Forecast Office
Raleigh, NC

Issued Jul 05, 2025 5:26 PM EDT



YouTube, Facebook, and X: @NWSRaleigh

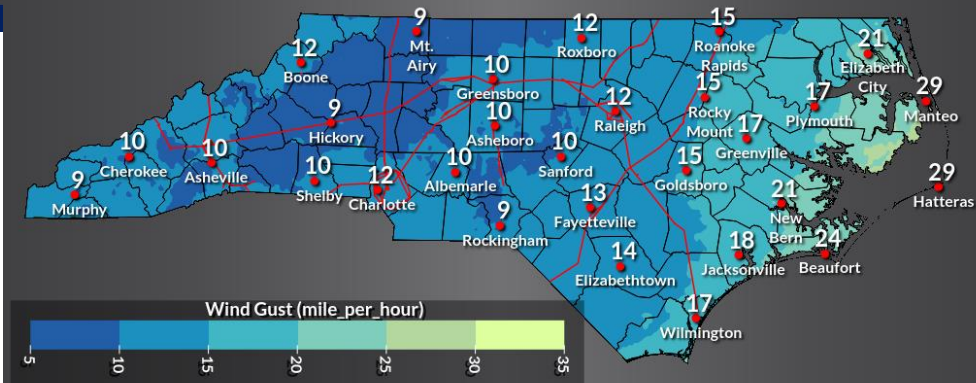
weather.gov/raleigh

24-hour Max Wind Gust

Valid Monday Jul 07, 2025

Weather Forecast Office
Raleigh, NC

Issued Jul 05, 2025 5:26 PM EDT



YouTube, Facebook, and X: @NWSRaleigh

weather.gov/raleigh



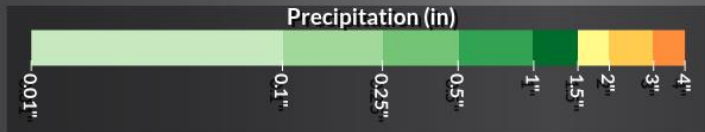
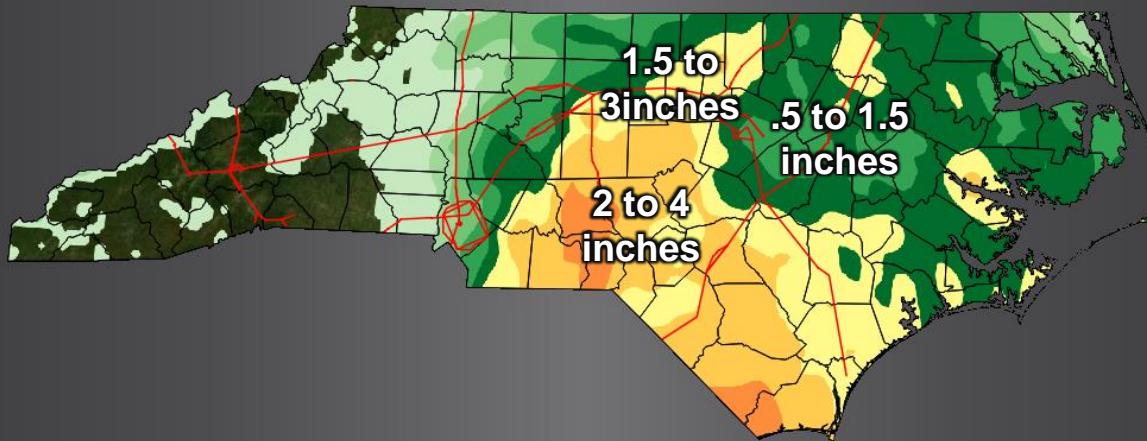
Probabilistic Rainfall Forecasts – Official NWS Forecast

https://www.wpc.ncep.noaa.gov/Prob_Precip/

Storm Total Rainfall Through Monday

Tropical Storm Chantal

Weather Forecast Office
Raleigh, NC
Issued Jul 05, 2025 6:03 PM EDT



This is the most-likely rainfall forecast. Also considered the “official NWS rainfall forecast”.

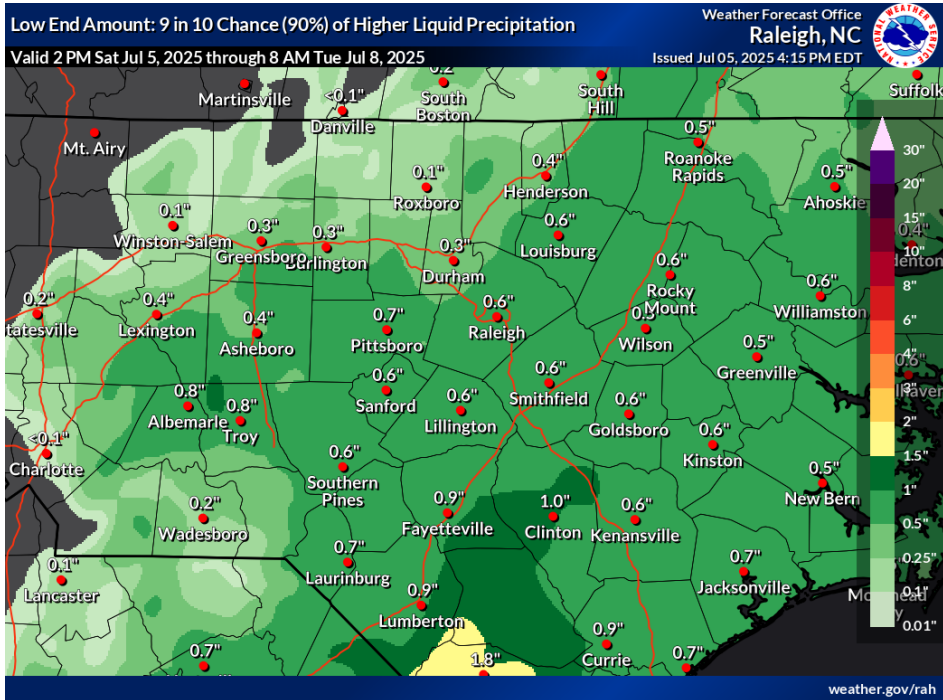
The next slide shows two alternate rainfall amount scenarios, including a best and worst-case scenario.



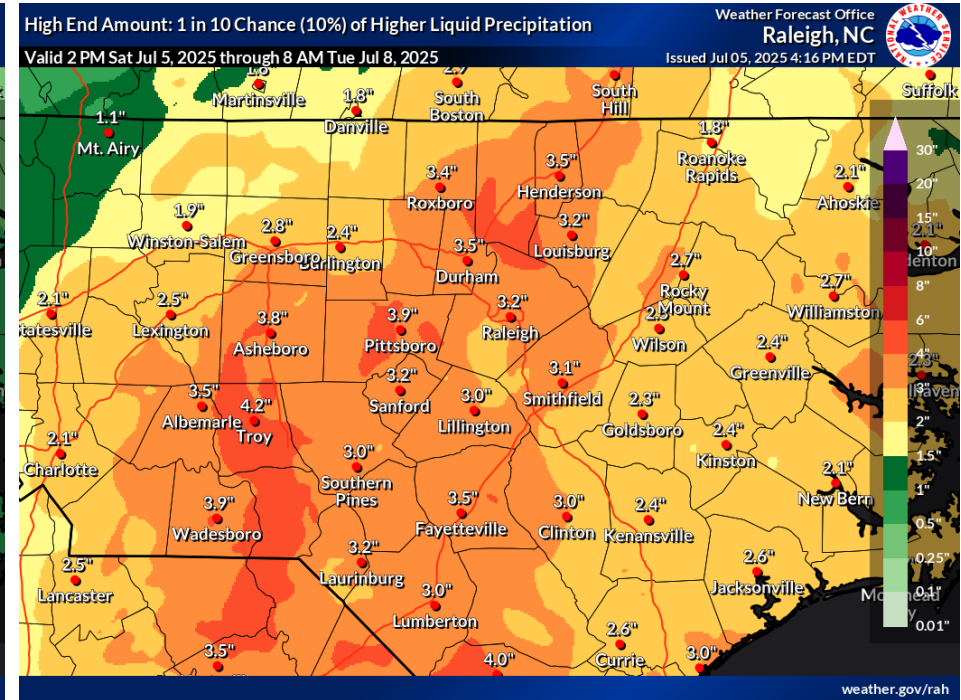
Probabilistic Rainfall Forecasts - Best & Worst Cases

https://www.wpc.ncep.noaa.gov/Prob_Precip/

Best-Case Scenario (90% of the models show **MORE** rain than this)



Reasonable Worst-Case Scenario (90% of the models show **LESS** rain than this)

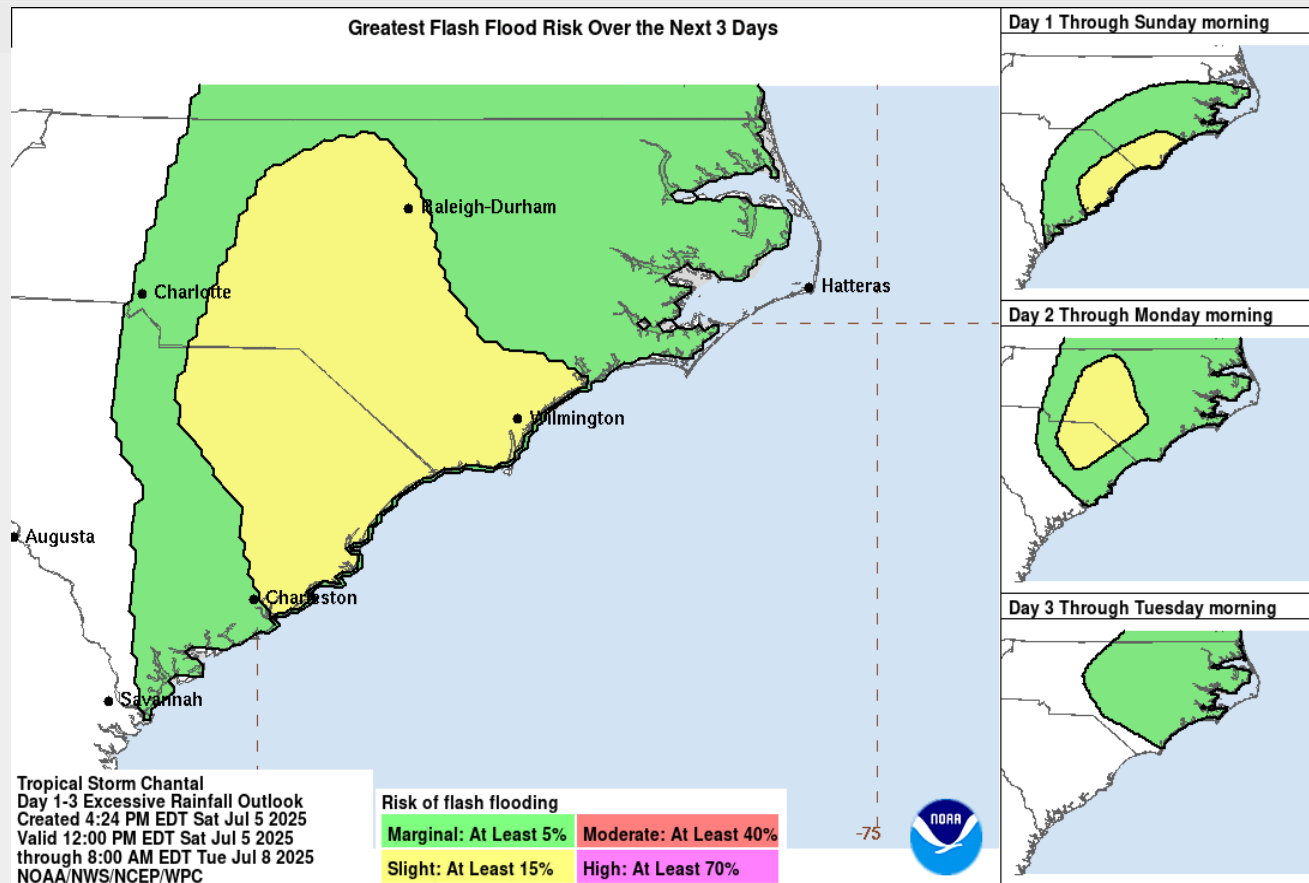




Excessive Rainfall Outlook

Tropical Storm Chantal

- This ERO is an increase from the previous forecast.
- Slight risk (level 2 of 4 flash flood risk) now includes much of central NC, especially south and west of Raleigh, with a marginal risk (level 1 of 4) elsewhere.
- The greatest risk for flash flooding is in the yellow area.

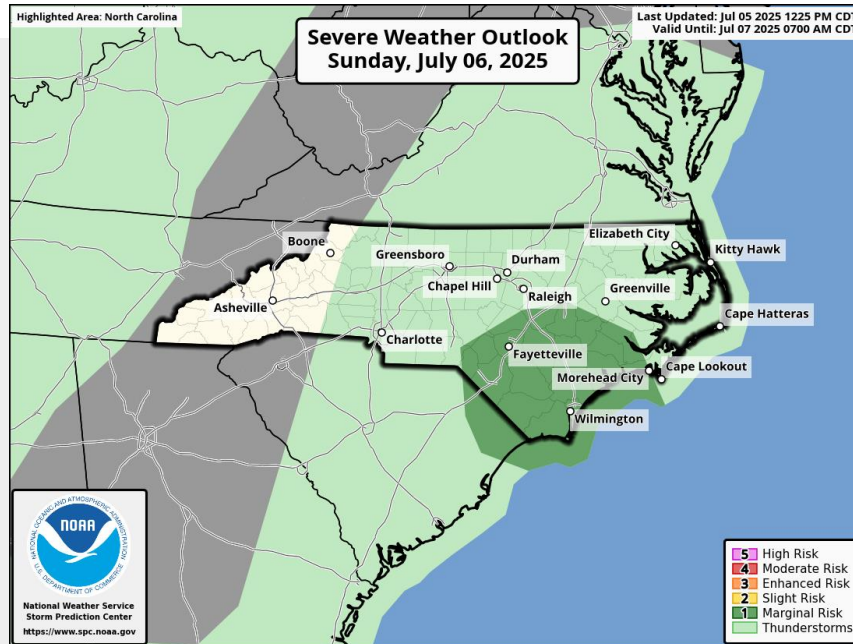




Tornado Potential

Tropical Storm Chantal

- Isolated tornadoes can't be ruled out on Sunday and Sunday night, but the area with the greatest risk will be areas southeast of Raleigh.





Key Takeaways

Tropical Storm Chantal

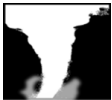
Confidence is HIGH that the event will occur
Confidence is MODERATE regarding impacts



Heavy rainfall and isolated to scattered flooding is possible on Sunday into early Monday. The heaviest rain and greatest risk for flash flooding now looks like it will be from Raleigh south and westward. 2 to 4 inches of rainfall, with locally higher amounts, is now expected across portions of central NC, esp south and west of Raleigh.



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Local Resources

Tropical Storm Chantal

Next Emailed Briefing:
By 7 AM Sunday



Web: weather.gov/raleigh



Phone: 919-326-1042



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