



Disclaimer: The information contained within is time-sensitive.

Hurricane Helene Briefing

12:00 PM

Thursday September 26, 2024

**** Conditions in place for Scattered Tornadoes ****

**** Wind/Wind Gusts may need to be increased later today/tonight ****





Situation Overview

September 26, 2024
12:00 PM

- Tornadoes: Impacts from scattered tornadoes becoming an increasing concern for our area
- Winds: May need to increase Tropical Storm Wind/Wind Gust values over land, especially tonight
- Helene still expected to be a LARGE SYSTEM, with IMPACTS reaching WELL OUTSIDE/EAST of the Track Cone of uncertainty, which covers our region!
- Potential Impacts Include: tornadoes, tropical storm force wind/wind gusts, periods of heavy rainfall, elevated tides/storm surge inundation, dangerous marine conditions, high surf and high rip current risk

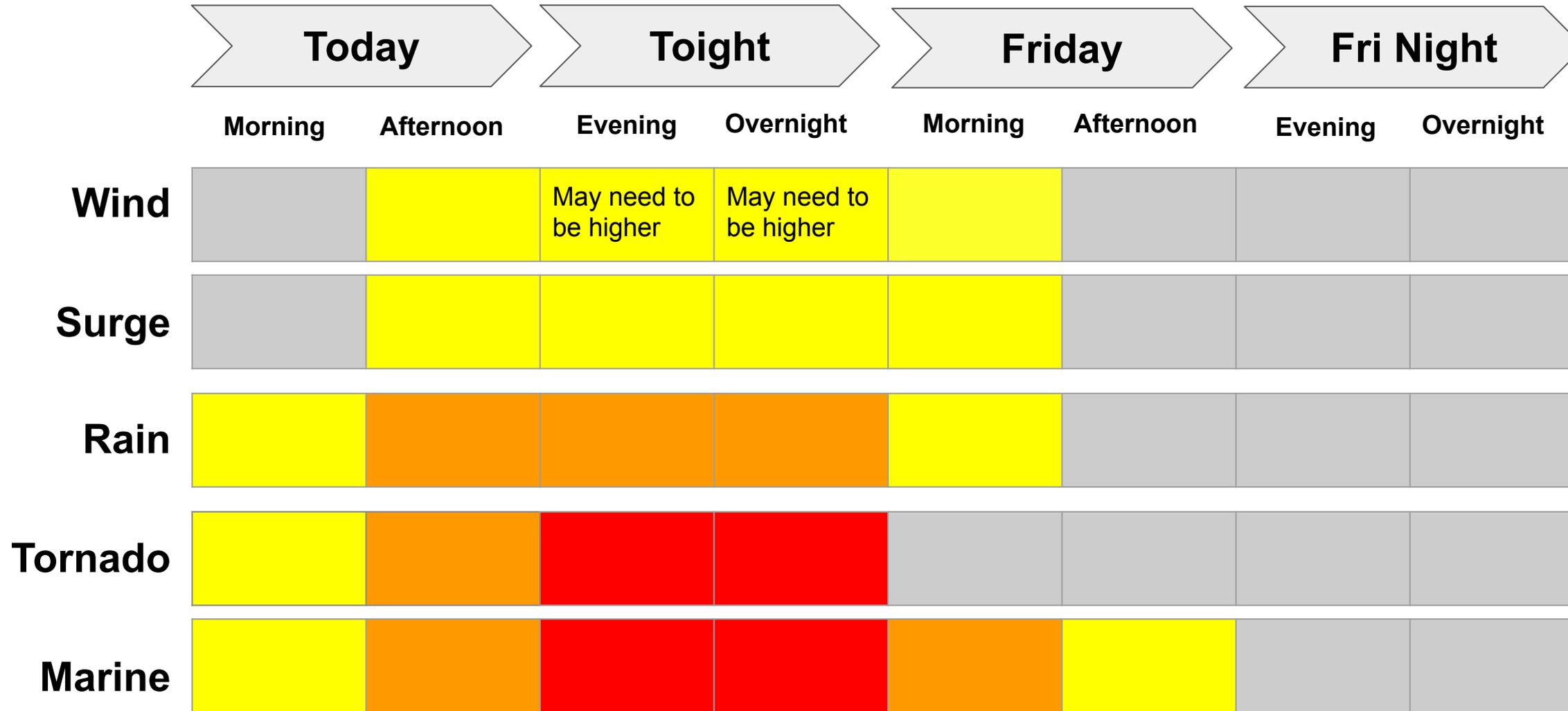




Threat Levels - *Max Values for the Storm*

September 26, 2024
12:00 PM

Changes: Increased Rain Threat for this afternoon given current radar trends



Effects and Impacts Legend

- Little to No Impact
- Minor Impact
- Moderate Impact
- High Impact
- Extreme Impact



Situation Overview

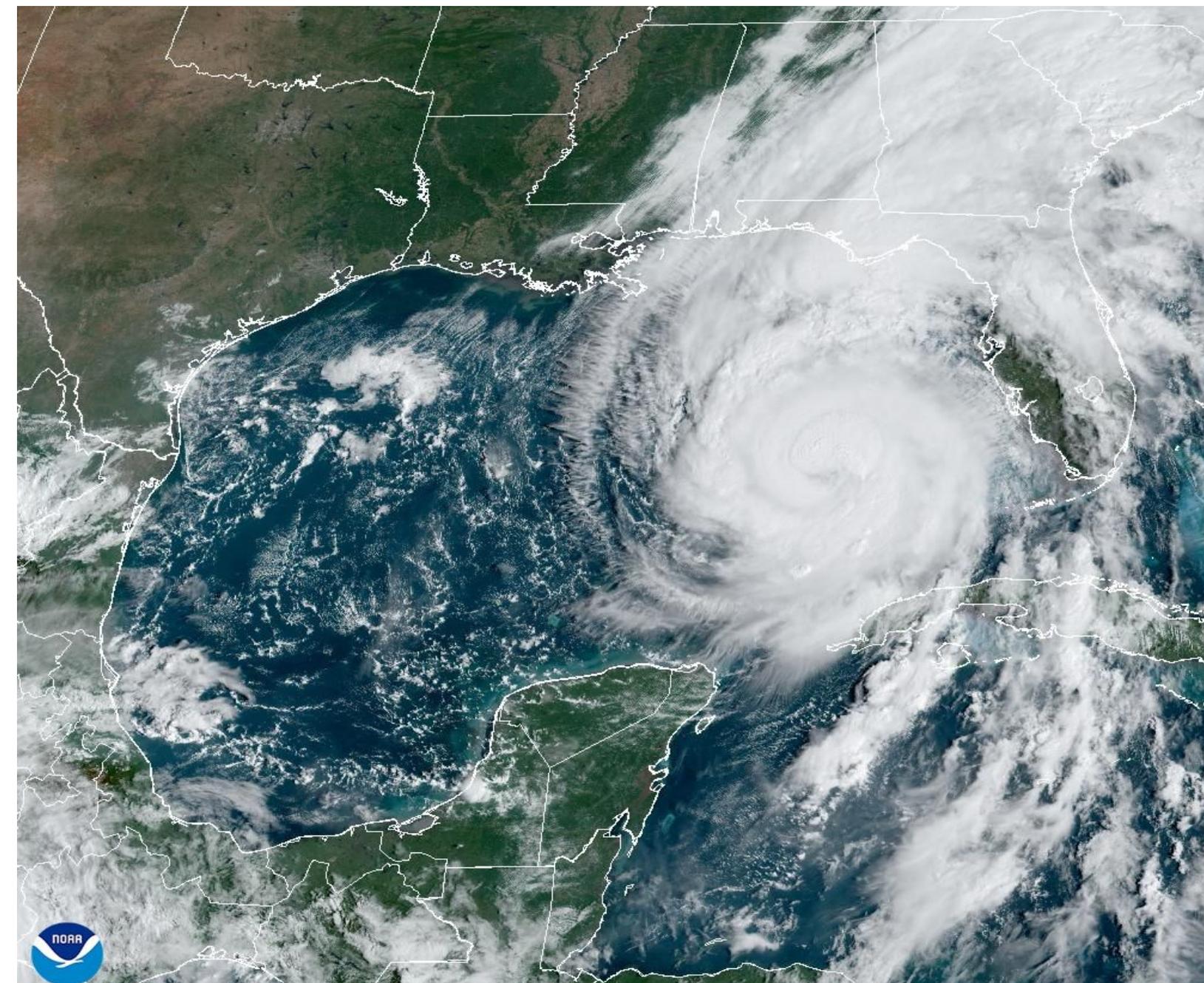
September 26, 2024
12:00 PM

Hazard	Impacts	Location	Timing
 <p>Wind</p>	<p>TS Wind/Wind Gusts expected. Downed and/or uprooted trees, Isolated to scattered power outages, some roads impassable due to debris</p>	<p>Highest Threat for TS force wind/wind gusts well inland (closer to Helene's track) and along the Atlantic coast</p>	<p>Later this afternoon through tonight. Starting first in GA later this afternoon, then into SC this evening/tonight</p>
 <p>Storm Surge & Inundation</p>	<p>Storm Surge Inundation 1-3 feet above normally dry ground in/around tidal region. Localized saltwater flooding immediate shoreline, minor to moderate beach erosion</p>	<p>Entire coastline</p>	<p>This afternoon through tonight</p>
 <p>Flooding Rain</p>	<p>Flooding of some roads/streets, especially in low lying, poorly drained areas, some storm drains and retention ponds may become full/overflow</p>	<p>Entire region, especially west of I-95 in southeast SC and southeast GA</p>	<p>Today into tonight</p>
 <p>Tornado</p>	<p>Scattered to possibly numerous may produced localized areas of enhanced tree and/or structural damage</p>	<p>Entire region of southeast SC and southeast GA and Atlantic waters</p>	<p>Now through tonight. Tornado threat will move from south to north through the period.</p>
 <p>Marine</p>	<p>Dangerous seas and tropical storm force winds/wind gusts will result in life-threatening conditions, especially for smaller crafts</p>	<p>Entire marine area from the Altamaha River, GA to the South Santee River, SC. Tropical Storm force wind gusts also possible within Charleston Harbor</p>	<p>This afternoon through Friday morning</p>



Current Satellite View

September 26, 2024
12:00 PM



26 Sep 2024 14:31Z - NOAA/NESDIS/STAR - GOES-East - GEOCOLOR Composite - GM

- Hurricane Helene continues to intensify as it moves over VERY warm waters of the eastern Gulf of Mexico
- Helene forecast to become a Major Hurricane this afternoon



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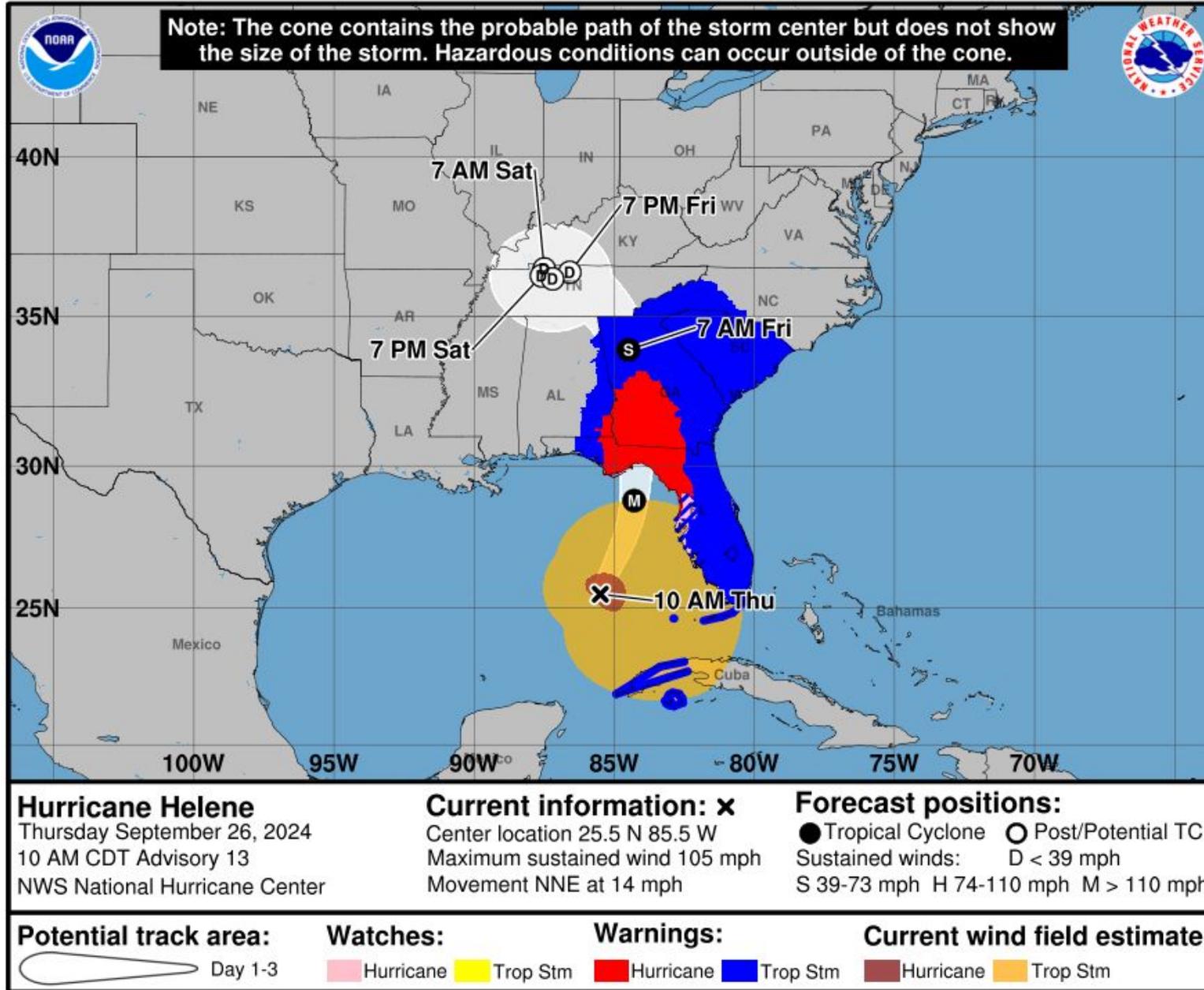
U.S. Department of Commerce

National Weather Service
Charleston, SC



Situation Overview

September 26, 2024
12:00 PM



- Track Trend: Little/no changes to track timing and impacts to our area
- Rapid Intensification Expected: Helene forecast to strengthen to a Major Hurricane this afternoon, making landfall along the Florida Big Bend area this evening
- Motion: Helene expected to begin accelerating northward across the eastern Gulf of Mexico later this afternoon/evening
- **NOTE:** Accelerating storm after landfall → May allow stronger winds to move further inland into southern and southeast GA





Tropical Storm Watch/Warning

September 26, 2024
12:00 PM



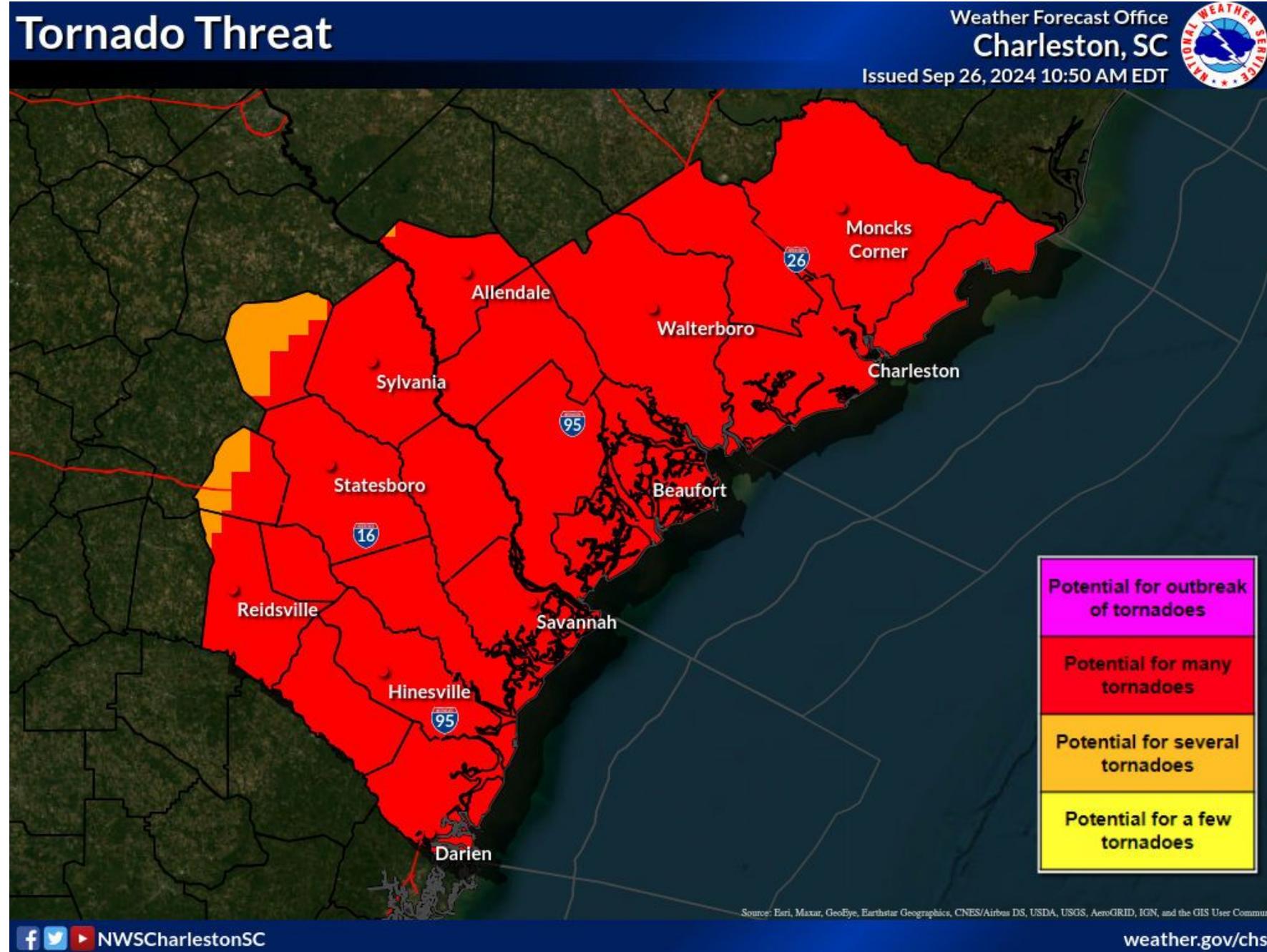
- **Tropical Storm Warnings** continue for ENTIRE region and all Atlantic waters, including the Charleston Harbor





Potential Tornado Impacts

September 26, 2024
12:00 PM



- Conditions very supportive for scattered, possibly numerous tornadoes
- **Timing:** Now through tonight
- **Impacts:** Nighttime tornadoes can be particularly dangerous. Enhanced tree damage and possible structural damage.
- Highest threat for tornadoes within stronger rainbands



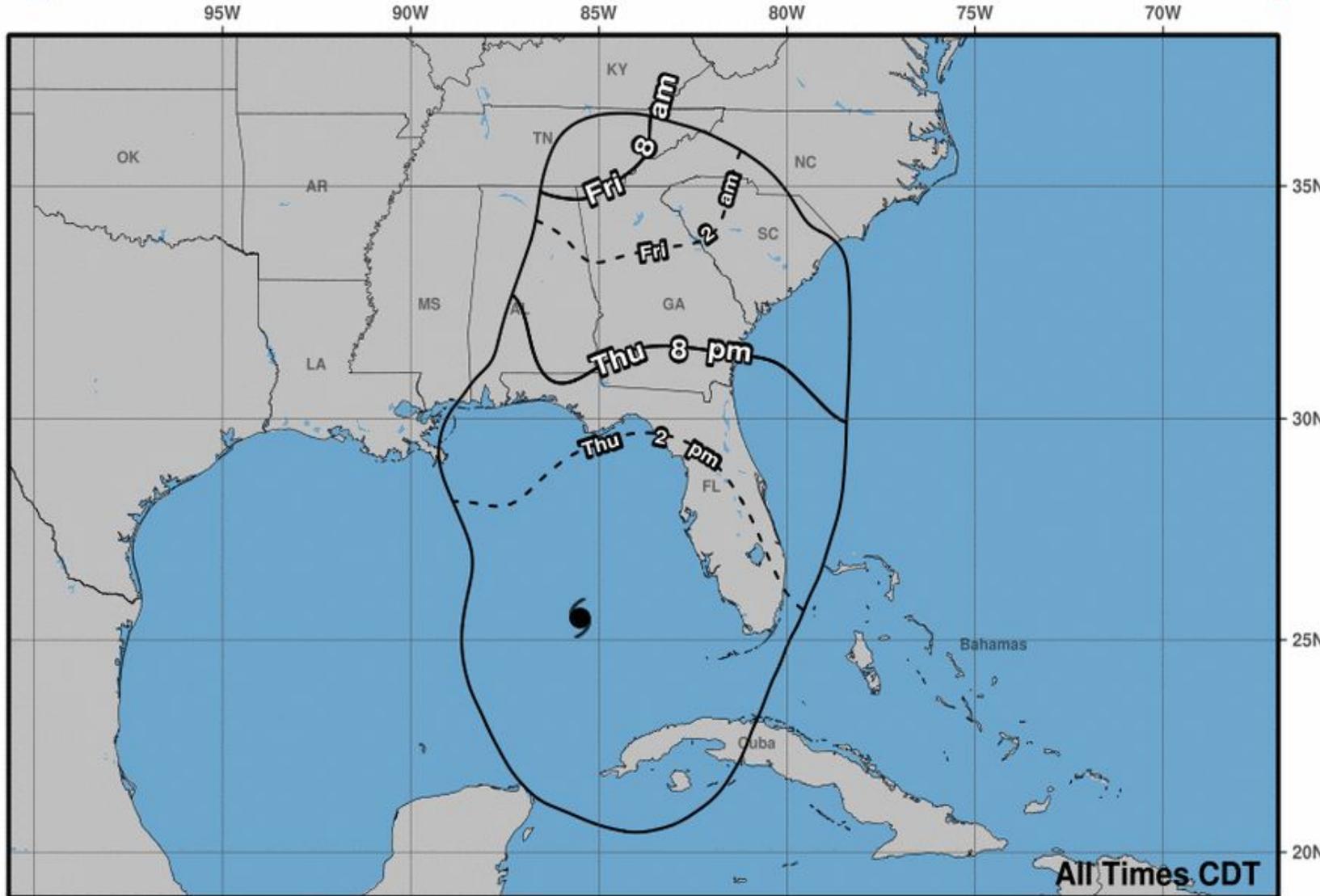


Most Likely Time of Arrival

September 26, 2024
12:00 PM



Most Likely Arrival Time of Tropical-Storm-Force Winds



Hurricane Helene
Thu. Sep. 26, 2024 10 am CDT
Advisory 13

Storm Location & Wind Speed

- < 34 kt (39 mph)
- ◌ 34-63 kt (39-73 mph)
- ≥ 64 kt (74 mph)

NOTE: Areas within the outermost black contour have at least a 5% chance of receiving winds of 34+ kt (39+ mph)

- Trend: Little change from previous NHC Advisory
- Most Likely time for Tropical Storm Force Wind/Wind Gusts:
 - Southeast GA - This evening
 - Southeast SC - Tonight



Wind Threat / Potential Impacts

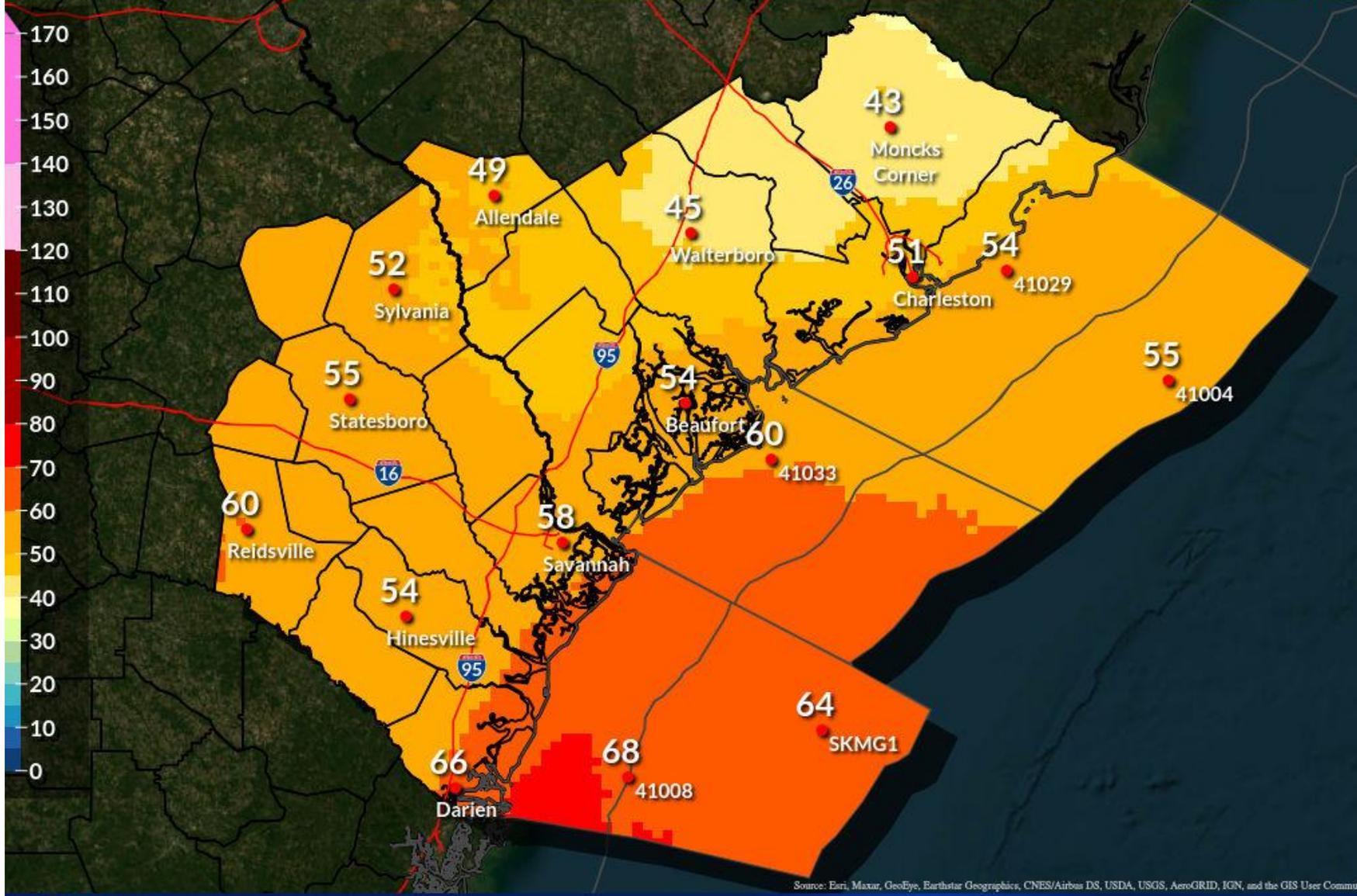
September 26, 2024
12:00 PM

Max Wind Gust (mph)

Valid 8 PM Thu Sep 26 to 8 AM Fri Sep 27, 2024

Weather Forecast Office
Charleston, SC

Issued Sep 26, 2024 10:15 AM EDT



Expected Max Wind Gusts:

- Tropical Storm Force wind/wind gust across much of the area
- **Timing:**
 - **GA:** Later this afternoon and tonight, slow decrease after midnight-2 AM
 - **SC:** This evening through tonight, decreasing toward sunrise Friday
- **Impacts:** Scattered power outages, downed and uprooted trees, hazardous for high profile vehicles on bridges/overpasses
- Winds expected to decrease rapidly from south to north Friday morning

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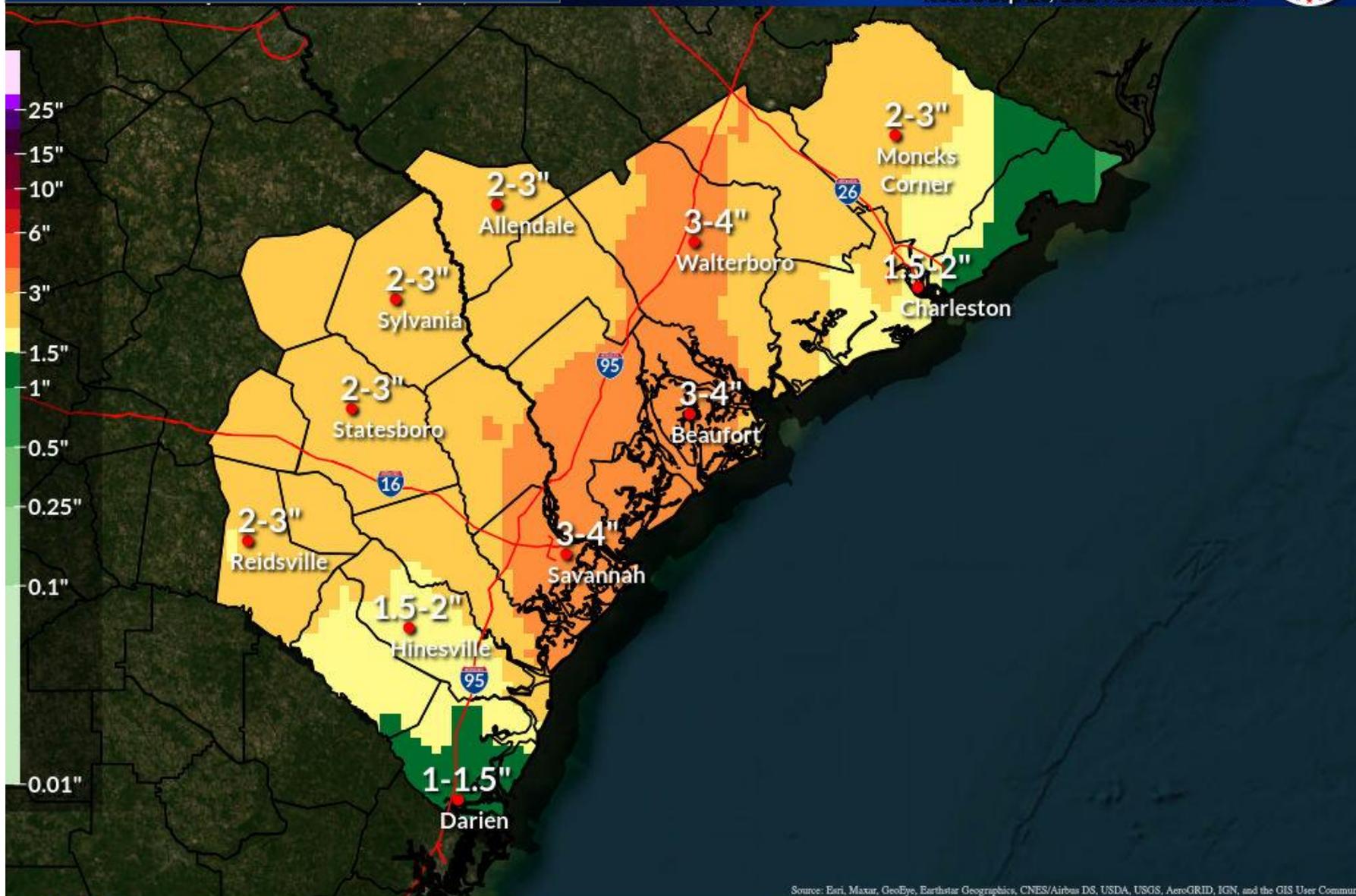
Expected Storm Total Rainfall

September 26, 2024
12:00 PM

3-Day Precipitation Forecast

Weather Forecast Office
Charleston, SC

Issued Sep 26, 2024 10:14 AM EDT



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Additional Rainfall through Friday Morning

- Heavy rainfall could coincide with the afternoon/evening commute, bringing extensive impacts despite total rainfall amounts of no more than a few inches
- The heavy rainfall threat expected to continue into tonight
- The risk for flooding may increase along the coast, if heavy rainfall coincides with high tide cycles, especially urban coastal areas



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Charleston, SC



Potential Marine Impacts

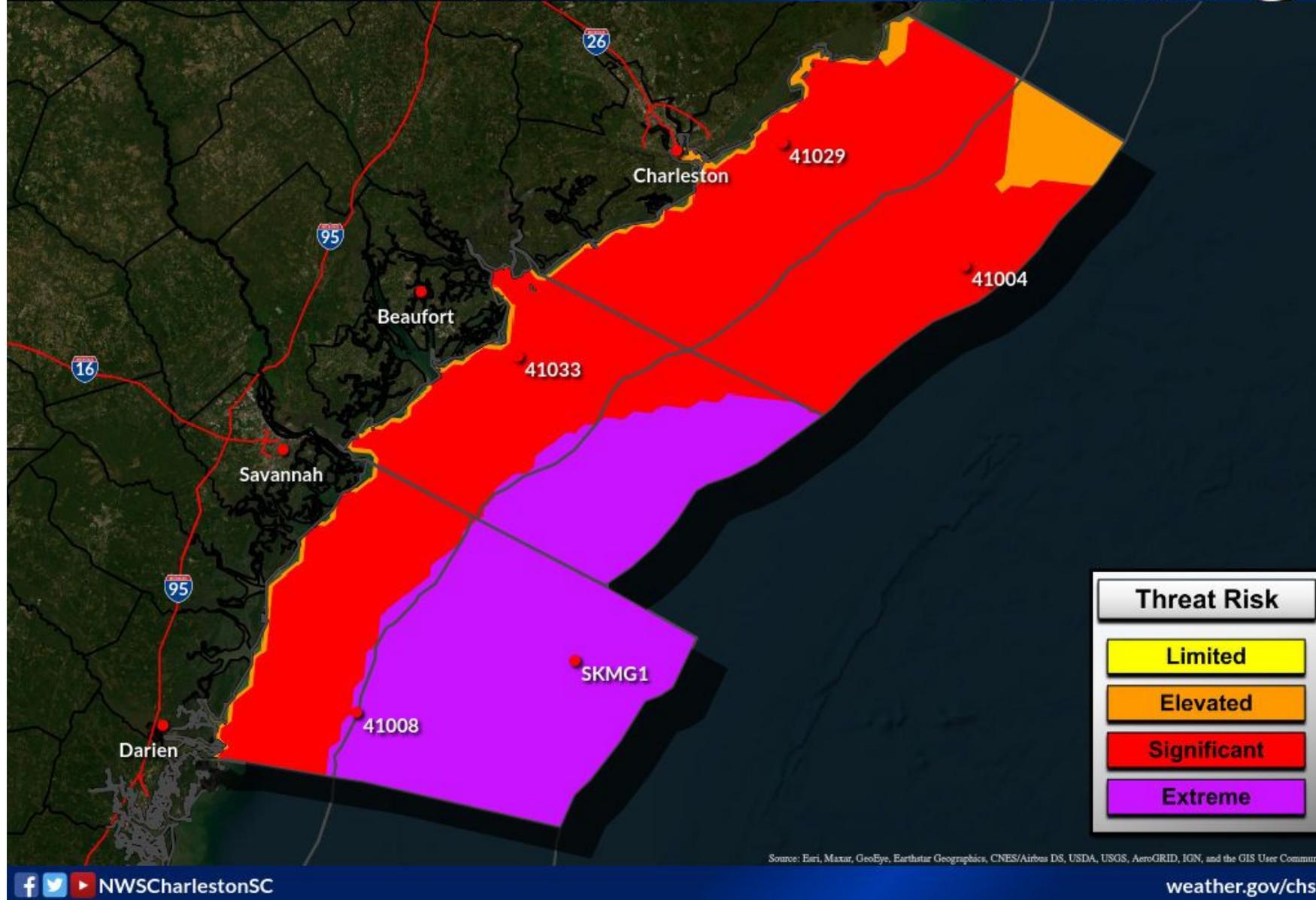
September 26, 2024
12:00 PM

Marine Hazard Risk for Thu/Thu Night

Valid 11 AM Thu Sep 26, 2024 to 8 AM Fri Sep 27, 2024

Weather Forecast Office
Charleston, SC

Issued Sep 26, 2024 11:11 AM EDT



Potential For:

- **Dangerous Seas/Waves:**
 - Seas building to 8-15 feet out 20 nm and 12-17 feet from 20-40 nm, highest this tonight and early Friday, especially over the GA waters
- **Tropical Storm Force Wind/Wind Gusts:**
 - Wind/Wind gusts of 45-55 knots possible later this afternoon into Friday morning, especially GA waters
 - Strongest winds/wind gusts likely within heavy rainbands
 - Waterspouts possible in rainbands
- *Note: This graphic shows a higher (Extreme) risk level than the Threat Level Graphic on Slide 3, since this is based on wave height.*





Potential Beach Impacts

September 26, 2024
12:00 PM

Rip Current Risk for Thu/Thu Night

Valid 11 AM Thu Sep 26, 2024 to 8 AM Fri Sep 27, 2024

Weather Forecast Office
Charleston, SC

Issued Sep 26, 2024 11:10 AM EDT



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Beach Hazards Potential:

- **High Risk for Deadly Rip Currents** through Friday
- **High Surf and Significant Beach Erosion**
 - **High Surf Advisory** in effect
 - **Timing:** Later this afternoon through Friday morning



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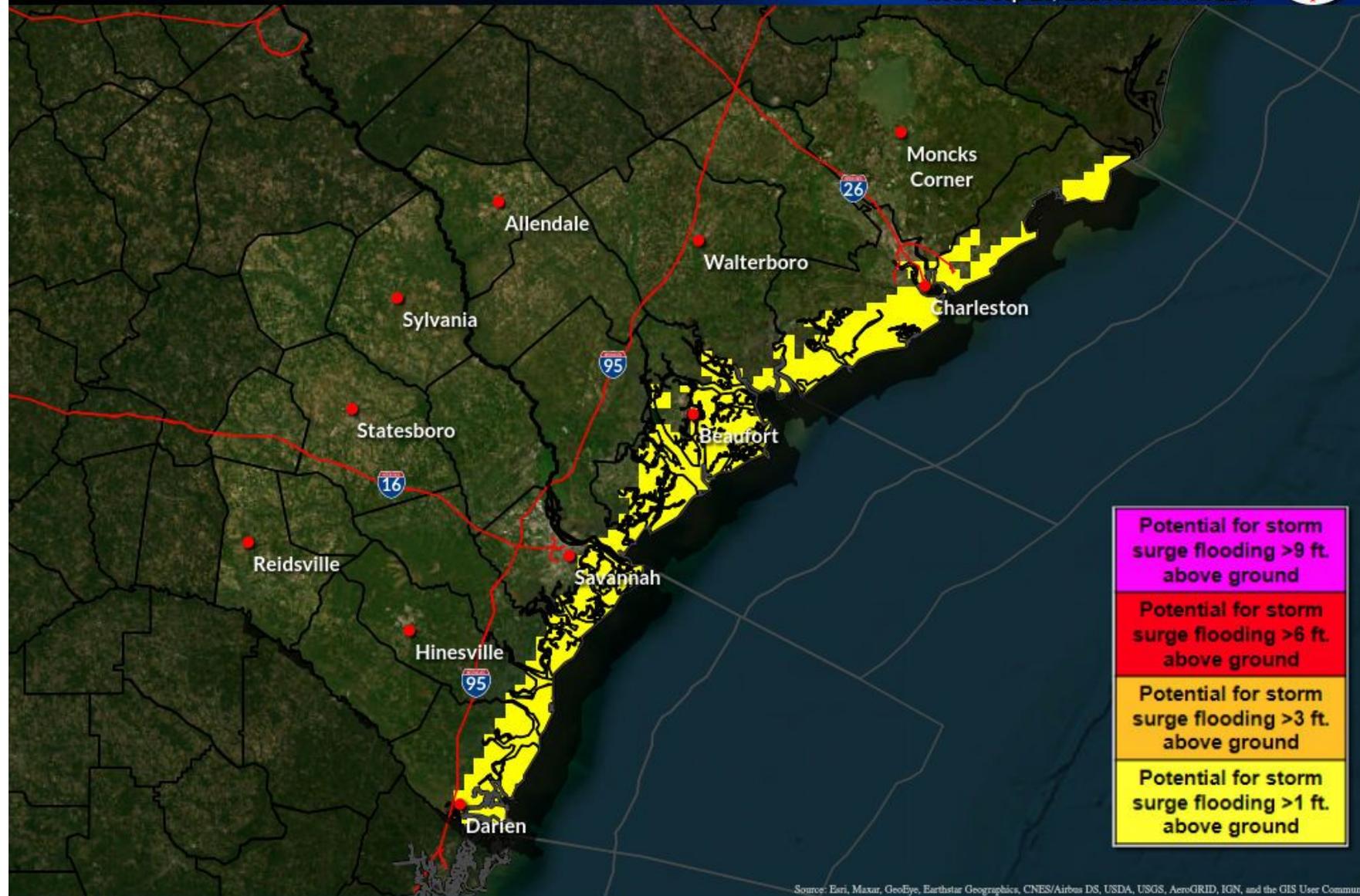


Potential Storm Surge Impacts

September 26, 2024
12:00 PM

Storm Surge Threat

Weather Forecast Office
Charleston, SC
Issued Sep 26, 2024 10:50 AM EDT



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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- **Increasing Tide Levels**
 - Storm Surge Inundation of 1-3 feet above normally dry ground in/around tidal region
- **Coastal Flood Advisory** this afternoon for Charleston & Colleton County coasts
- **Impacts:** Minor flooding of some streets/roads near the coast, and in low lying areas. *Additional Coastal Flood Advisories possible tonight*
- **Event Timing:** This afternoon through tonight, especially during high tide cycles



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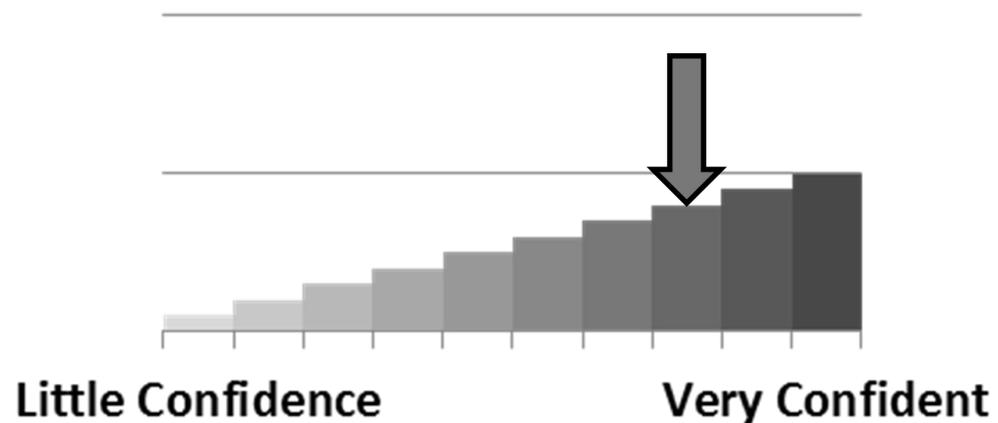


Key Take-Aways

September 26, 2024
12:00 PM

- Tornadoes: Impacts from scattered tornadoes becoming an increasing concern for our area
- Helene is a LARGE STORM, with impacts reaching well east of the track cone of uncertainty
- Focus attention on expected impacts, NOT the centerline of the forecast track

Forecast Confidence



Overall Storm Formation and Track: High Confidence

Local Level and Timing of Impacts: Moderate to High





Next Briefing:

Thursday Sep 26, 6:00 PM ?????

Method: Webinar

