



April 5-6, 2017 Severe Weather Briefing

Threat Assessment for northeast South Carolina & southeast North Carolina

National Weather Service Wilmington NC

3 PM EDT Wednesday April 5, 2017

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Impact Summary & Confidence for northeast SC and southeast NC

Greatest expected impacts

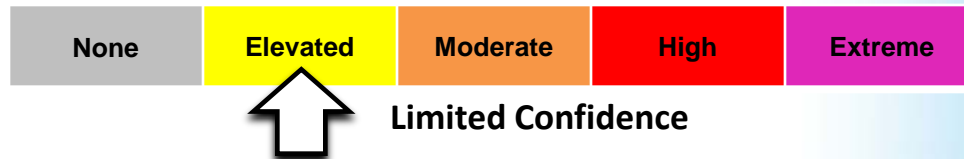
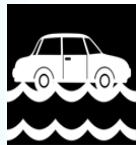
**Damaging
Tstm Wind**



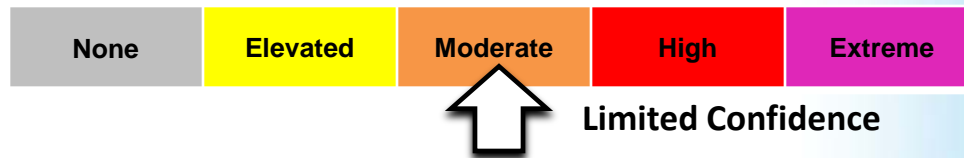
Hail



Flooding



Tornado



Timing, Impacts, and Other Hazards

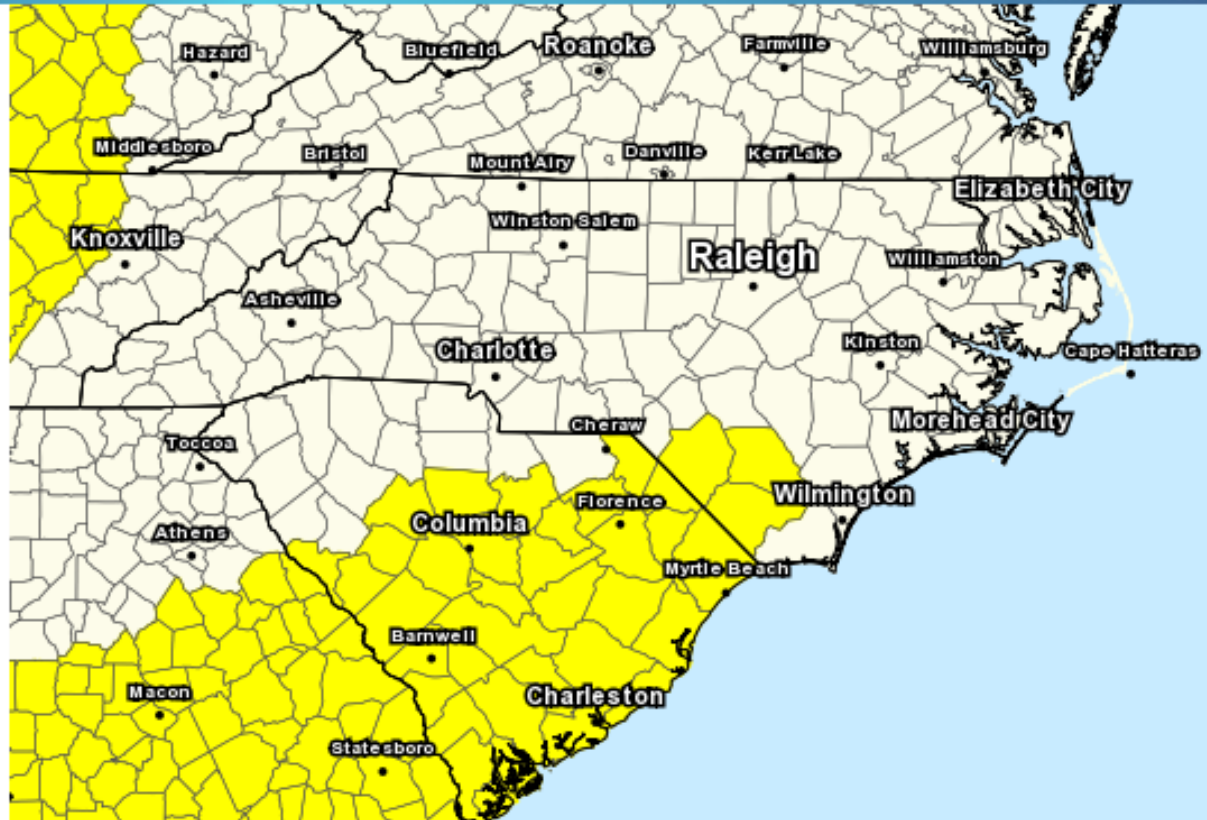
- **Timing:** A couple rounds of severe weather are possible starting with the severe weather this afternoon and early evening. A Tornado Watch is now in effect for northeast SC and portions of southeast NC until 8 PM EDT. Another round of severe weather is possible overnight into Thursday morning. The threat of severe weather will come to an end with the passage of a strong cold front Thursday morning.
- **Impacts:** The primary threat is from damaging thunderstorm wind gusts in excess of 60 mph. Secondary threats include tornadoes and large hail. As a result, those areas affected by the strongest thunderstorms could receive structural damage, downed trees, and subsequent power outages.
- **Other Hazards:** Strong winds (25 to 35 mph with gusts to around 45 mph) are expected during Thursday in the wake of the potent cold front. As a result, there could be additional downed trees and power outages. A Wind Advisory will be in effect for Thursday to account for the stronger non-thunderstorm winds Thursday.

In addition, a Gale Warning is in effect through late Thursday for the adjacent Atlantic waters. Winds of 25 to 35 kts with higher gusts are possible tonight through Thursday night with seas up to 10 ft. Conditions farther offshore will be worse with 35 to 45 kt winds and seas up to 16 ft possible.

Severe Weather Watches and Warnings

National Weather Service

■ Tornado Watch



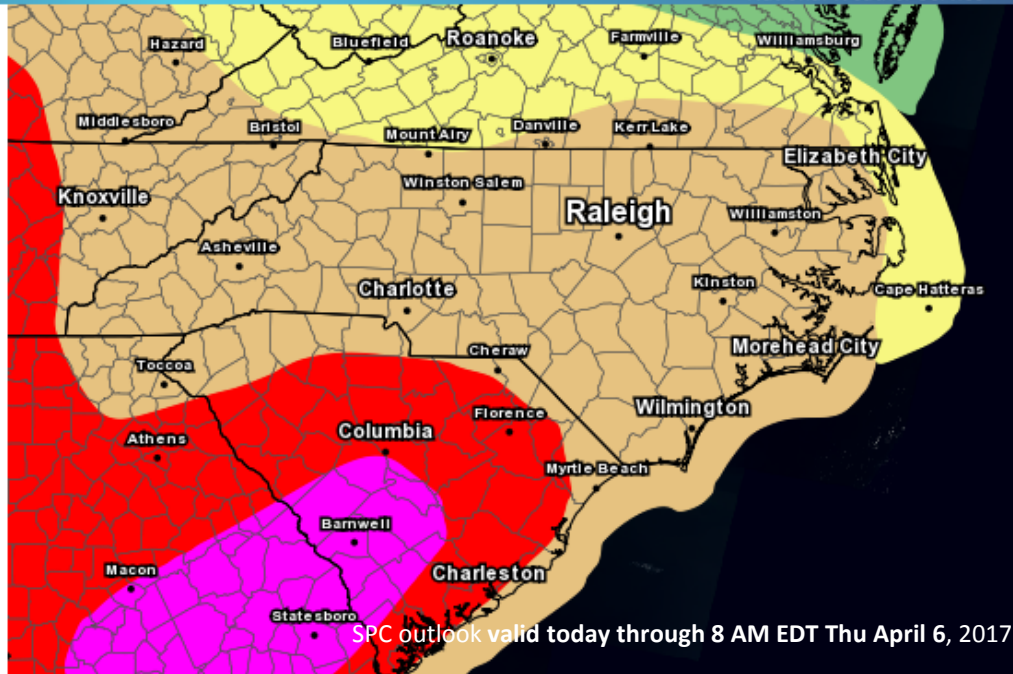
Graphic Created
April 5th, 2017
2:58 PM EDT

TORNADO WATCH in effect **through 8 PM EDT** this evening

Today's Severe Weather Outlook

National Weather Service

- General Thunderstorms
- 1 - Marginal Risk
- 2 - Slight Risk
- 3 - Enhanced Risk
- 4 - Moderate Risk
- 5 - High Risk



Graphic Created
April 5th, 2017
12:56 PM EDT

SPC outlook valid today through 8 AM EDT Thu April 6, 2017

Understanding Severe Thunderstorm Risk Categories

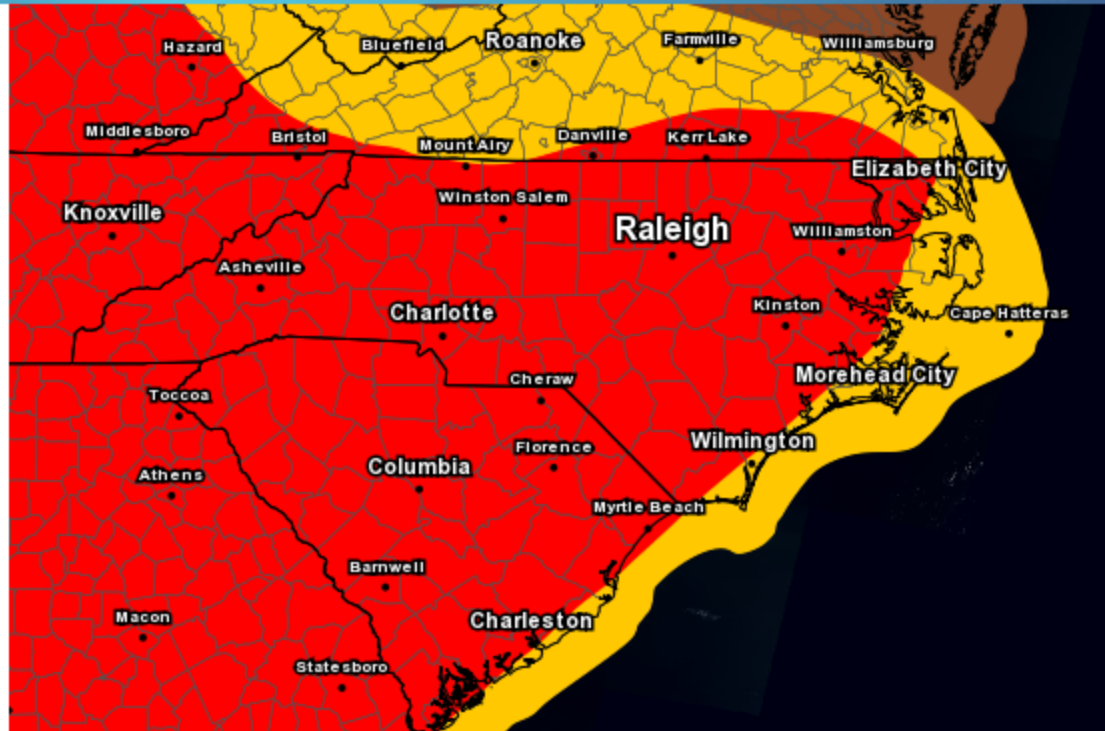
THUNDERSTORMS (no label)	1 - MARGINAL (MRGL)	2 - SLIGHT (SLGT)	3 - ENHANCED (ENH)	4 - MODERATE (MDT)	5 - HIGH (HIGH)
No severe* thunderstorms expected	Isolated severe thunderstorms possible	Scattered severe storms possible	Numerous severe storms possible	Widespread severe storms likely	Widespread severe storms expected
Lightning/flooding threats exist with all thunderstorms	Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible	More persistent and/or widespread, a few intense	Long-lived, widespread and intense	Long-lived, very widespread and particularly intense
• Winds to 40 mph • Small hail	• Winds 40-60 mph • Hail up to 1" • Low tornado risk	• One or two tornadoes • Reports of strong winds/wind damage • Hail ~1", isolated 2"	• A few tornadoes • Several reports of wind damage • Damaging hail, 1 - 2"	• Strong tornadoes • Widespread wind damage • Destructive hail, 2" +	• Tornado outbreak • Derecho

- Multi-threat severe weather event expected including damaging thunderstorm winds (primary threat), tornadoes, and large hail. Bulk of severe weather will occur at night. **People need to maintain a high level of weather awareness. Be prepared to act if warnings are issued for your area.**
- The Moderate Risk area has been expanded across a larger portion of SC including a large area of northeast SC. The Enhanced Risk has expanded farther north as well across NC.

* NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.

Today's Severe Wind Risk

- 5% Probability
- 15% Probability
- 30% Probability
- 45% Probability
- 60% Probability



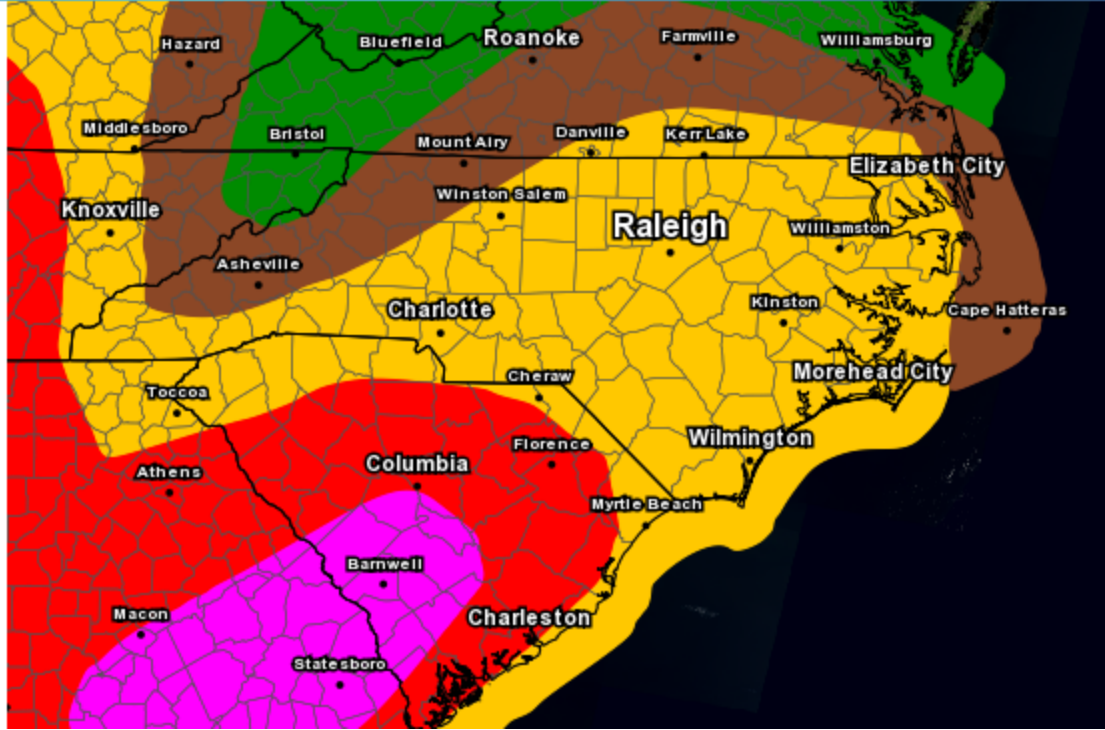
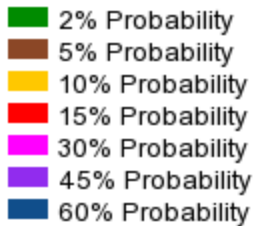
Graphic Created
April 5th, 2017
1:04 PM EDT

SPC Severe Wind outlook valid today through 8 AM EDT Thu April 6, 2017



Damaging thunderstorm wind gusts in excess of 60 mph are the primary threat across northeast SC and southeast NC, especially tonight into Thursday morning. The risk has increased across a large portion of southeast NC and into eastern NC.

Today's Severe Tornado Risk



Graphic Created
 April 5th, 2017
 1:13 PM EDT

SPC Tornado outlook valid today through 8 AM EDT Thu April 6, 2017

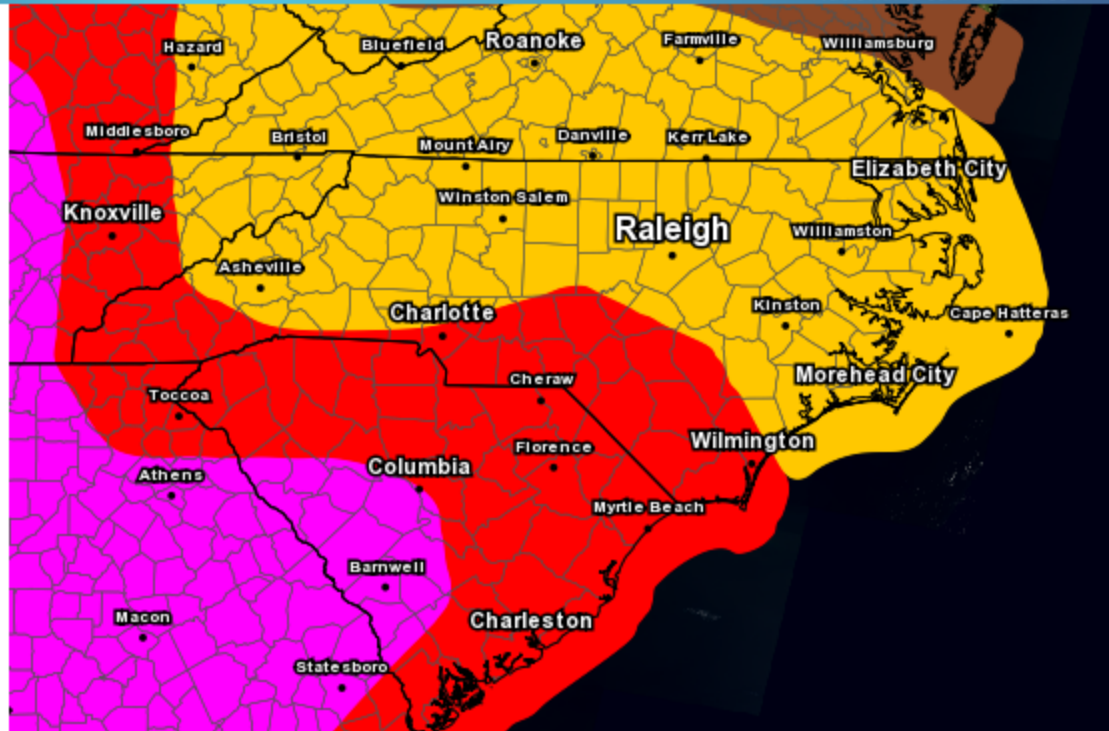
- A few tornadoes, maybe even strong & long track, are possible across northeast SC and southeast NC. The risk for tornadoes will be greatest this evening into Thursday morning as the storms move across the area. The probabilities have increased across northeast SC and southeast NC with this update.

- Make sure your family knows where to shelter if a tornado warning is issued for your area. If a warning is issued for your area, then go to the lowest floor & center most location such as an interior closet or bathroom. Put as many walls between you & the exterior walls as possible.



Today's Severe Hail Risk

- 5% Probability
- 15% Probability
- 30% Probability
- 45% Probability
- 60% Probability



Graphic Created
 April 5th, 2017
 1:21 PM EDT

SPC Severe Hail outlook valid today through 8 AM EDT Thu April 6, 2017

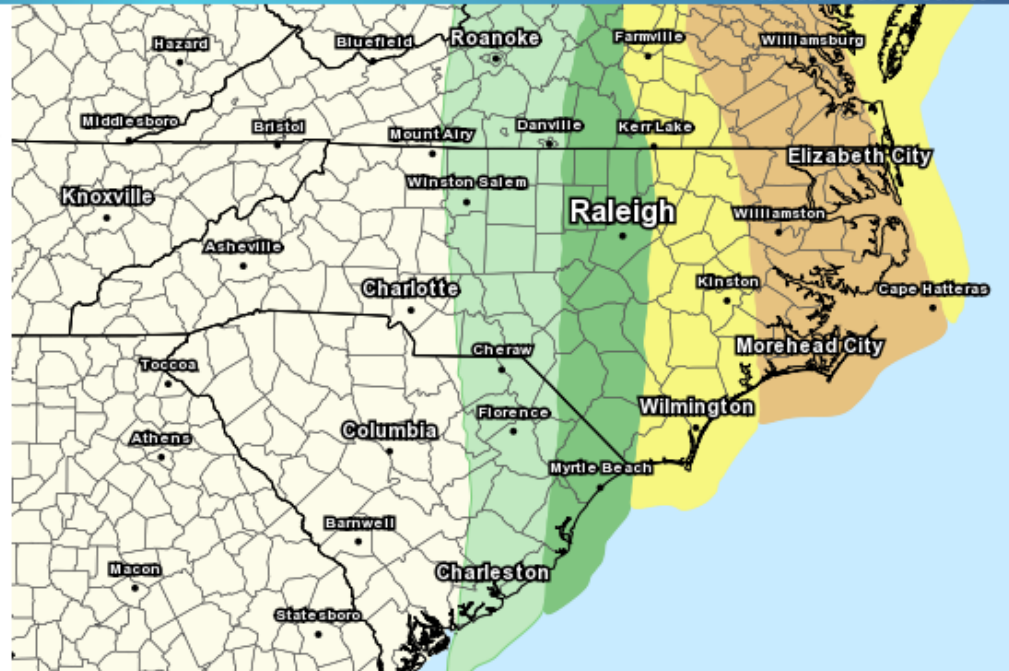


The risk for large hail continues across northeast SC and southeast NC. The risk is enhanced from Wilmington and Fayetteville, NC into central and northeast SC with even higher probabilities for large hail farther southwest into southwest SC and eastern GA.

Tomorrow's Severe Weather Outlook

National Weather Service

- General Thunderstorms
- 1 - Marginal Risk
- 2 - Slight Risk
- 3 - Enhanced Risk
- 4 - Moderate Risk
- 5 - High Risk



Graphic Created
April 5th, 2017
1:33 PM EDT

SPC outlook valid 8 AM EDT Thu April 6, 2017 through 8 AM EDT Fri Apr 7, 2017

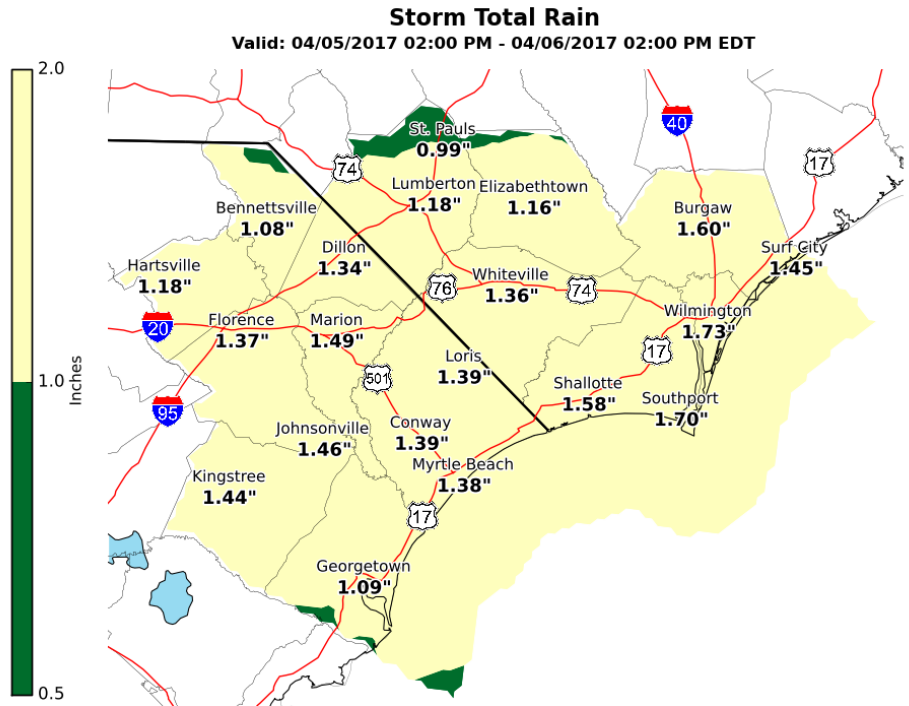
Understanding Severe Thunderstorm Risk Categories

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- The severe weather event will be ongoing for portions of northeast SC and southeast NC Thursday morning at the onset of the Day 2 Convective Outlook which is initially valid at 8 AM EDT Thursday April 6, 2017.
- The threat for severe weather will diminish later Thursday morning with the passage of the strong cold front. An isolated tornado is possible along with a few damaging thunderstorm wind gusts until the front passes.

* NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.

Storm Total Rainfall



National Weather Service
Wilmington North Carolina
04/05/2017 01:22 PM EDT

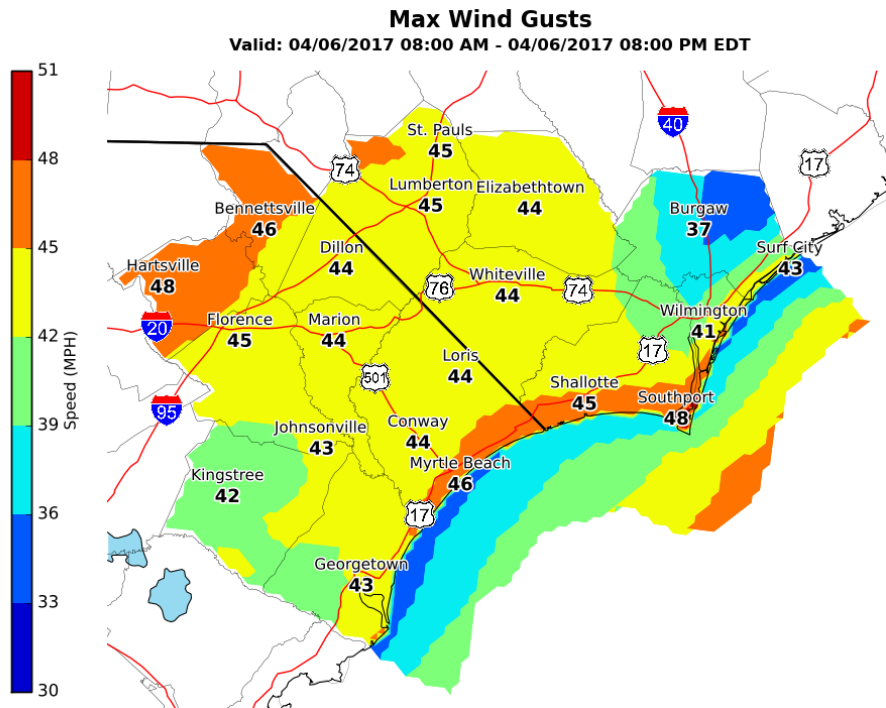
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Rainfall outlook valid today Apr 5, 2017 through Thu Apr 6, 2017

- Storm total rainfall averages of 1 to 2 inches with isolated higher amounts likely. The bulk of the rainfall is expected tonight into early Thursday morning. Localized flooding is possible as a result, especially across prone low-lying areas with poor drainage.



Post-Frontal Peak Wind Gust Outlook



National Weather Service
Wilmington North Carolina
04/05/2017 01:18 PM EDT

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Post-Frontal Peak Wind Gust outlook valid Thu Apr 6, 2017



The wind in the wake of the strong cold front are expected to increase to 20 to 35 mph with potential gusts to around 45 mph in many locations. The strong wind could cause additional trees to topple and additional power outages. A **Wind Advisory** will be in effect for Thursday.



Key Points



- This severe weather event may be accompanied by multiple hazard types from large hail to tornadoes and damaging thunderstorm wind gusts. Currently, the primary threat is from damaging wind gusts, followed by large hail and tornadoes.
- A round of severe weather is possible this afternoon and early evening, with additional severe weather possible overnight into Thursday morning. People are advised to maintain a high level of situational awareness until the threat subsides. Check your NOAA Weather Radio is working properly with fresh batteries & be prepared to act if warnings are issued for your area.
- Rainfall will average 1 to 2 inches across northeast SC and southeast NC with the bulk of heavy rainfall occurring tonight into early Thursday morning. Isolated higher amounts are likely. Some low-lying, poor drainage areas may flood as a result.
- Strong winds are expected in the wake of the cold front during Thursday. A Wind Advisory will be in effect for the gusty winds. A Gale Warning remains in effect for the adjacent Atlantic waters.