

IMPACTS FOR D7 (through next 5 days)

Winds – Medium

Storm Surge – Medium

Rainfall/Flash Flooding – Extreme

Tornadoes – Medium

Waves - Medium

TROPICAL STORM DEBBY BRIEFING



5:00 PM EDT

Monday, August 5, 2024

Prepared by:

Keren Rosado-Vázquez

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*



NHC_TAFB

www.nhc.noaa.gov

Changes Since Last Briefing

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

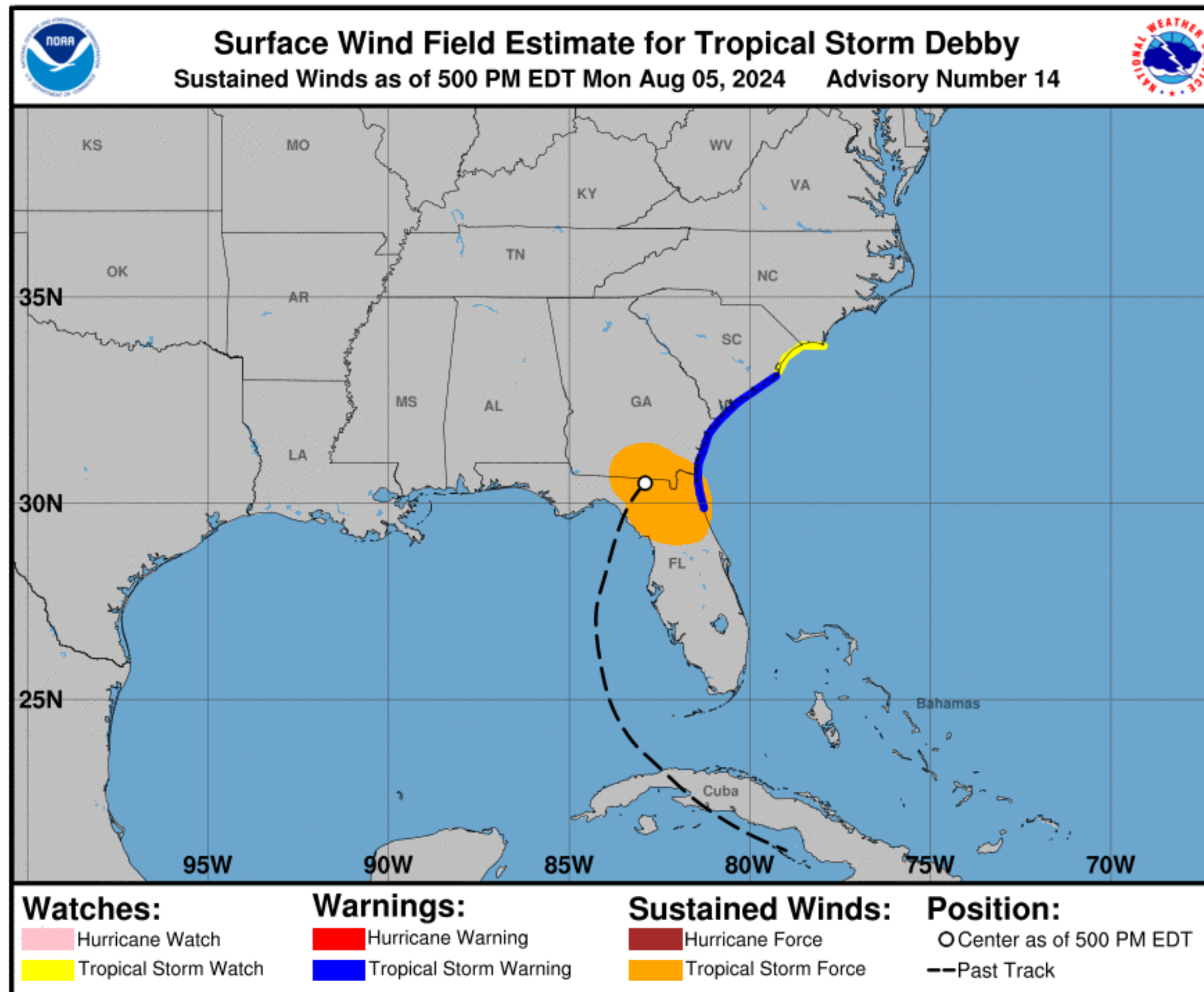
- Tropical Storm Debby sustained winds have decreased to 45 kt with gusts to 55 kt.

Situation Overview

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



...DEBBY INLAND NEAR THE
FLORIDA/GEORGIA BORDER... MAJOR
FLOOD THREAT FOR THE SOUTHEASTERN
UNITED STATES FOR THE NEXT SEVERAL
DAYS...

SUMMARY OF 500 PM EDT...INFORMATION

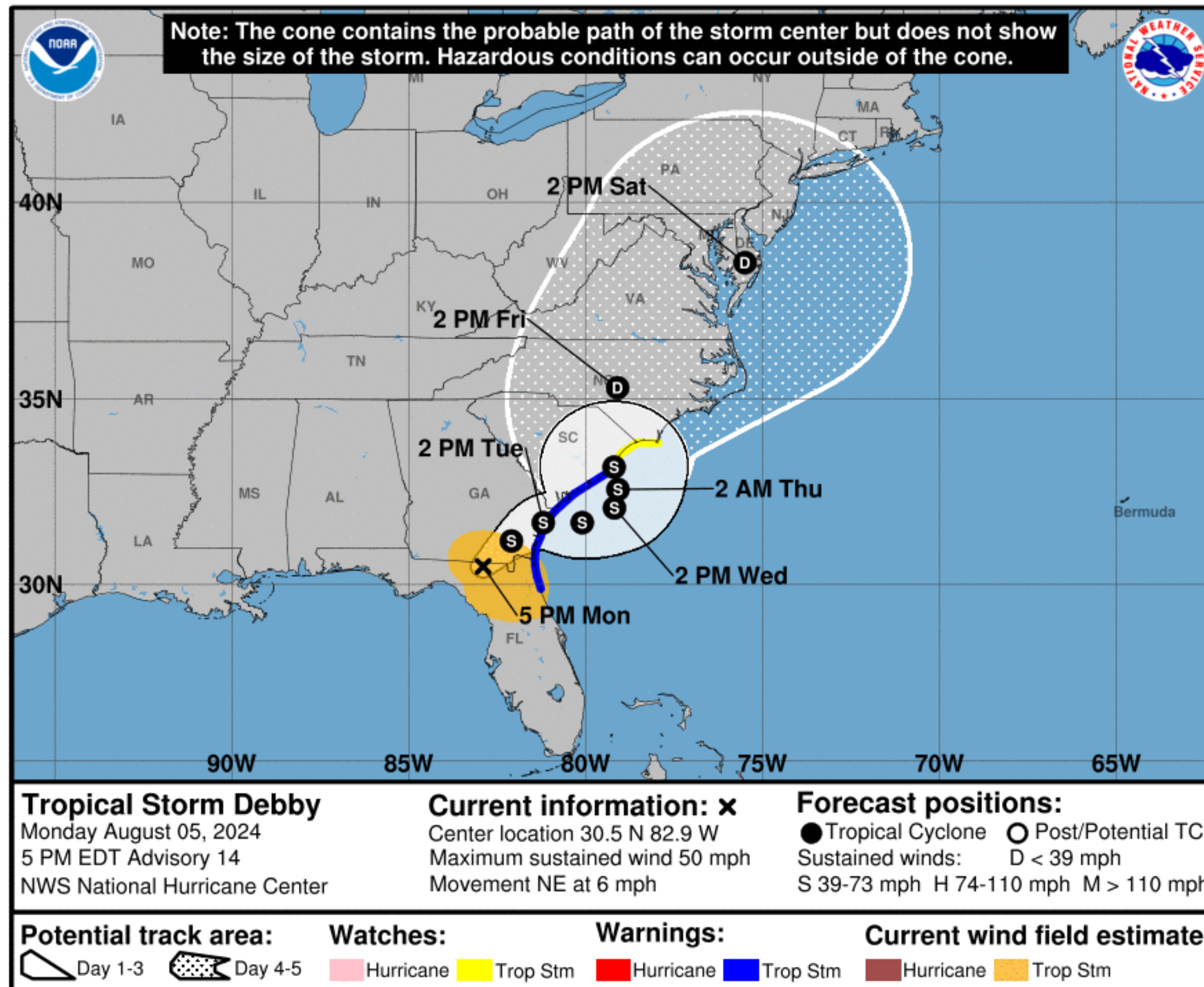
LOCATION...30.5N 82.9W
ABOUT 30 MI... SE OF VALDOSTA GEORGIA
MAXIMUM SUSTAINED WINDS...50 MPH
PRESENT MOVEMENT...NE OR 35 DEGREES
AT 6 MPH
MINIMUM CENTRAL PRESSURE...994 MB

Forecast Information

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

- A turn toward the east is expected on Tuesday, followed by a turn to the north at a slow forward speed on Wednesday.
- On the forecast track, the center will move across southeastern Georgia tonight and Tuesday, move offshore of the South Carolina coast by late Tuesday and Wednesday, and approach the South Carolina coast on Thursday.
- Additional weakening is forecast through late Tuesday. Some re-strengthening is possible on Wednesday and Thursday.
- Current center forecast positions through the next 5 days (if applicable) illustrated by dots
- White swath of potential track error added to each side of the forecast track through day 3
- Hatched swath of potential track error added to each side of the forecast track days 4-5

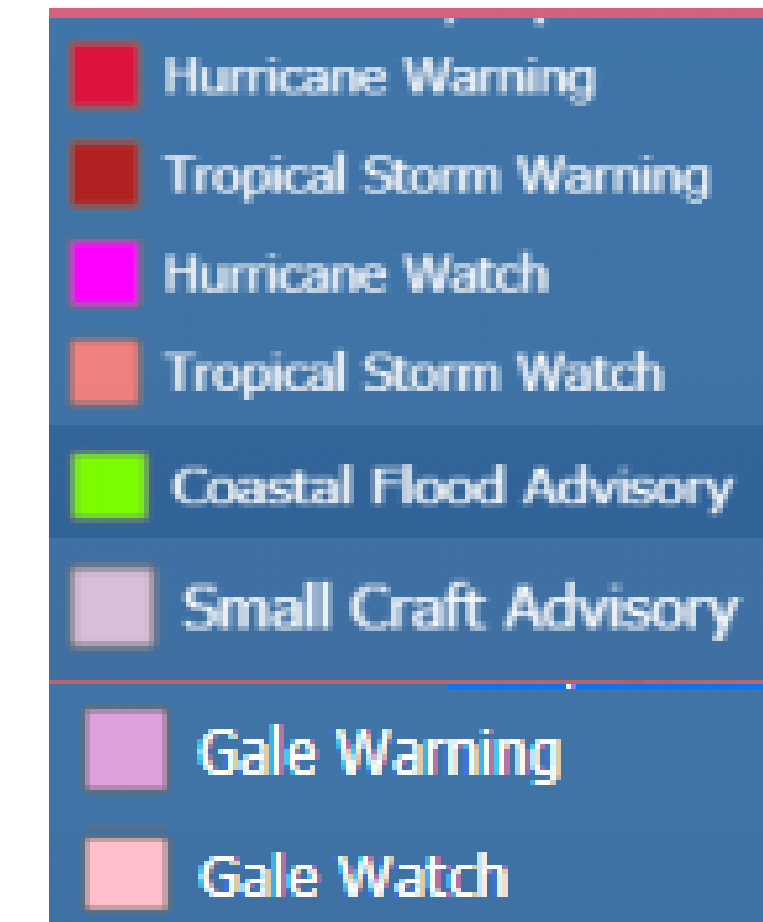
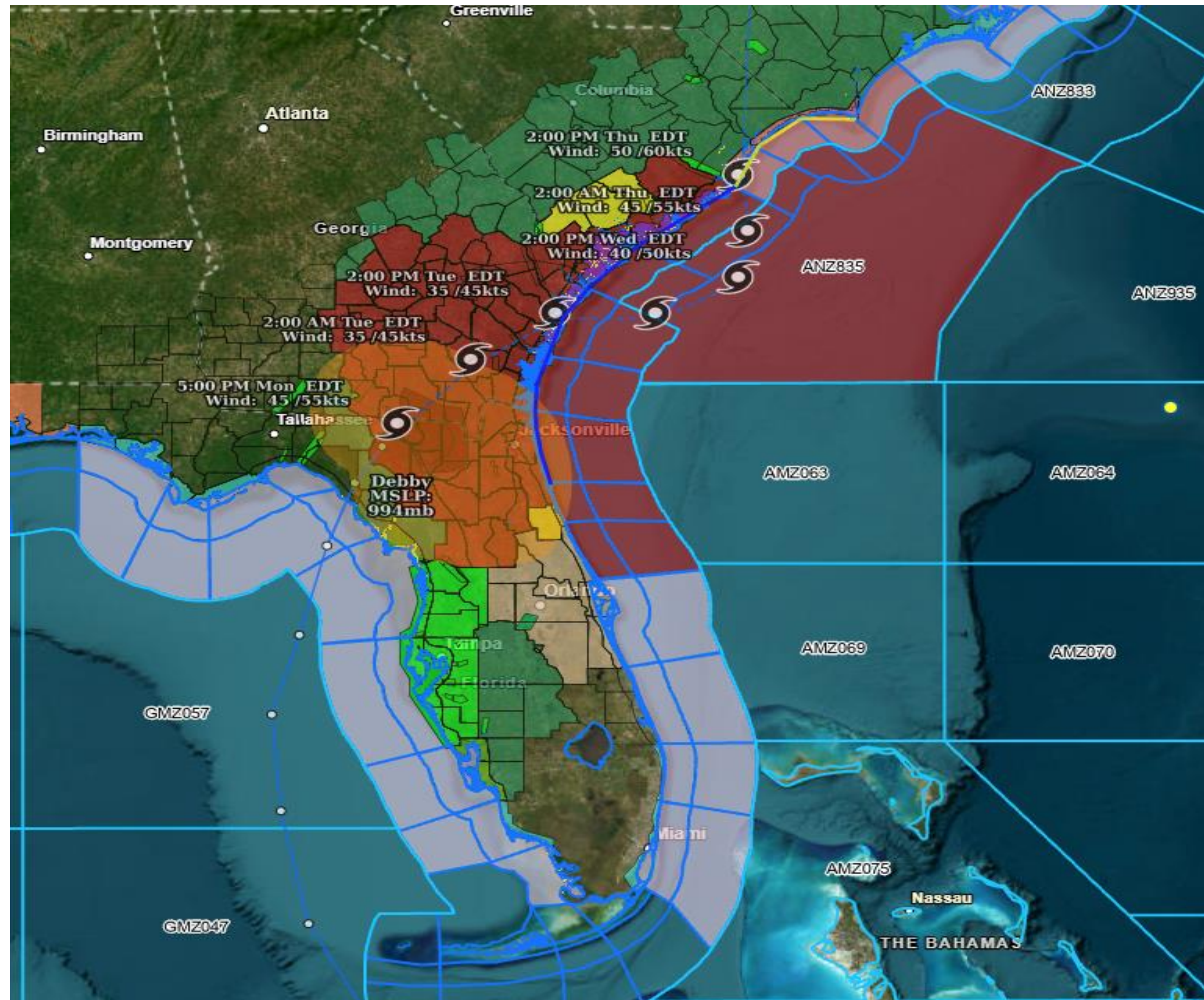
** Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

Hazards Map

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

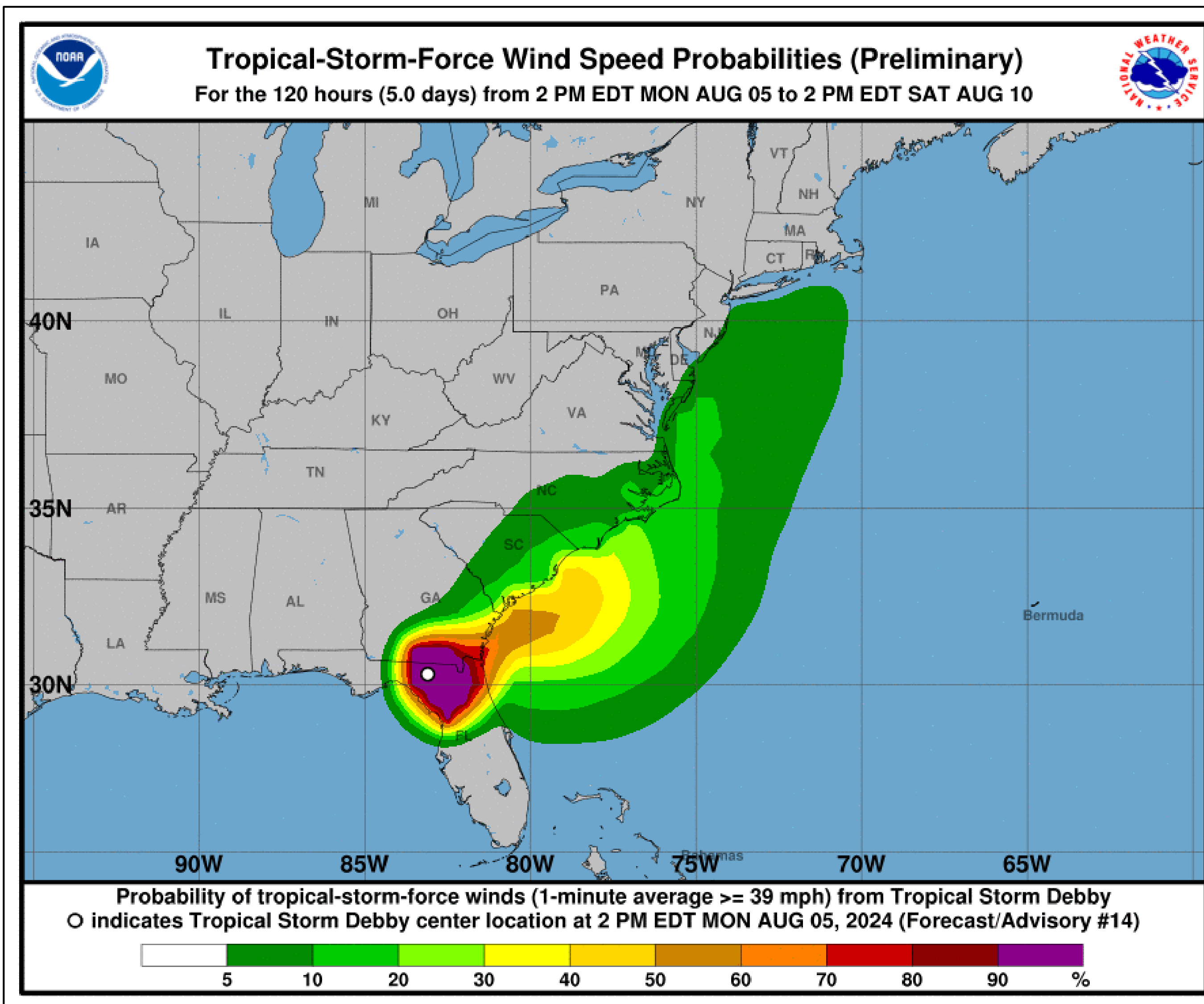


T.S. Wind Speed Probabilities

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



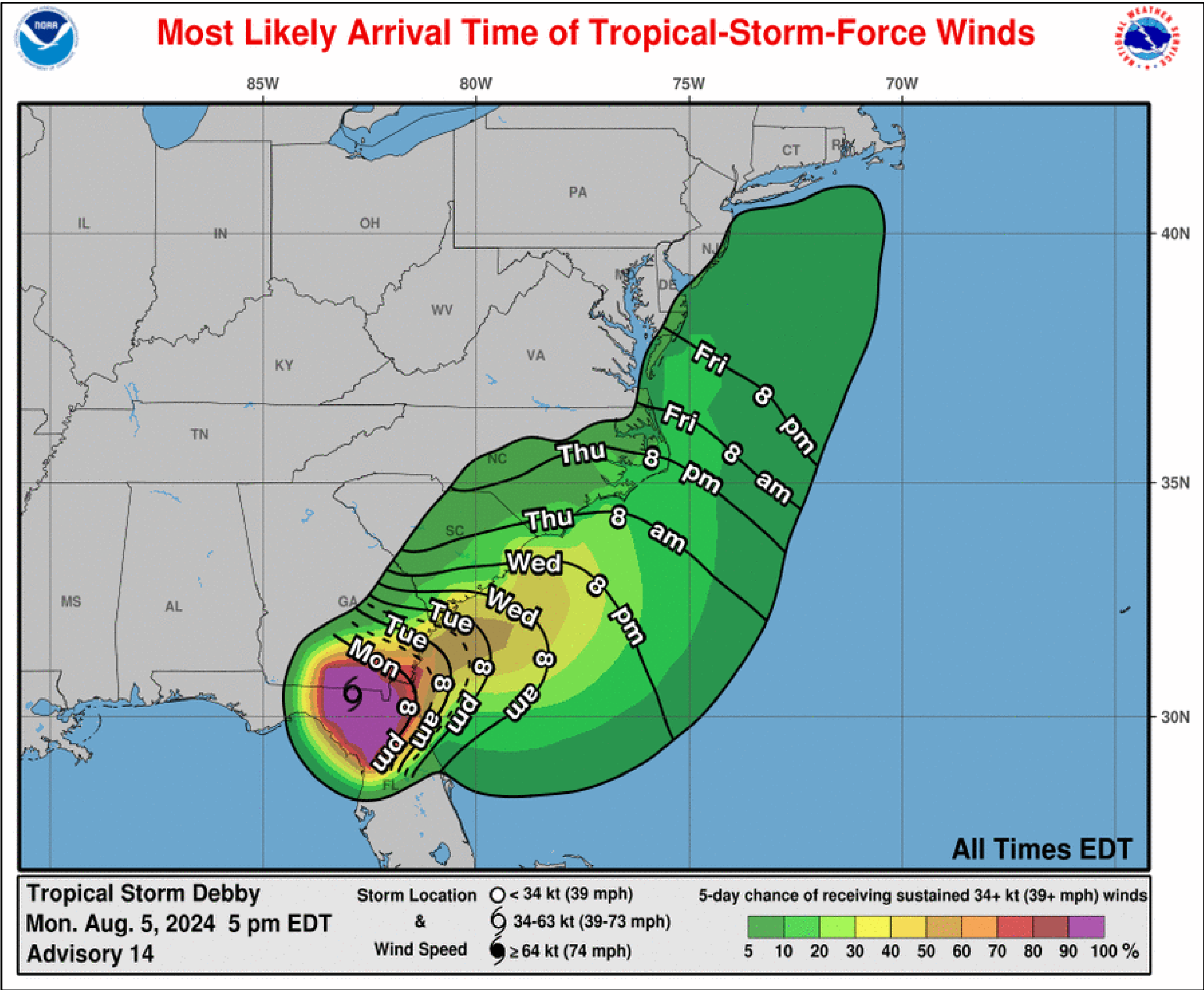
- TAMPA 3%
- CEDAR KEY FL 4%
- JACKSONVILLE 94%
- SAVANNAH 18%
- BEAUFORT 40%
- CHARLESTON 36%
- MYRTLE BEACH 38%

-**Green** indicates probabilities have gone down since last briefing
-**Red** indicates probabilities have gone up since last briefing
-**Black** indicates probabilities remain the same

- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.



Tropical Storm Debby



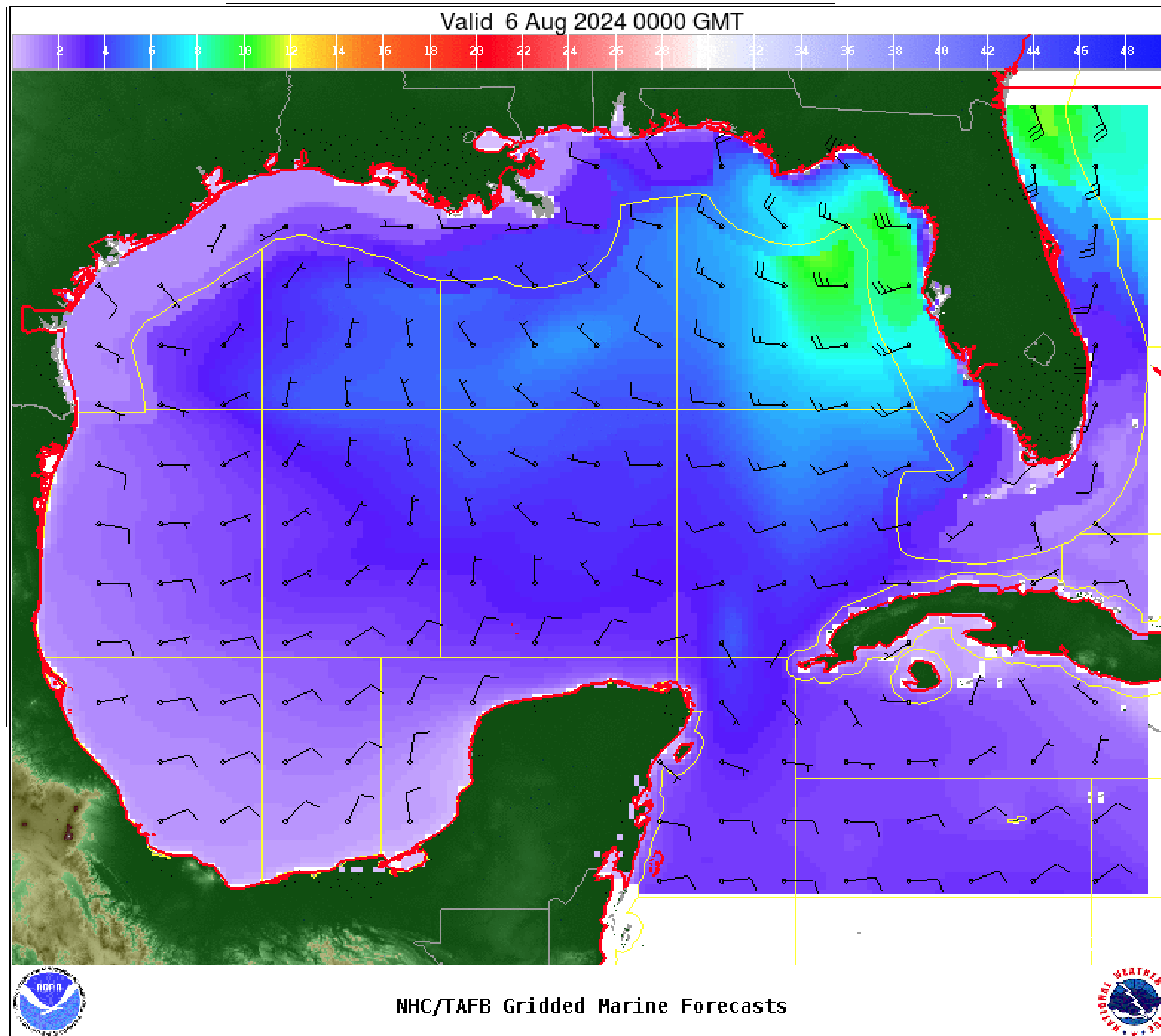
- Jacksonville FL –Tonight
- Savannah GA –Tuesday morning
- South Carolina –Tuesday evening
- The most likely time of arrival of Tropical Storm Force Winds (34kt to 63 kt) for this cyclone based off the current track and wind radii.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.

Wind And Waves

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



6 Hour Forecast

Monday, August 5, 2024 at 8:00 PM EDT

Peak Winds: 30 kt

Peak Seas: 10 ft

- Wave heights are in feet



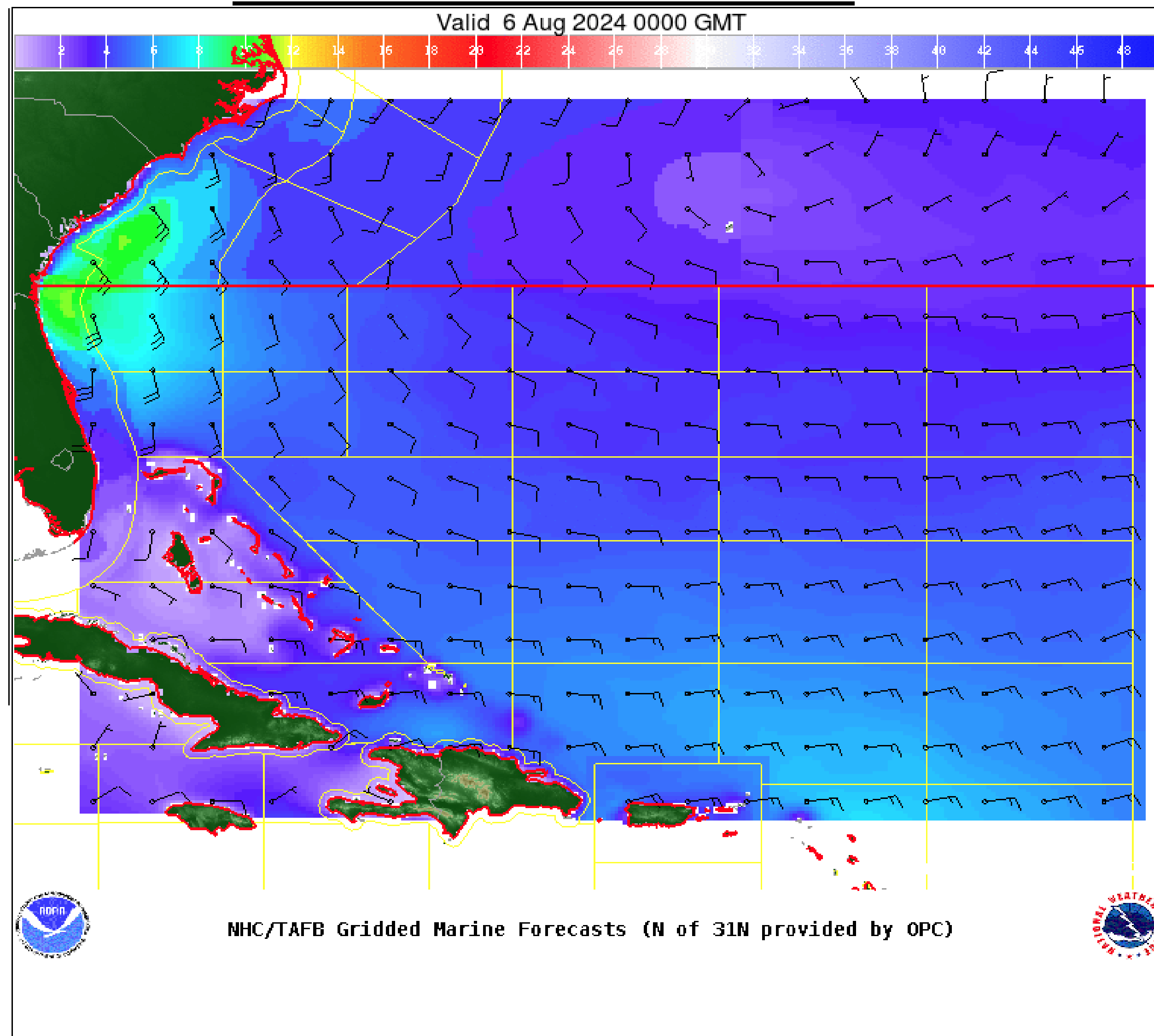
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



6 Hour Forecast

Monday, August 5, 2024 at 8:00 PM EDT

Peak Winds: 35 kt

Peak Seas: 11 ft

- Wave heights are in feet



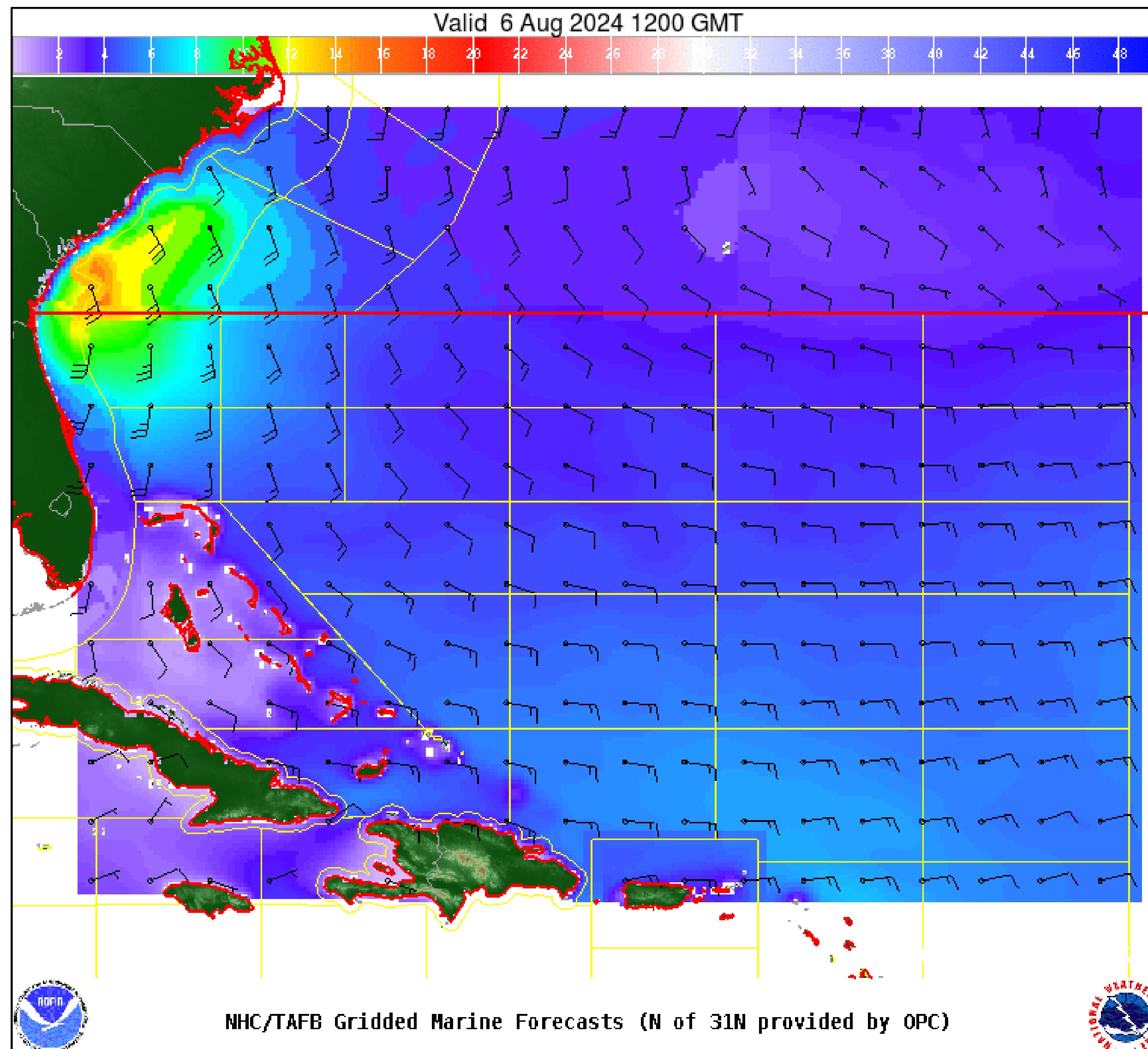
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



12 Hour Forecast

Tuesday, August 6, 2024 at 8:00 AM EDT

Peak Winds: 30 kt

Peak Seas: 15 ft

- Wave heights are in feet



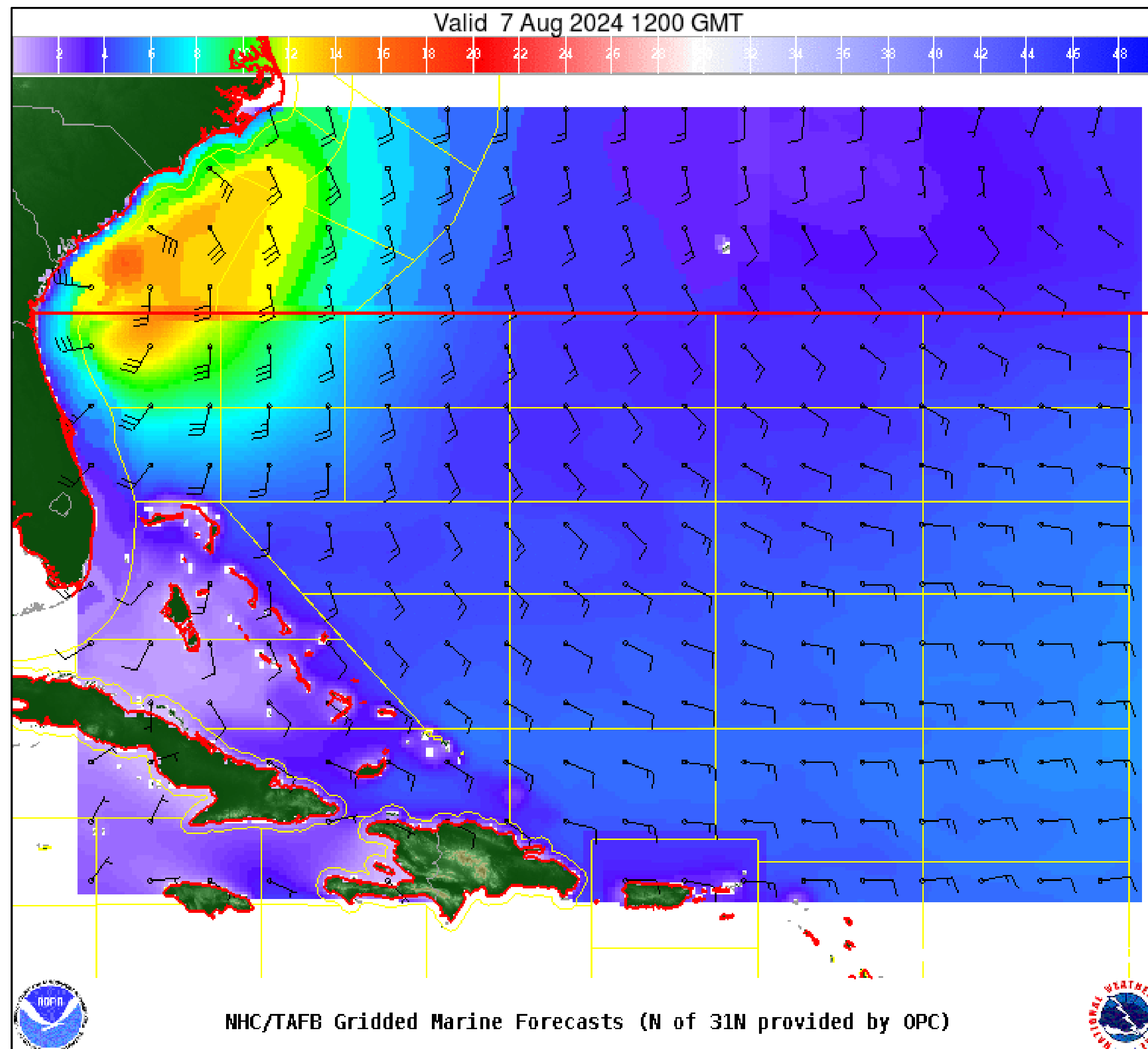
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



36 Hour Forecast

Wednesday, August 7, 2024 at 8:00 AM EDT

Peak Winds: 35 kt

Peak Seas: 17 ft

- Wave heights are in feet



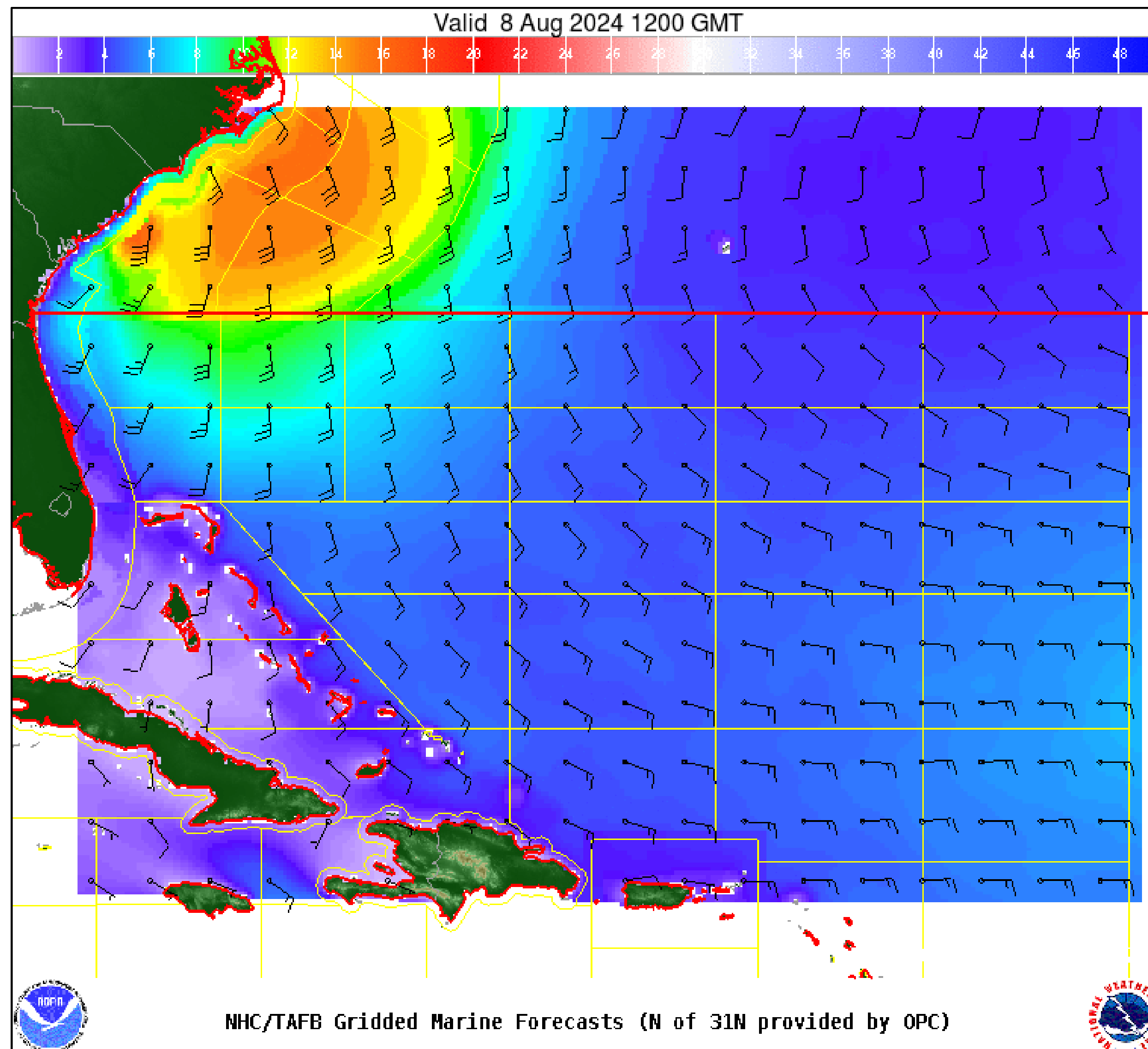
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



48 Hour Forecast

Thursday, August 8, 2024 at 8:00 AM EDT

Peak Winds: 45 kt

Peak Seas: 17 kt

- Wave heights are in feet



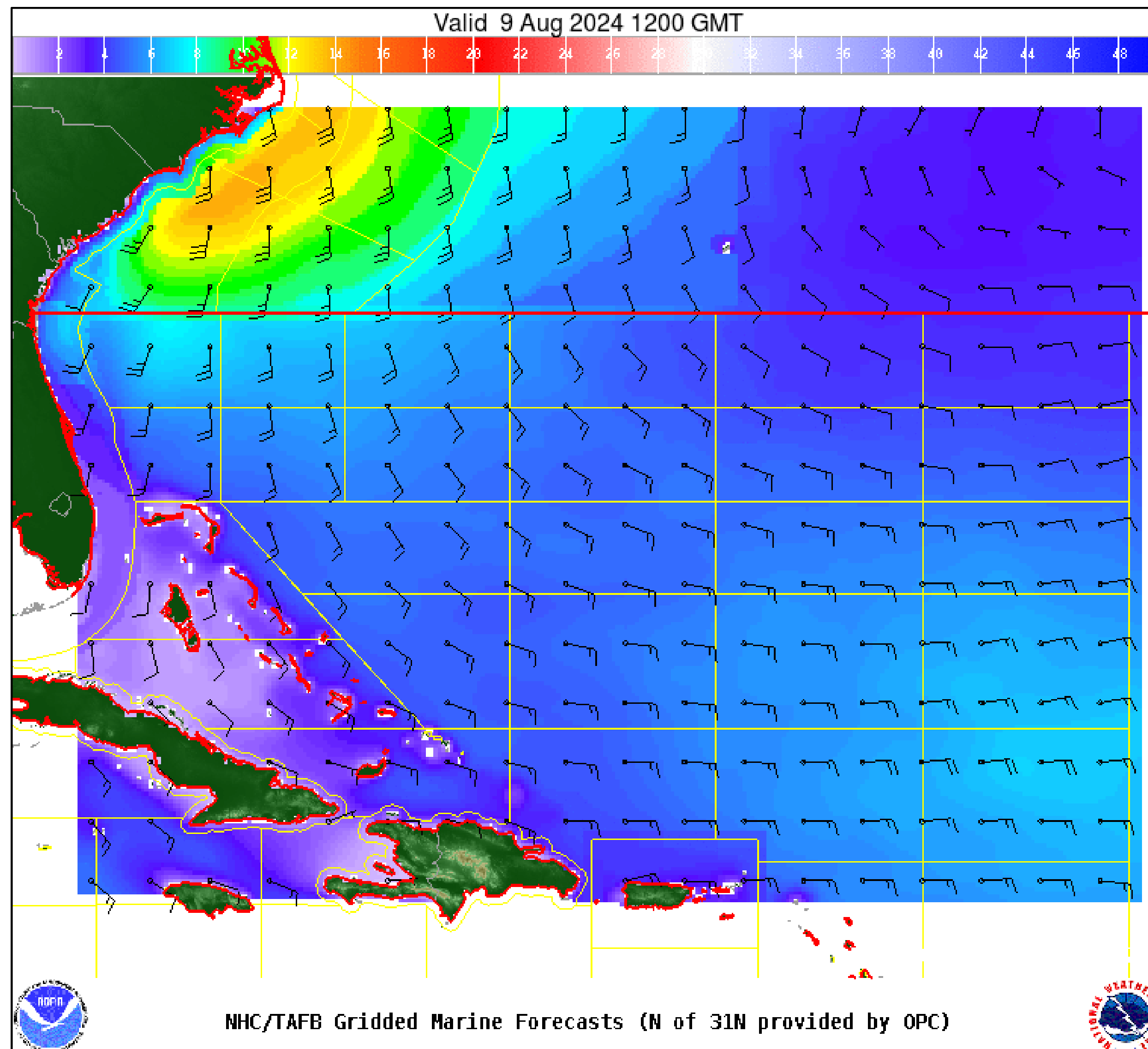
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



72 Hour Forecast

Friday, August 9, 2024 at 8:00 AM EDT

Peak Winds: 25 kt

Peak Seas: 14 ft

- Wave heights are in feet



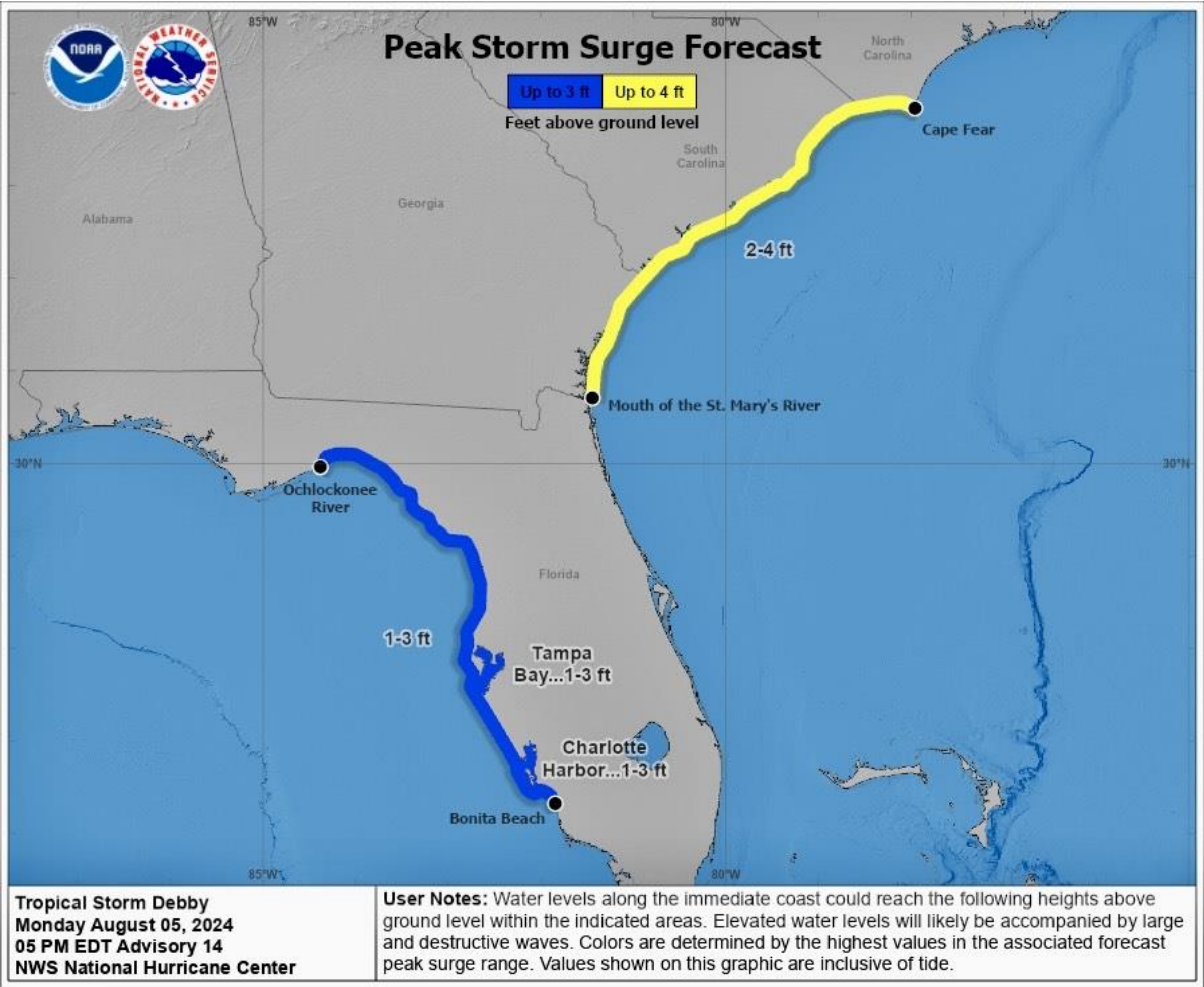
Significant Wave Height (ft)

Potential Peak Storm Surge / Watches and Warnings

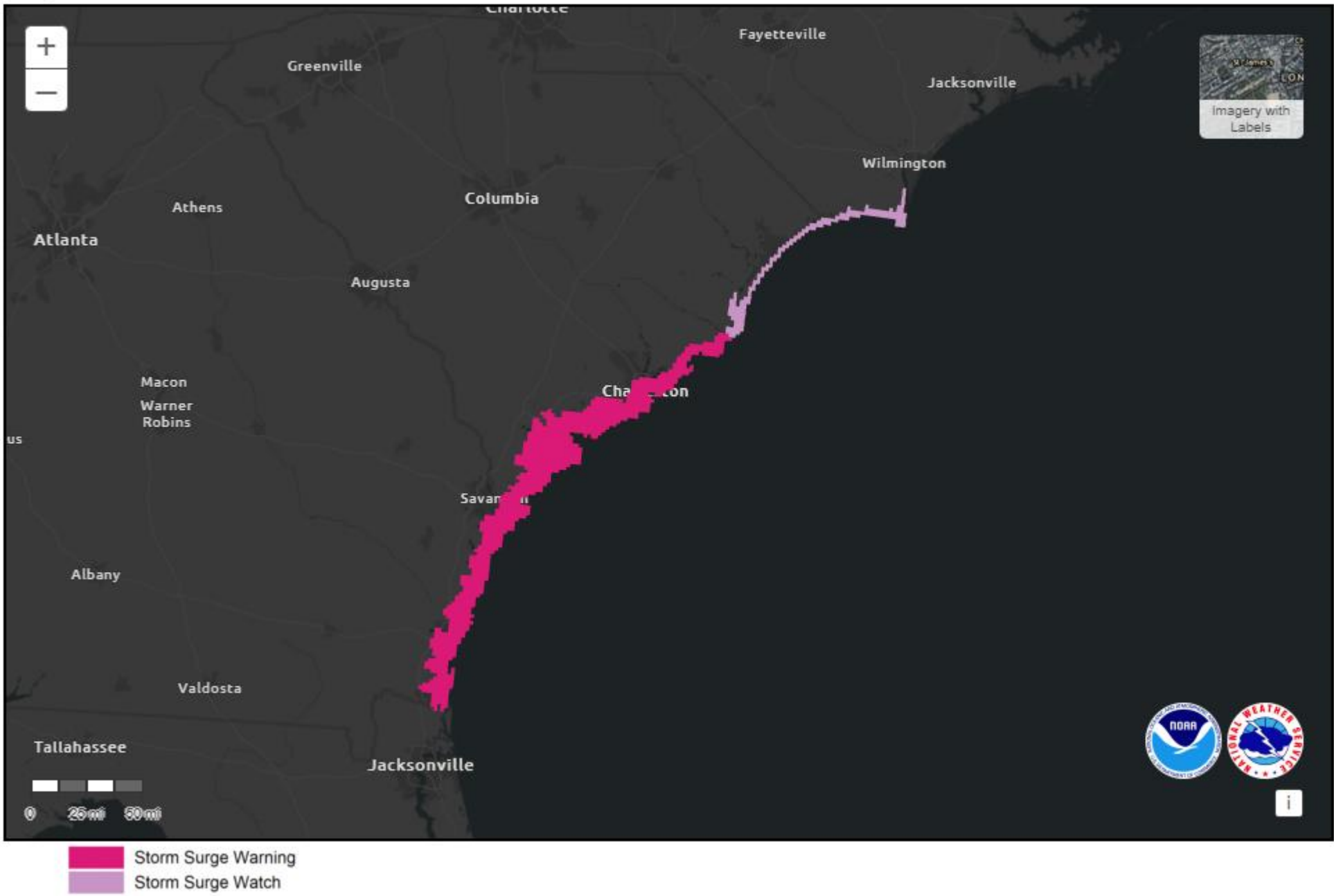


Tropical Analysis and Forecast Branch
NWS National Hurricane Center

Hurricane Debby



Tropical Storm Debby
Advisory 14 — Issued: 5:00 PM EDT Mon Aug 5



Storm surge watch/warning:

- * Discontinued the storm surge warning on the Gulf coast
- * Holding the surge warning for the Atlantic coast
- * Included a surge watch from South Santee River, SC up to Cape Fear, NC

Peak surge forecast:

- * Reduced to 1-3 feet of surge from Bonita Beach north to Ochlockonee River including Charlotte Harbor and Tampa Bay
- * Extended 2-4 feet of surge north from The Mouth of the St. Mary's River, GA up to Cape Fear, NC

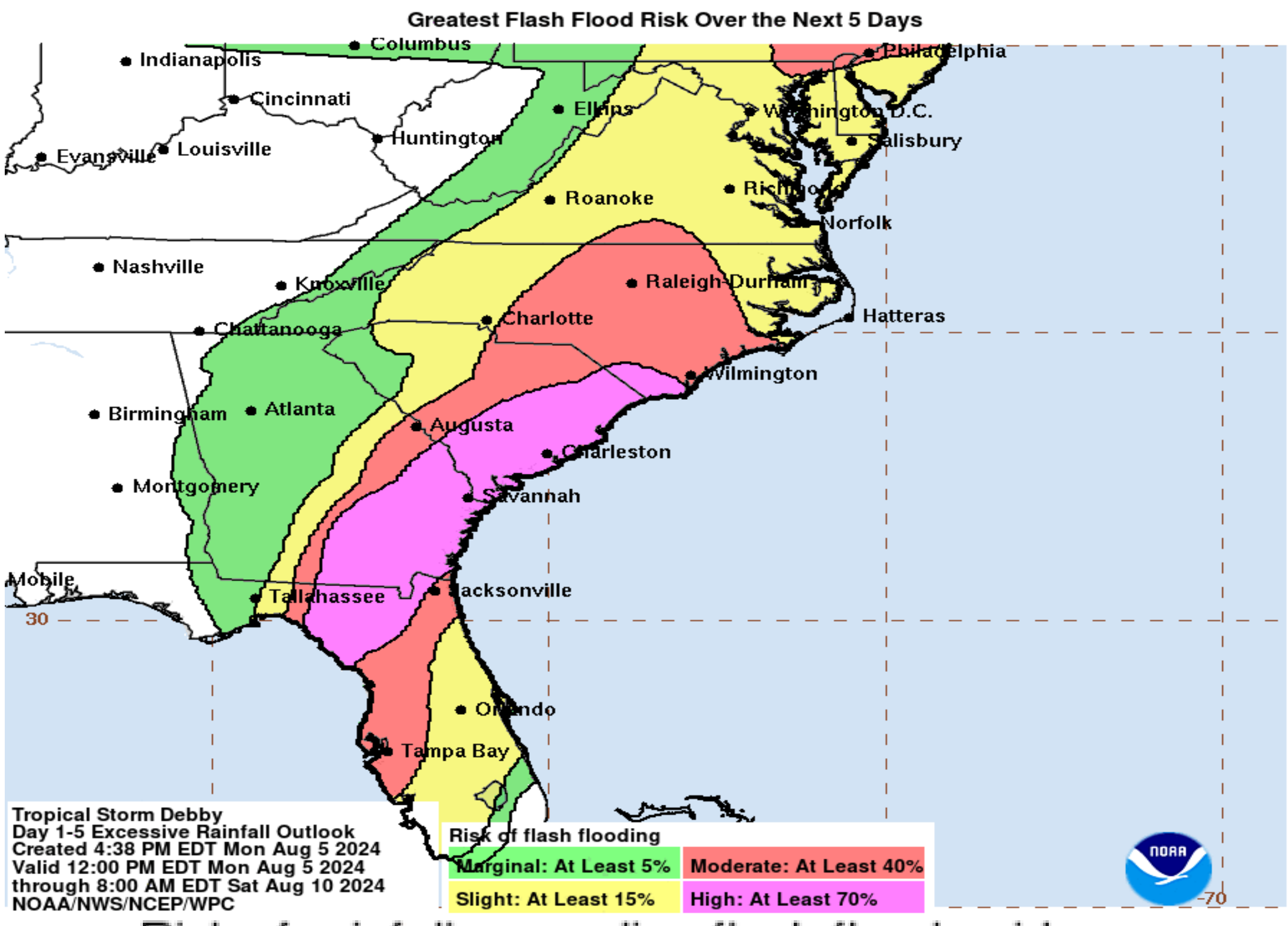
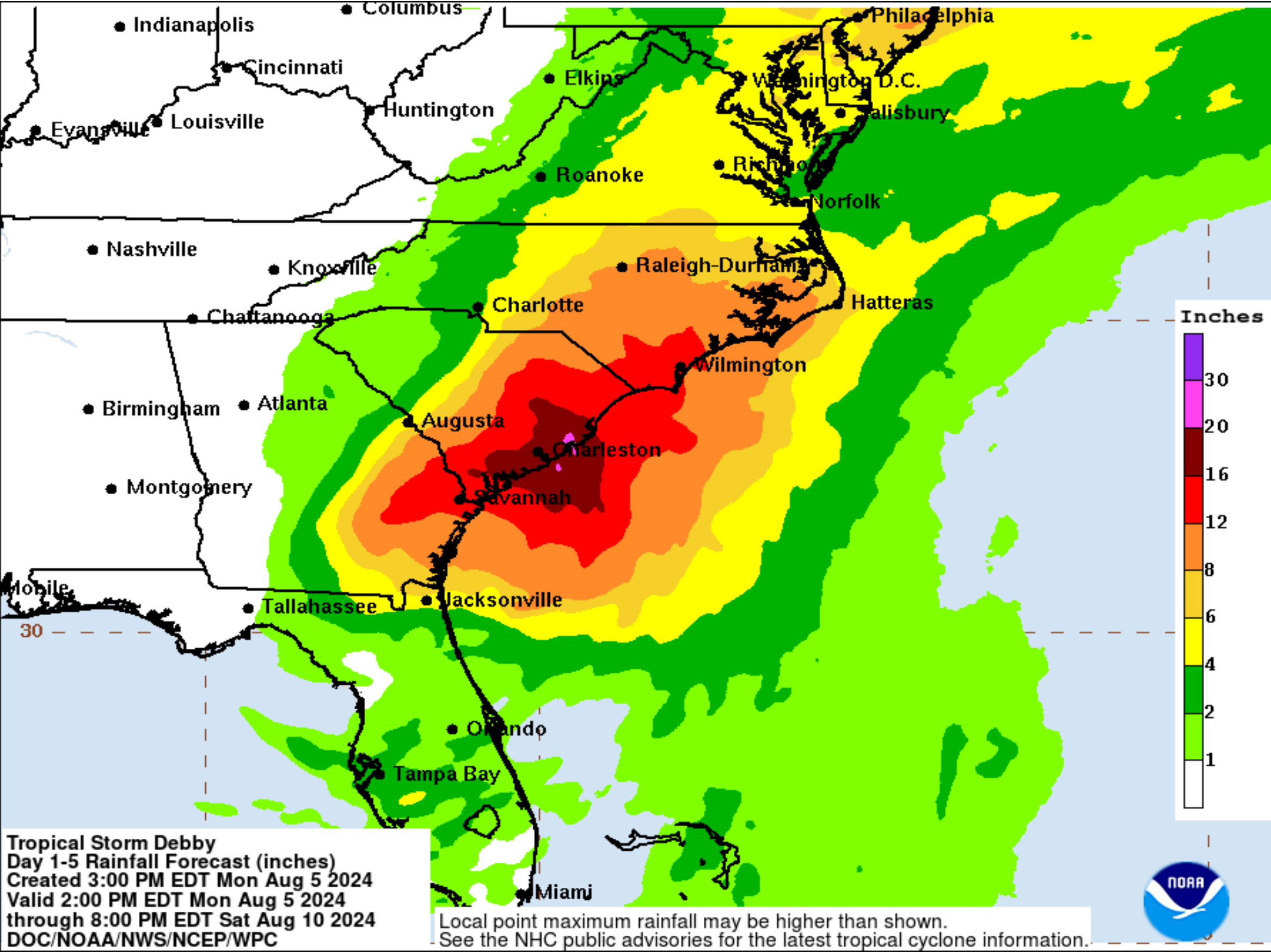
Expected Storm Total Rainfall and Chance of Rainfall Flooding

Tropical Storm Debby

Images from NWS Weather Prediction Center



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Risk of rainfall exceeding flash flood guidance within 25 miles of a point

HIGH: > 50% **SLGT: 10%-20%**
MDT: 20%-50% **MRGL: 5%-10%**

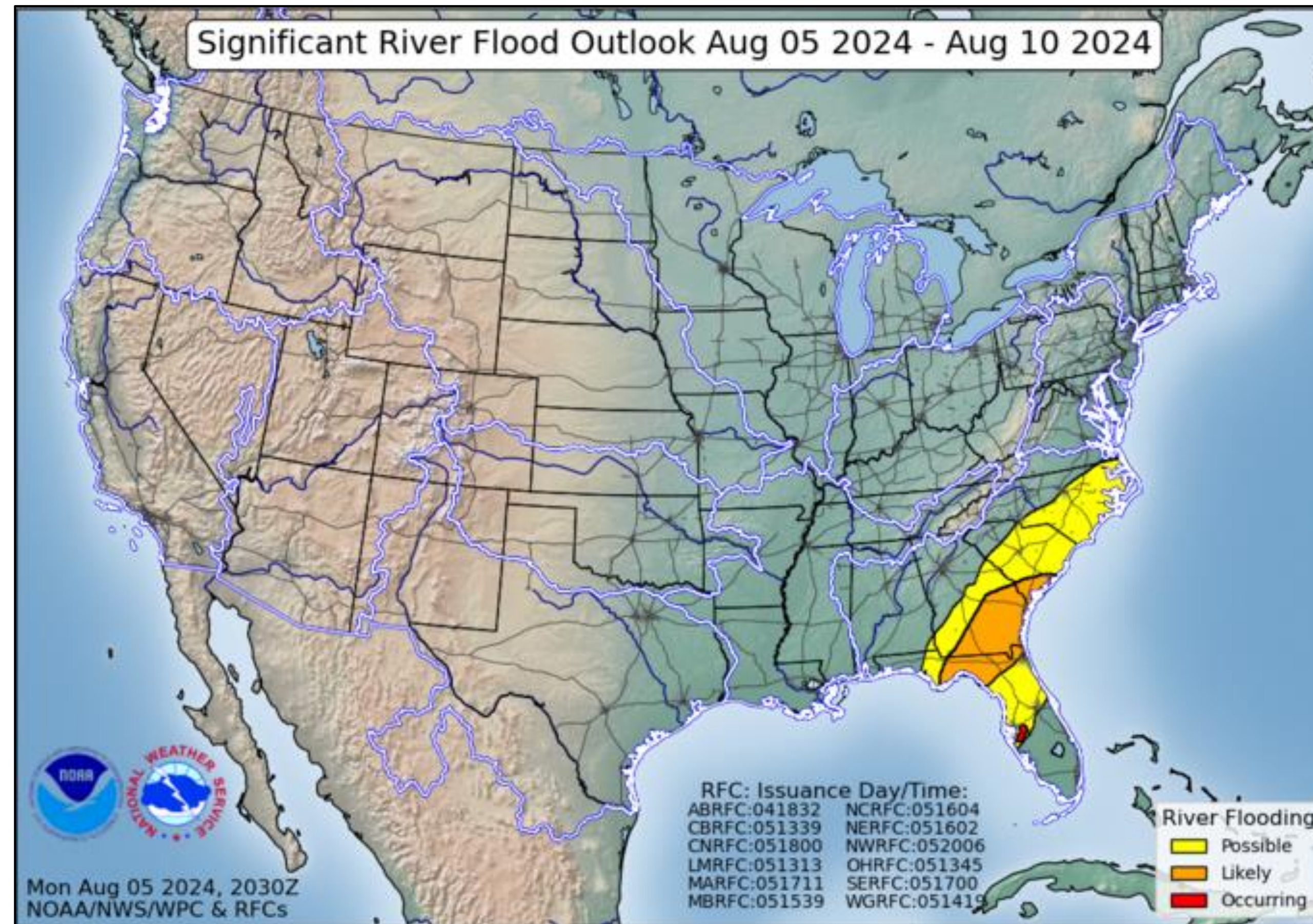
Refer to map legend for Valid Time

Flood Outlook

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



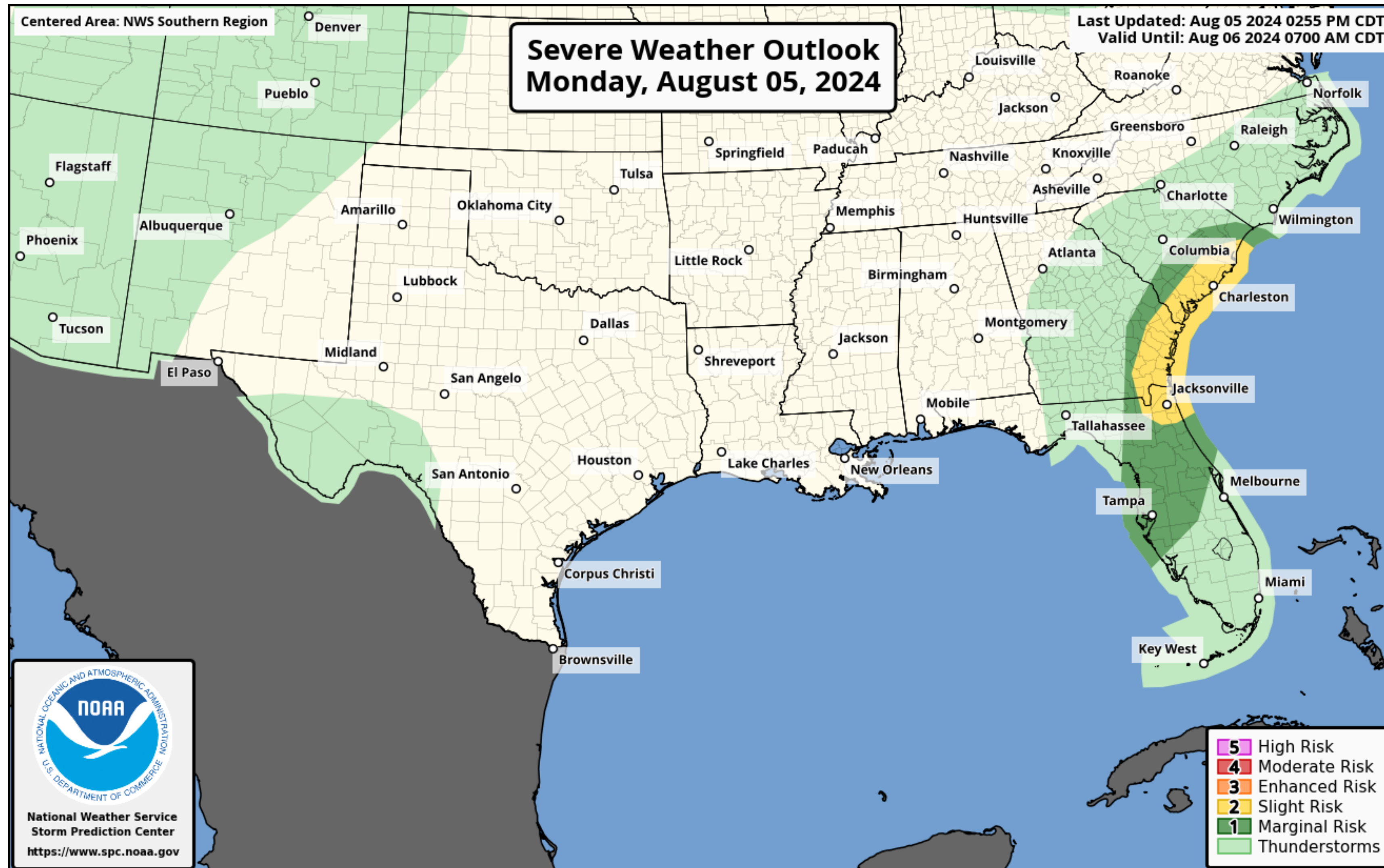
Tornado Outlook – Day 1

Tropical Storm Debby

Image from NWS Storm Prediction Center



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Key Messages

Tropical Storm Debby



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Key Messages for Tropical Storm Debby

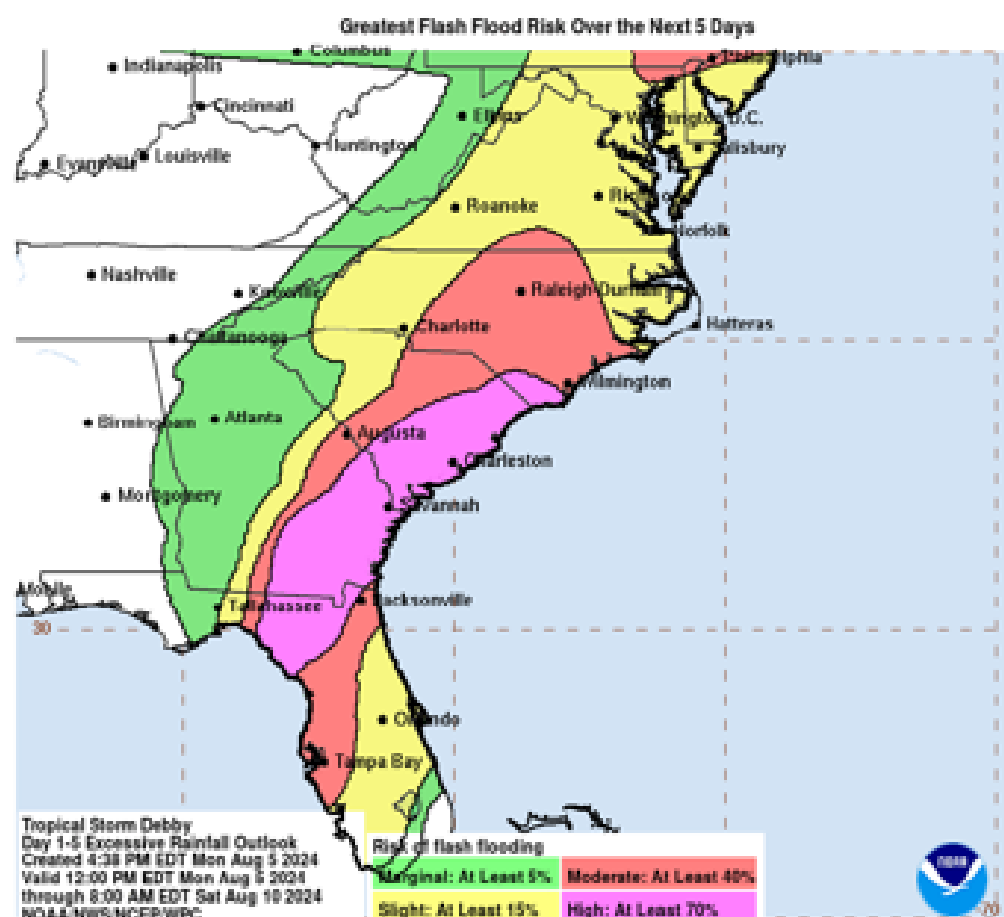
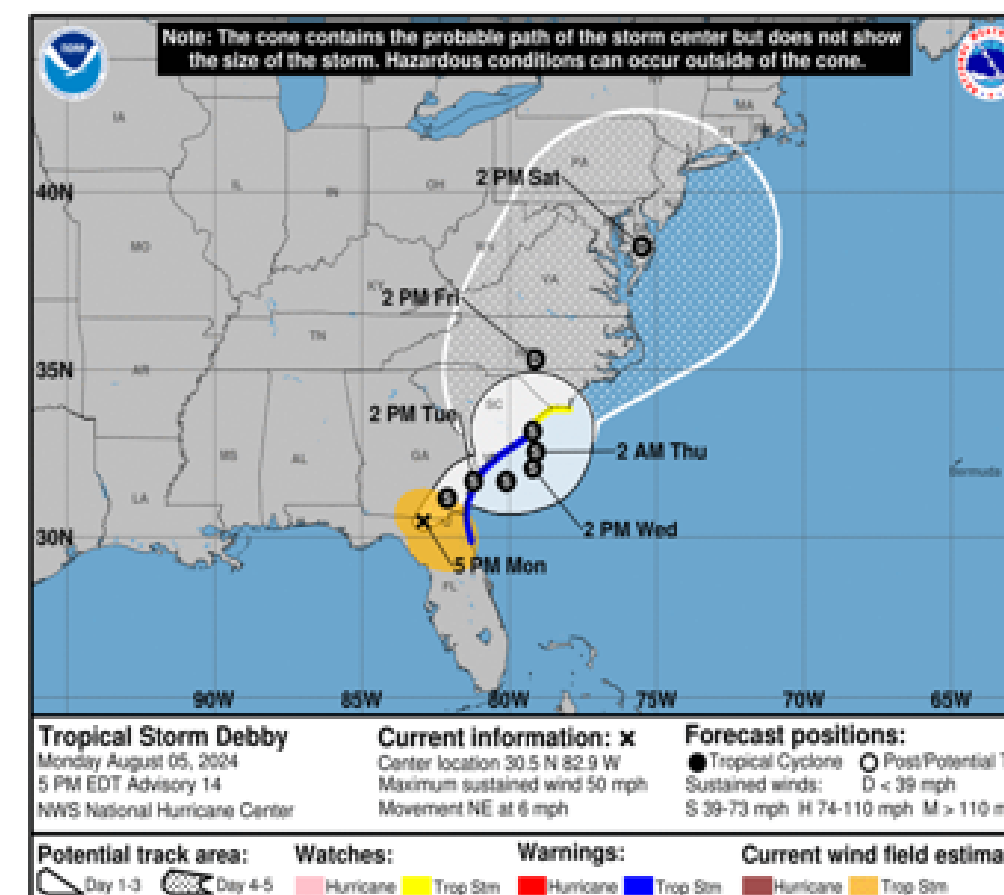
Advisory 14: 5:00 PM EDT Mon Aug 05, 2024



1. Potentially historic heavy rainfall across southeast Georgia and the coastal plain of South Carolina through Saturday morning will likely result in areas of catastrophic flooding. Heavy rainfall will likely result in considerable flooding impacts from portions of central and northern Florida and across portions of central and northeast North Carolina through Saturday morning.

2. Dangerous storm surge and tropical storm conditions will spread northward along the southeast U.S. coast from northeastern Florida to North Carolina through the middle of the week. Storm Surge and Tropical Storm watches and warnings have been issued for portions of these areas. Residents in the Storm Surge watch and warning area should follow any advice given by local officials.

3. In portions of Florida where Debby has passed, deadly hazards remain, including downed power lines and flooded areas. Ensure generators are properly ventilated to avoid carbon monoxide poisoning. Exercise caution when using chainsaws and power tools, and drink plenty of water to avoid heat exhaustion.



For more information go to hurricanes.gov

Marine Key Messages:

- Conditions will continue to improve over the NE Gulf of Mexico.
- Winds will likely peak to 45 kt over the Atlantic Thursday. While seas will build to 17 ft.
- Conditions over the D7 Atlantic area will begin to improve Friday.

You can contact the
Tropical Analysis and
Forecast Branch at
305-229-4424



TROPICAL STORM DEBBY BRIEFING

TIME of NEXT NHC Advisory:

3 UTC: 11 PM EDT

*The Next Briefing Will Be:
Tuesday 9:00 AM EDT*

You can always find get the latest graphics and information for this storm at www.hurricanes.gov



NHC_TAFB

www.nhc.noaa.gov