

IMPACTS FOR D7 (through next 5 days)

Winds – Medium

Storm Surge – Low

Rainfall/Flash Flooding – High

Tornadoes – None

Waves - High

TROPICAL STORM ERNESTO BRIEFING



8:30 AM EDT

Wednesday, August 14, 2024

Prepared by:

Jeff Lewitsky

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*



NHC_TAFB



www.nhc.noaa.gov

Key Messages

Tropical Storm Ernesto



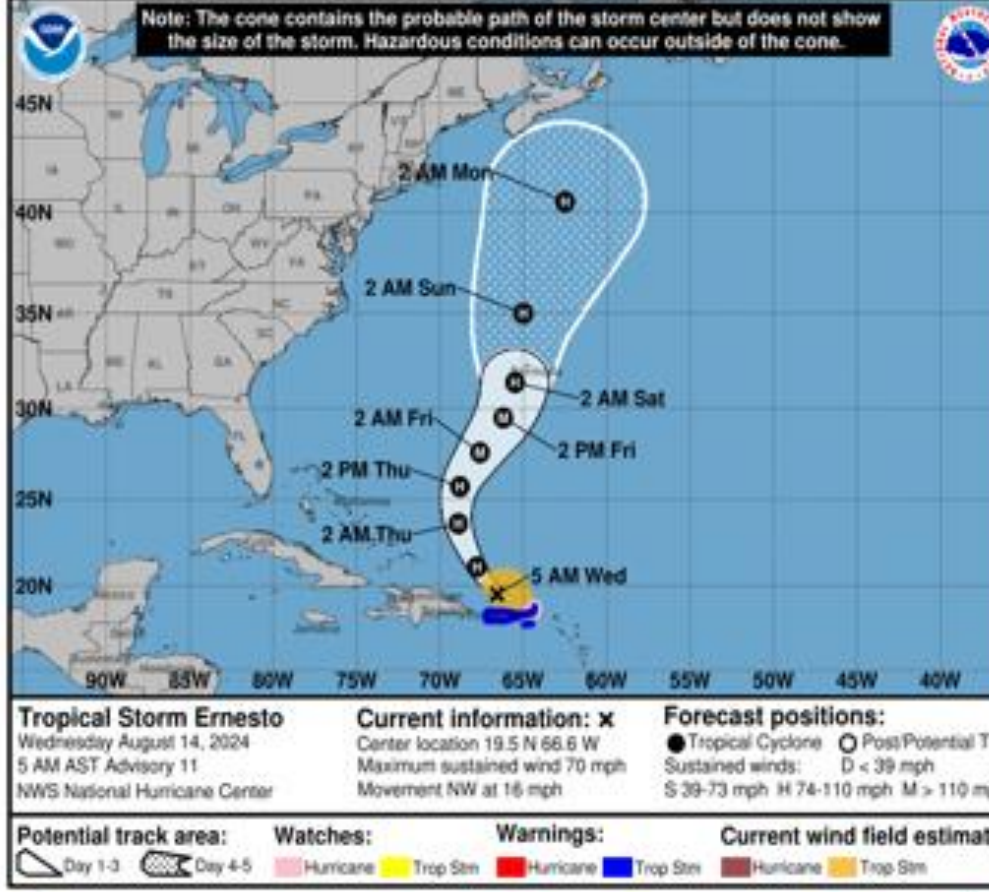
Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Key Messages for Tropical Storm Ernesto

Advisory 11: 5:00 AM AST Wed Aug 14, 2024

1. Tropical storm conditions are expected to continue over the Virgin Islands, Puerto Rico, Culebra, and Vieques during the next several hours.
2. Heavy rainfall will result in locally considerable flash flooding and mudslides today over the Virgin Islands and into portions of Puerto Rico.
3. Ernesto is likely to bring impacts to Bermuda late this week, and interests there should monitor the progress of this system.
4. Swells generated by Ernesto are expected to affect portions of the Virgin Islands, Puerto Rico, the Dominican Republic, the Turks and Caicos, and the Bahamas during the next few days, and then reach the east coast of the United States and Bermuda late this week and into the weekend. These swells are likely to cause life-threatening surf and rip current conditions.



Tropical Storm Ernesto
Wednesday August 14, 2024
5 AM AST Advisory 11
NWS National Hurricane Center

Current information: x
Center location 19.5 N 66.6 W
Maximum sustained wind 70 mph
Movement NW at 16 mph

Forecast positions:
● Tropical Cyclone ○ Post-Potential TC
Sustained winds: D < 39 mph
S 39-73 mph H 74-110 mph M > 110 mph

Potential track area: Day 1-3 Day 4-5
Watches: Hurricane Trop Stm
Warnings: Hurricane Trop Stm
Current wind field estimate: Hurricane Trop Stm

Most Likely Arrival Time of Tropical-Storm-Force Winds

Tropical Storm Ernesto
Wed. Aug. 14, 2024 5 am AST
Advisory 11

Storm Location ○ = 34 kt (39 mph)
○ = 34-63 kt (39-73 mph)
● = 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds
5 10 20 30 40 50 60 70 80 90 100 %

All Times AST

For more information go to hurricanes.gov

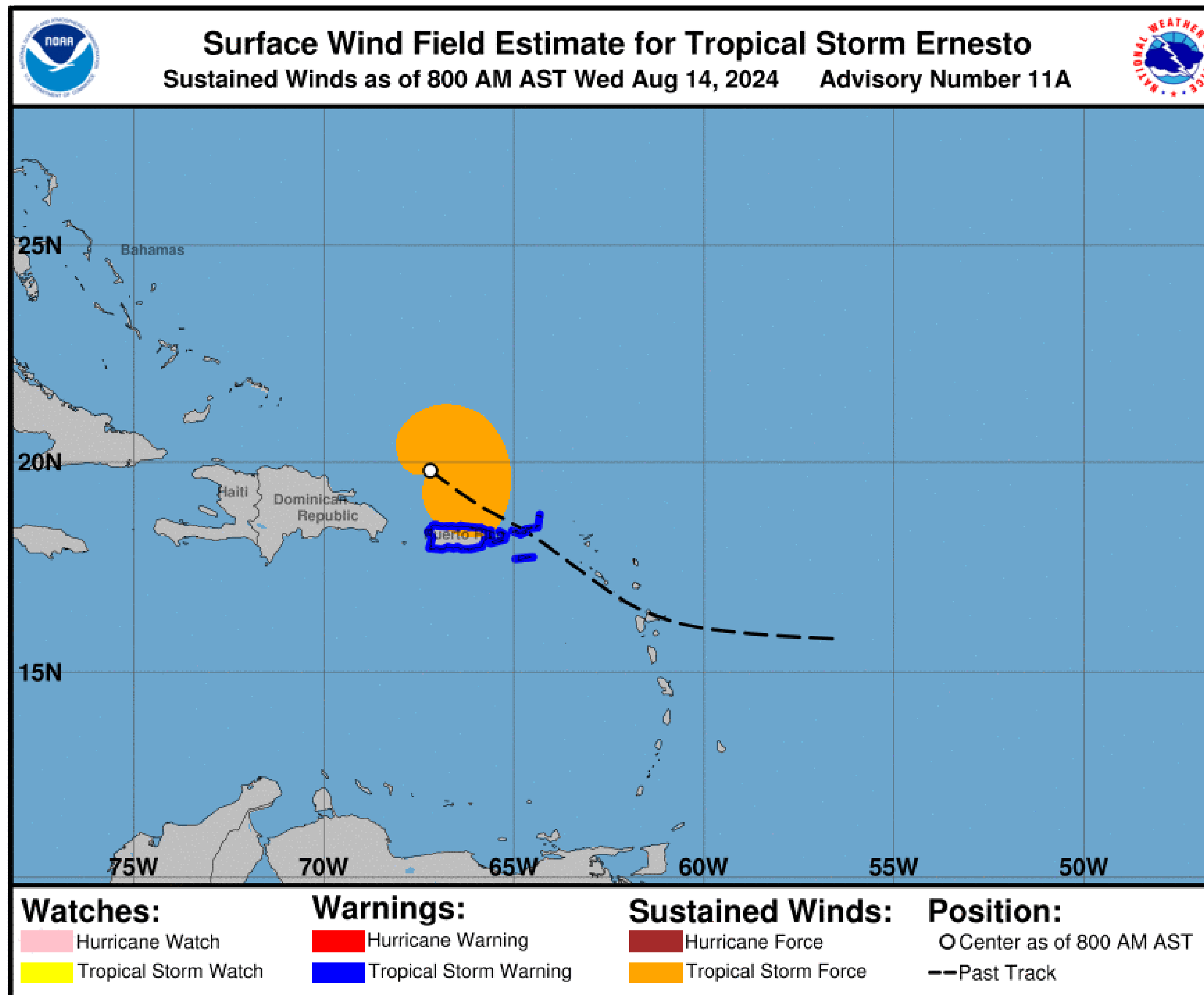
- Marine Key Messages:
- Very large seas will persist across the USVI/PR, peaking this morning
- Tonight into early Thursday, seas will slowly subside and subside below 8 ft

Situation Overview

Tropical Storm Ernesto



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NWS National Hurricane Center



**...FLOODING RAINS FROM ERNESTO
CONTINUE ACROSS PUERTO RICO
AND THE VIRGIN ISLANDS...**

Summary of 800 AM EDT Information

LOCATION...19.8N 67.2W

About 109 nm NW of San Juan Puerto Rico

Maximum Sustained Winds...60 kt

Present Movement...NW at 14 kt

Peak Seas...25 ft

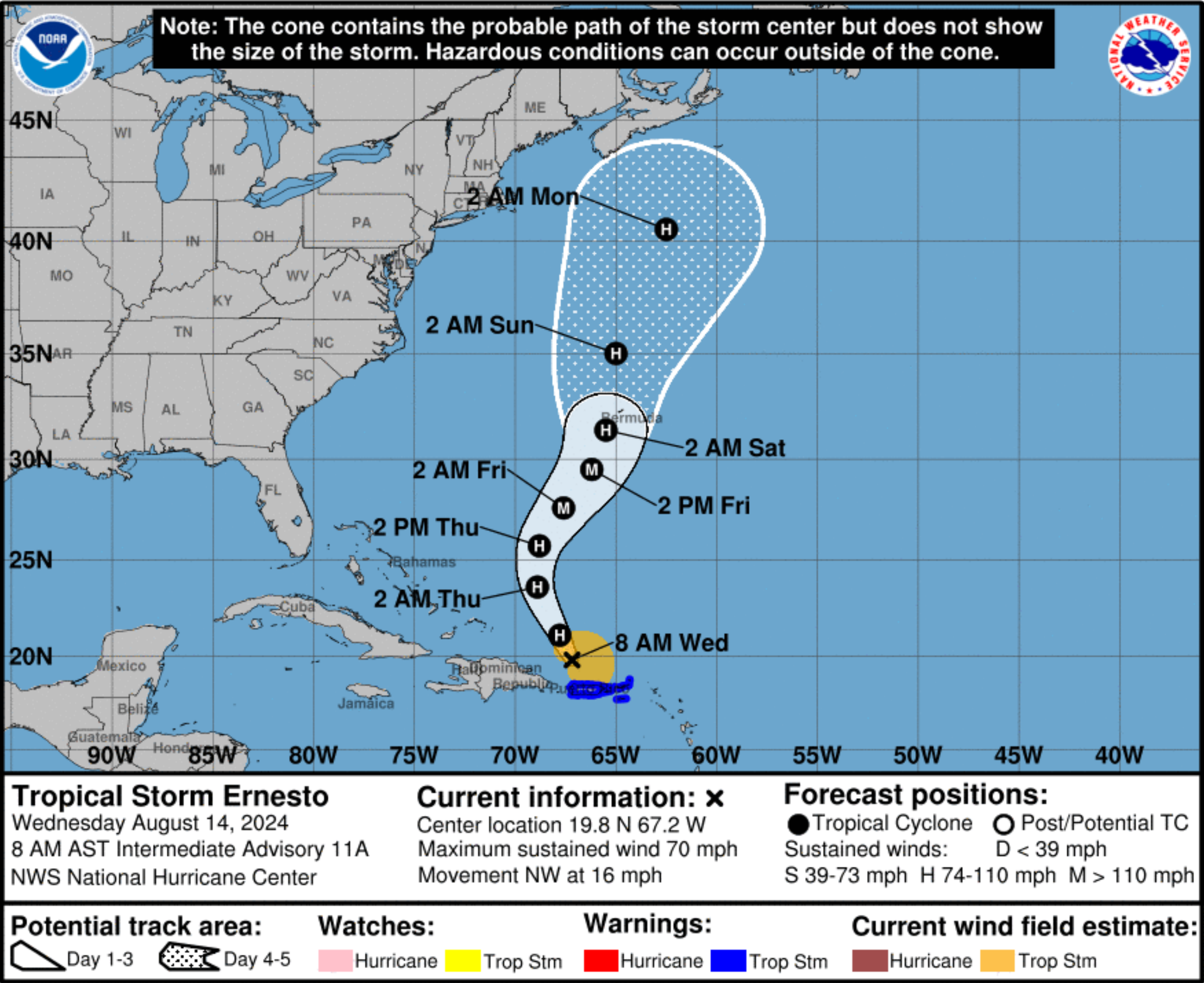
12 ft seas...200NE 145SE 60SW 180NW.

Forecast Information

Tropical Storm Ernesto



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

- A turn toward the north-northwest and north with a gradual decrease in forward speed is expected tonight and Thursday.
- On the forecast track, the center of Ernesto will move northward away from Puerto Rico through today.
- Ernesto should then move over the western Atlantic later in the week and be nearing Bermuda on Saturday.
- Ernesto is expected to become a hurricane later today and could become a major hurricane in a couple of days.
- 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

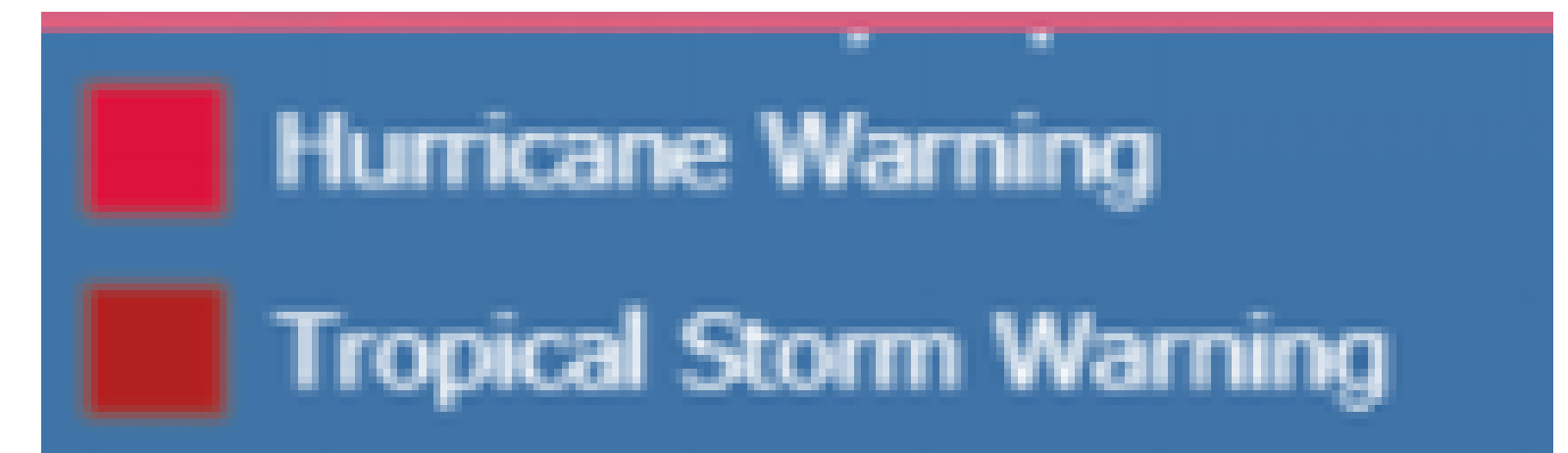
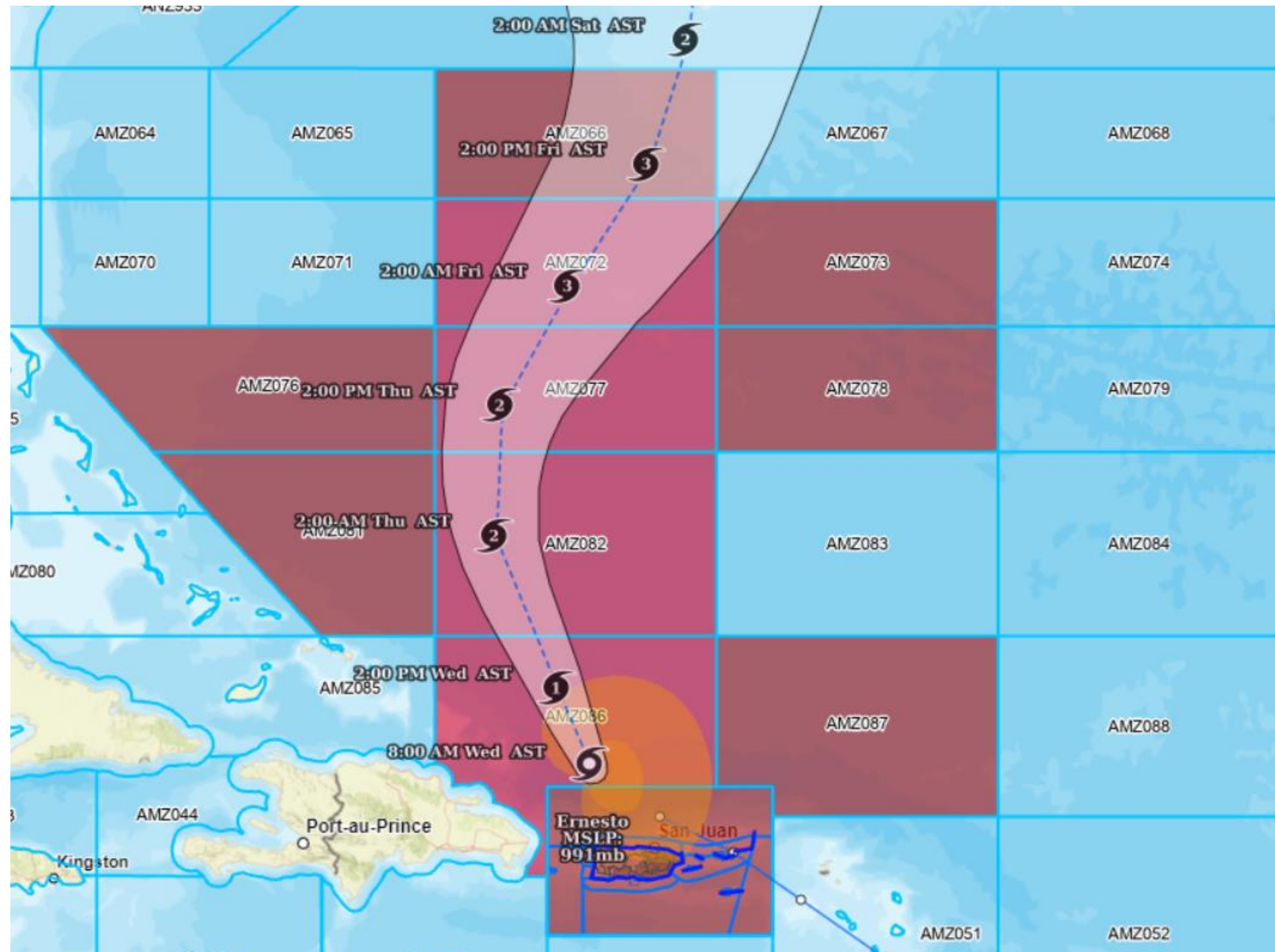
** Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

Hazards Map

Tropical Storm Ernesto



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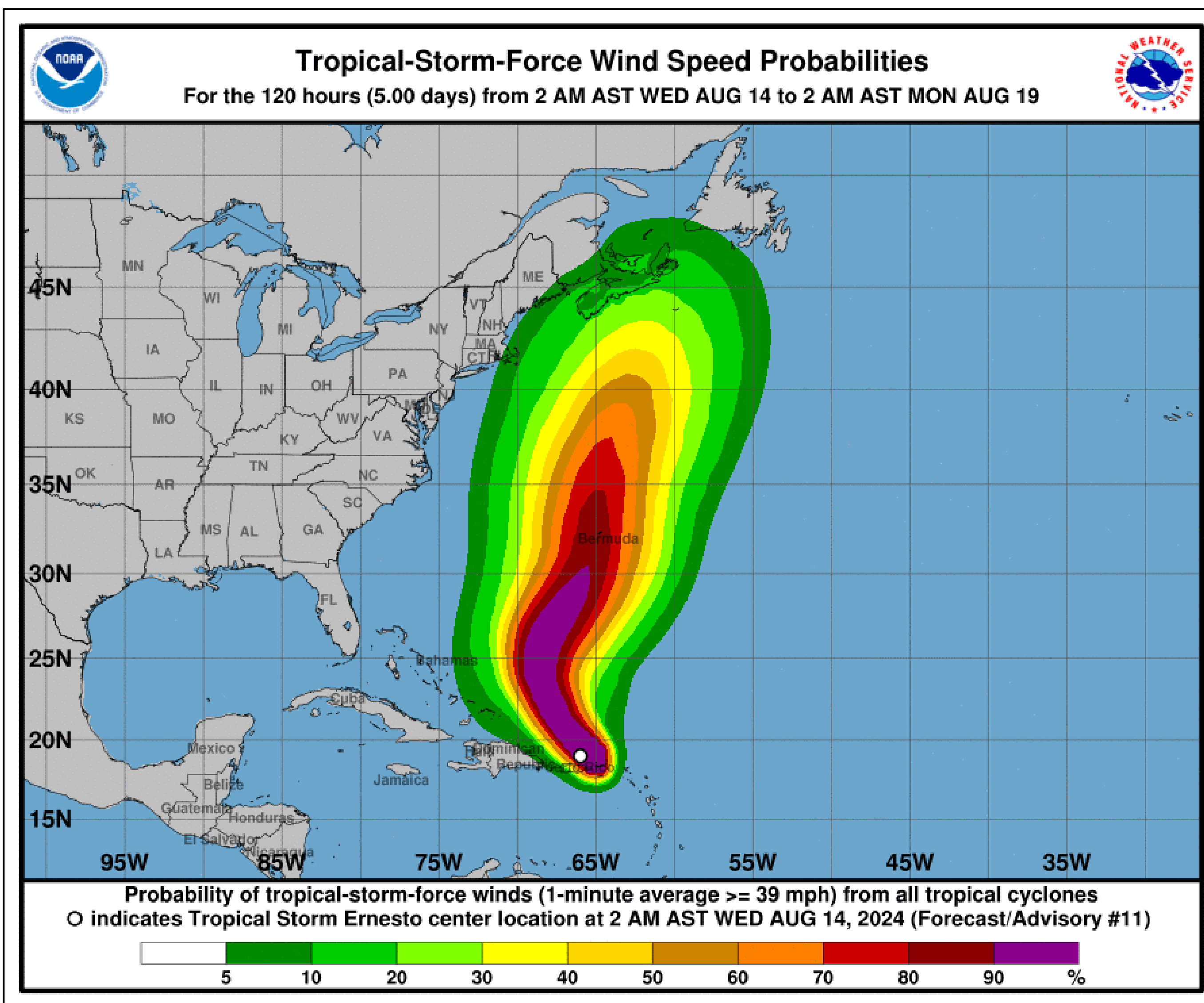


T.S. Wind Speed Probabilities

Tropical Storm Ernesto



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■ Ponce 0%

■ Aguadilla 5%

■ San Juan 85%

■ Vieques 100%

■ Culebra 100%

■ Saint Thomas 100%

■ Saint Croix 50%

■ 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.

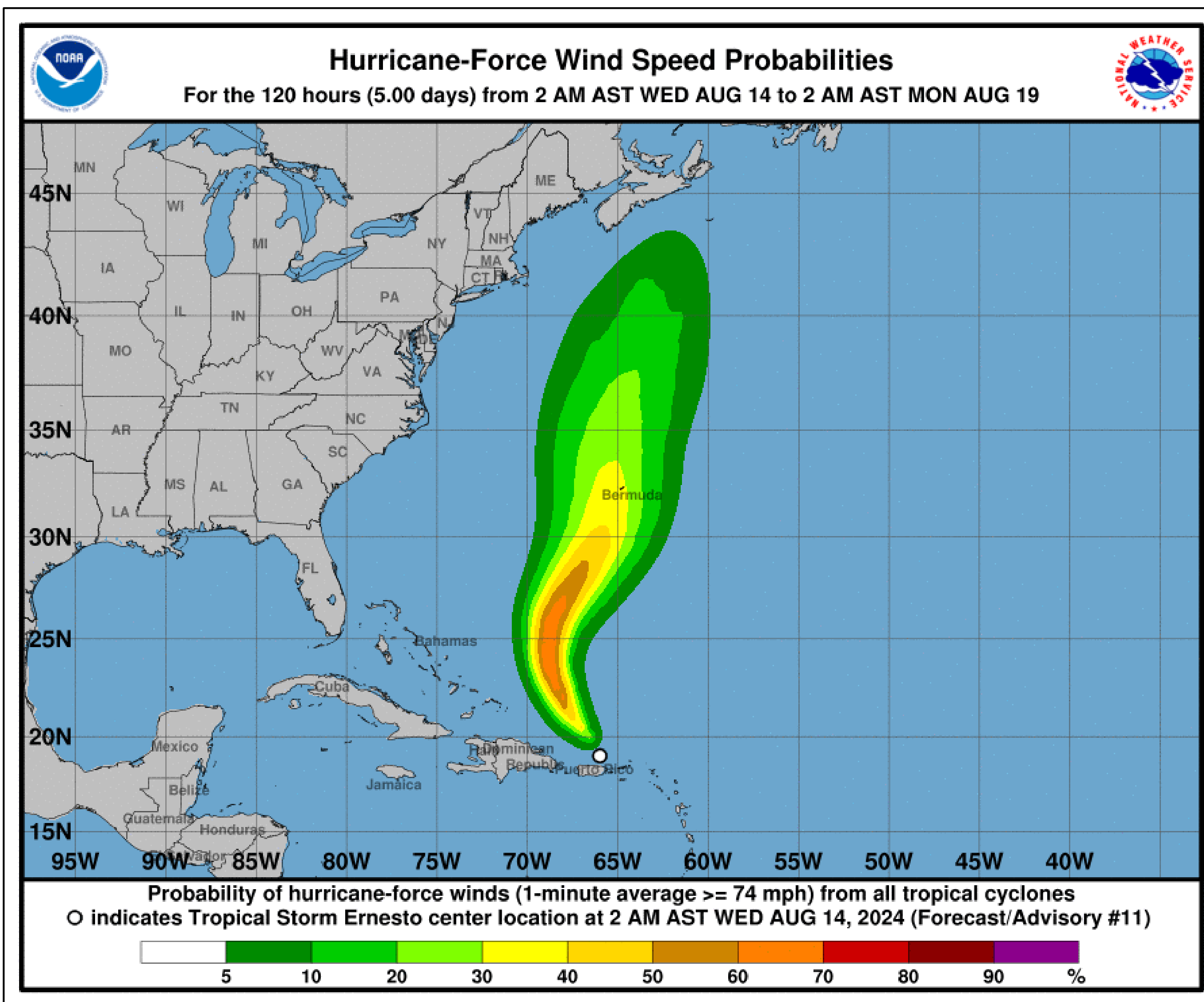
-**Green** indicates probabilities have gone down since last briefing
-**Red** indicates probabilities have gone up since last briefing
-**Black** indicates probabilities remain the same

Hurricane Wind Speed Probabilities

Tropical Storm Ernesto



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NWS National Hurricane Center



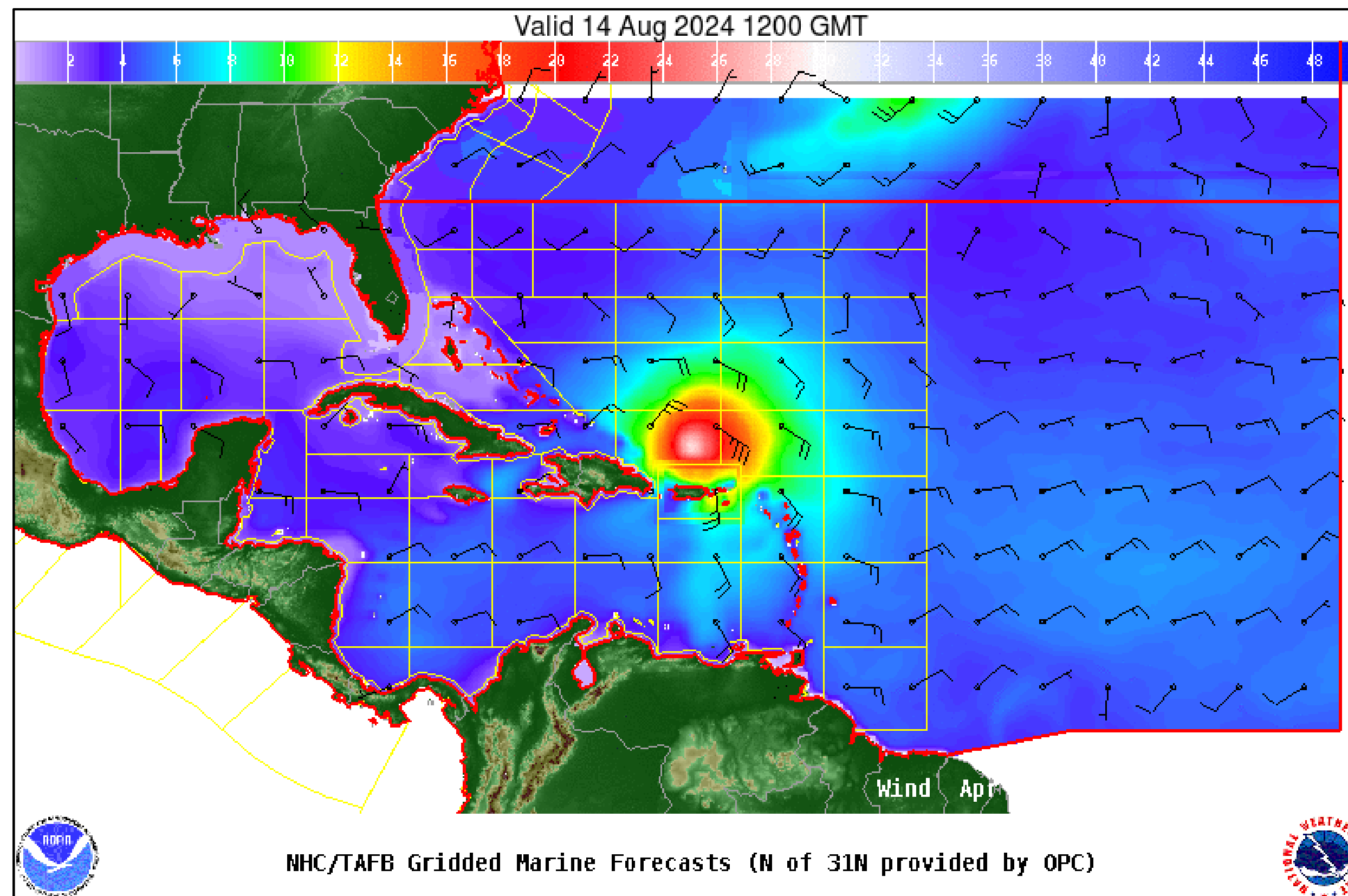
- **PR and US VI: None**
- Probabilities of sustained hurricane force winds (64 kt +) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
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- Red through purple are the highest probabilities of 71%-100%
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Wind And Waves

Tropical Storm Ernesto



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Current Conditions

Wednesday, August 14th at 8am EDT

Peak Winds: 60 kt

Peak Seas: 25 ft

- Wave heights are in feet



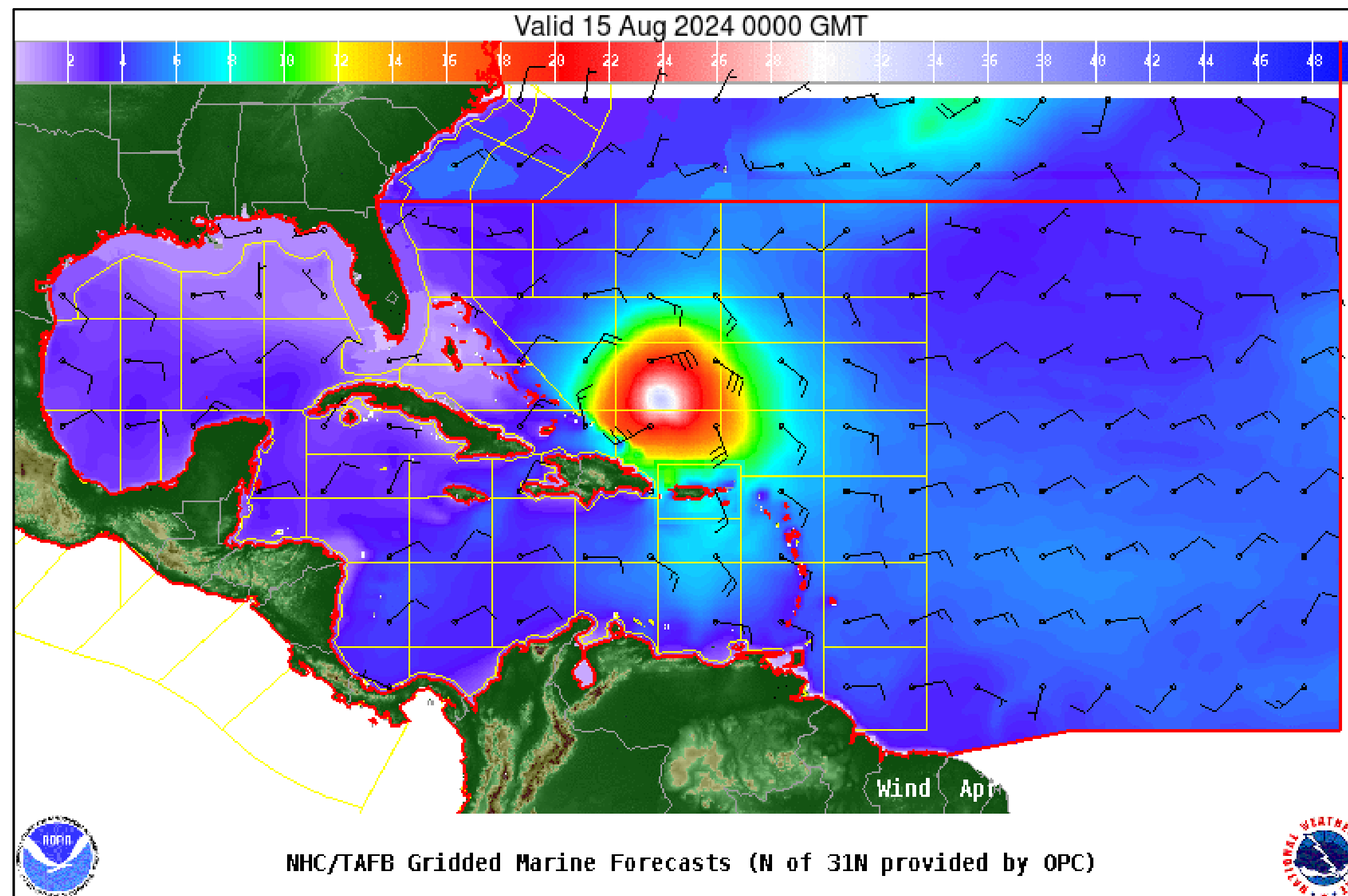
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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12 Hour Forecast

Wednesday, August 14th at 8pm EDT

Peak Winds: 75 kt

Peak Seas: 32 ft

- Wave heights are in feet



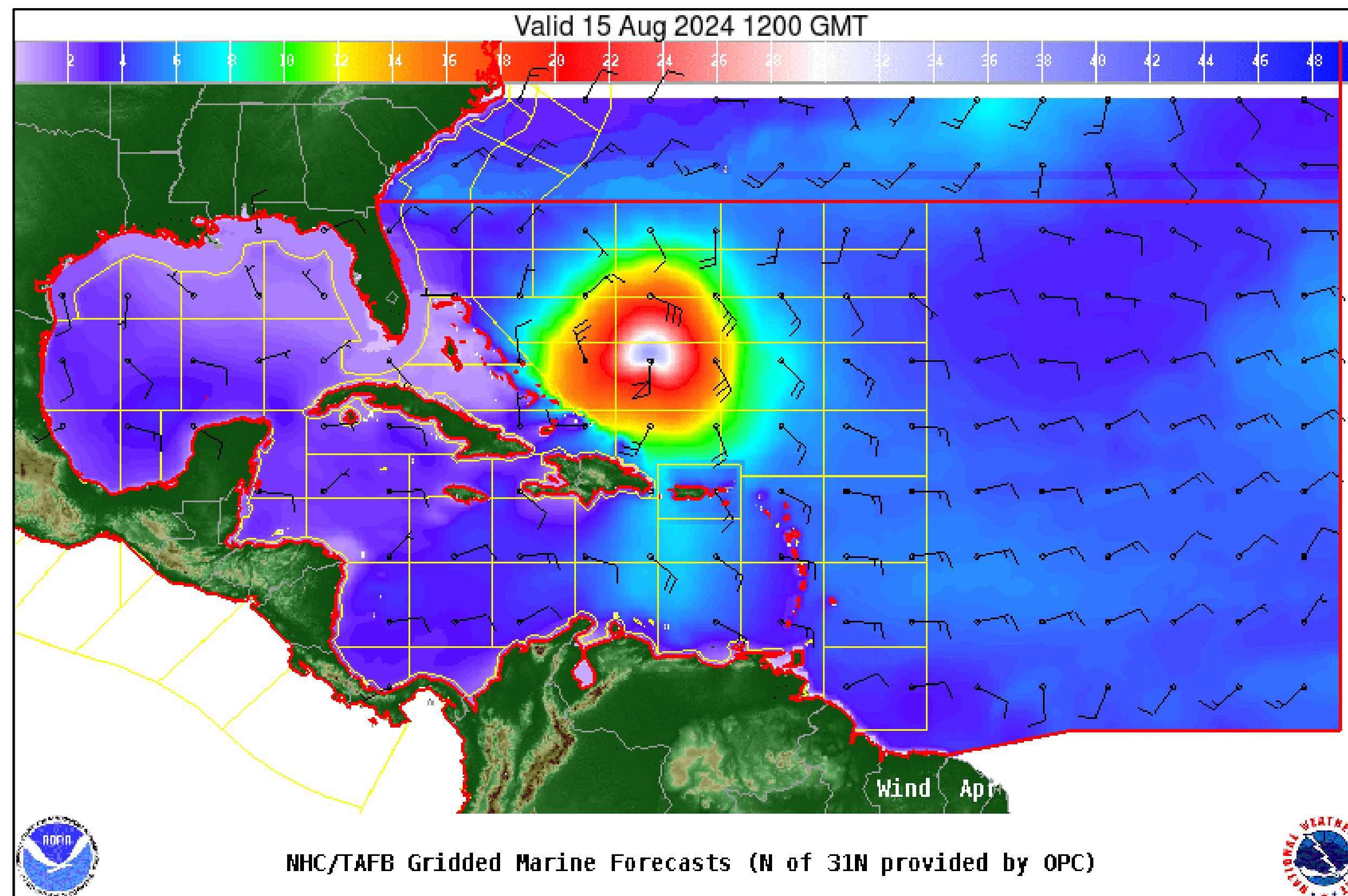
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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24 Hour Forecast

Thursday, August 15th at 8am EDT

Peak Winds: 90 kt

Peak Seas: 36 ft

- Wave heights are in feet



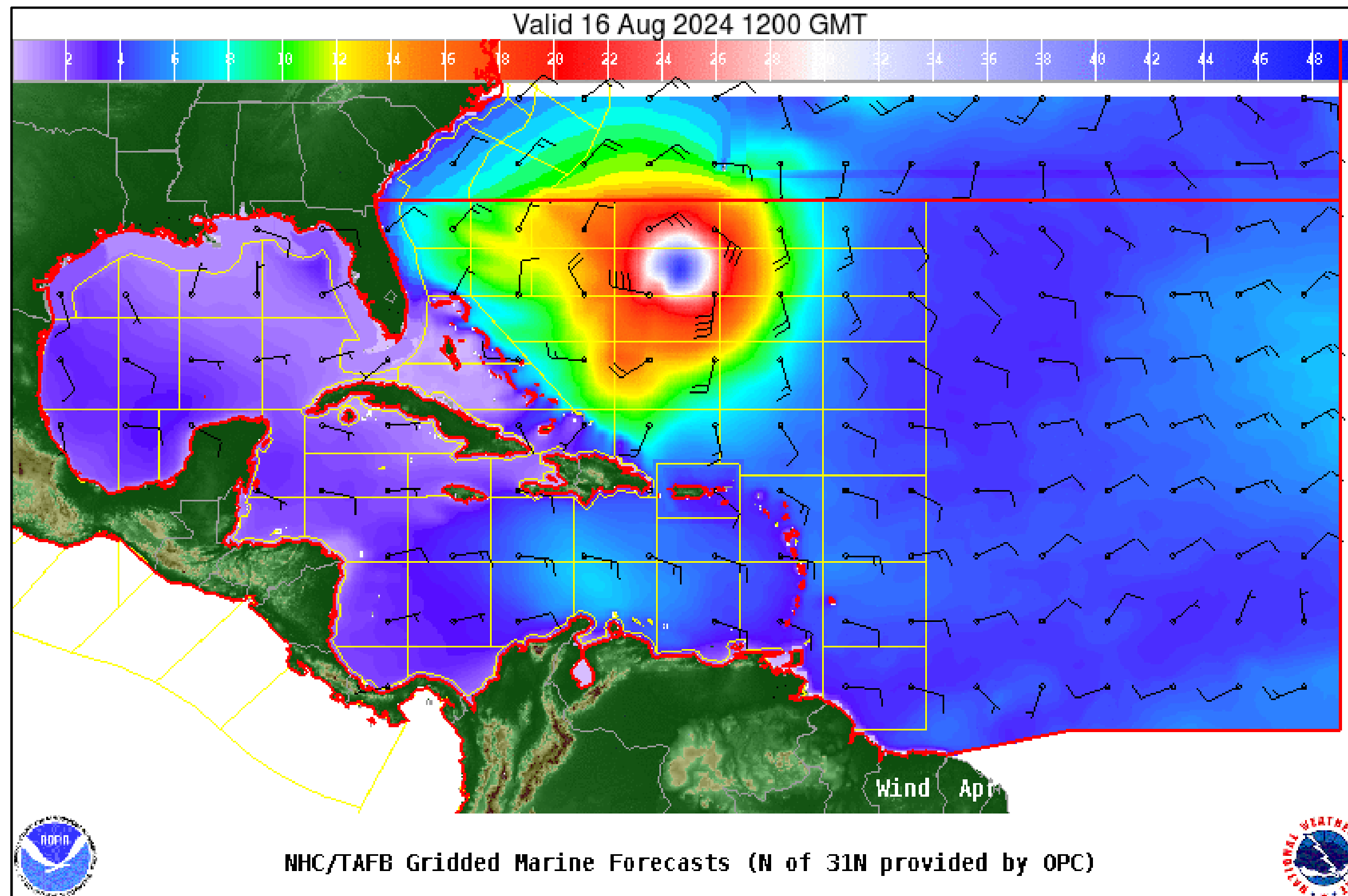
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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48 Hour Forecast

Friday, August 16th at 8am EDT

Peak Winds: 100 kt

Peak Seas: 42 ft

- Wave heights are in feet



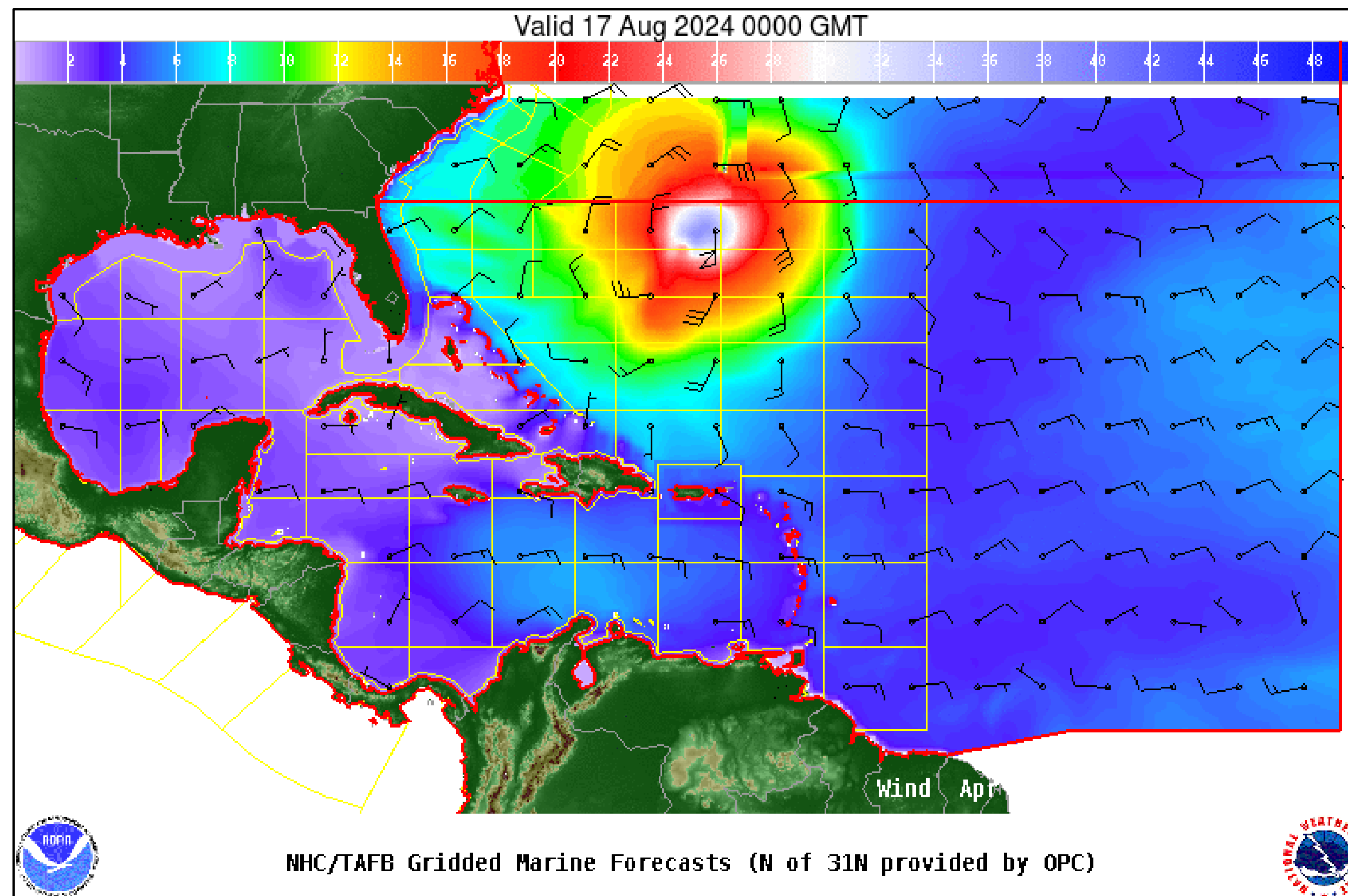
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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NWS National Hurricane Center



60 Hour Forecast

Friday, August 16th at 8pm EDT

Peak Winds: 100 kt

Peak Seas: 40 ft

- Wave heights are in feet



Significant Wave Height (ft)

Time of Departure

Tropical Storm Ernesto



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NWS National Hurricane Center

City	Most Likely	Latest Reasonable
St. Thomas	Wednesday morning	Wednesday morning
Vieques	Wednesday morning	Wednesday morning
San Juan	Wednesday morning	Wednesday morning

Expected Storm Total Rainfall and Chance of Rainfall Flooding

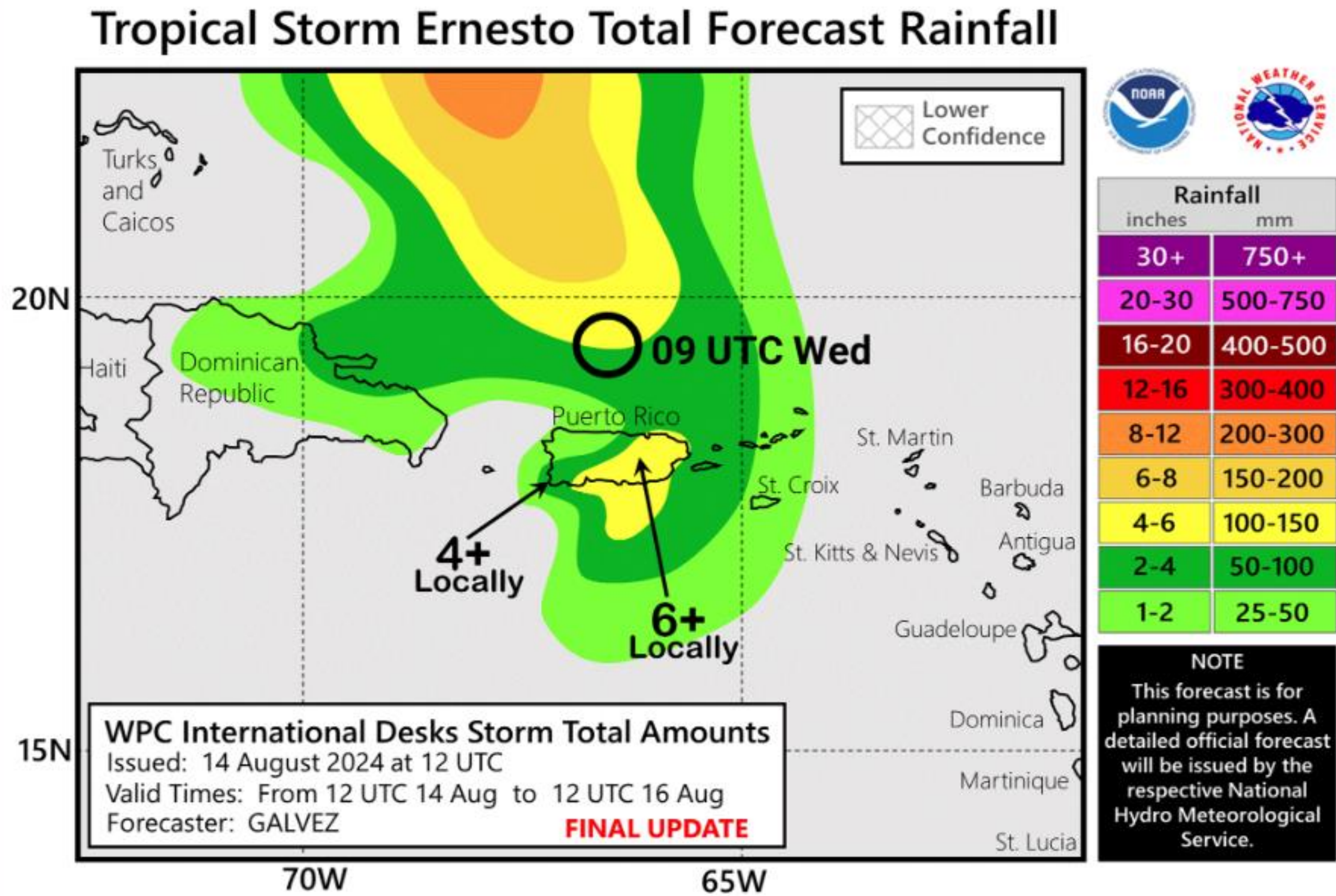
Tropical Storm Ernesto

Images from NWS Weather Prediction Center



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

Rainfall Forecast (from the Weather Prediction Center)





Key Messages

Tropical Storm Ernesto



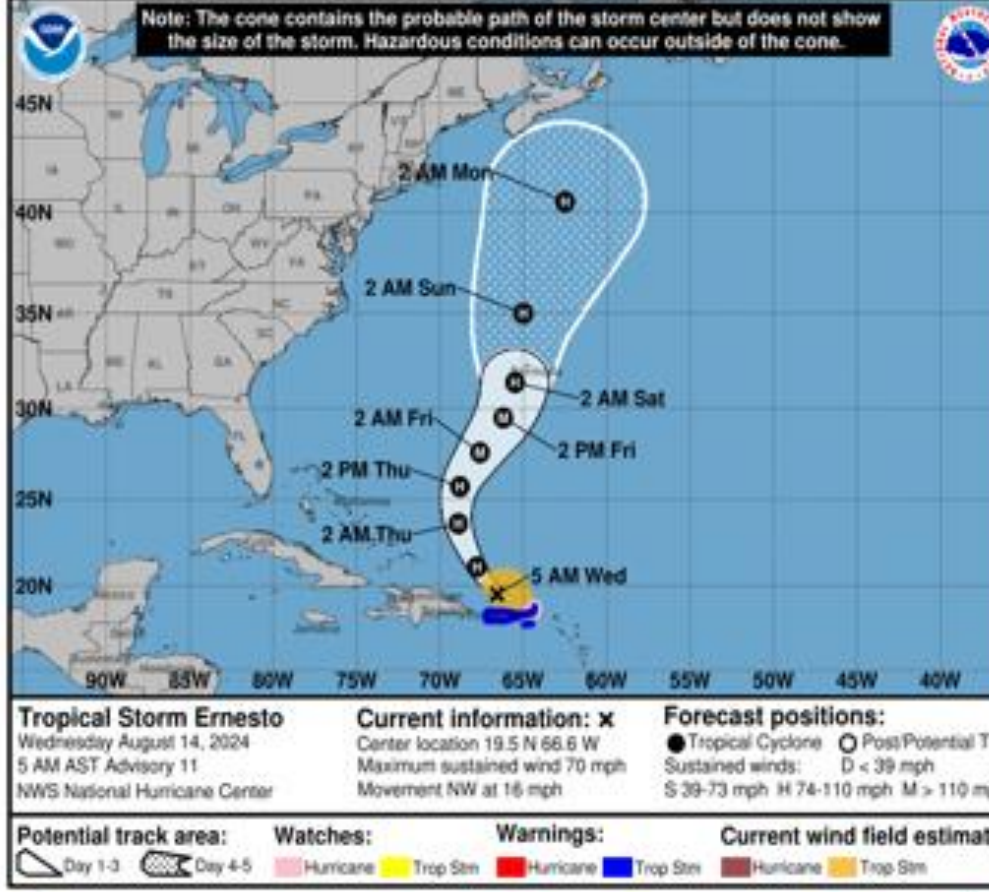
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Most Likely Arrival Time of Tropical-Storm-Force Winds

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



This briefing was prepared by:
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Phone: 305-229-4484

TROPICAL STORM ERNESTO BRIEFING

TIME of NEXT NHC Advisory:
15 UTC: 11 AM EDT

The Next Briefing Will Be:
Wednesday, 6:00 PM EDT

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



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www.nhc.noaa.gov