

IMPACTS FOR D7 (through next 5 days)

Winds – Medium

Storm Surge – Low

Rainfall/Flash Flooding – High

Tornadoes – Low

Waves - High

TROPICAL STORM ERNESTO BRIEFING

5:00 PM EDT

Monday, August 12, 2024

Prepared by:

Amanda Reinhart

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*



Changes since Last Briefing

Tropical Storm Ernesto



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NWS National Hurricane Center

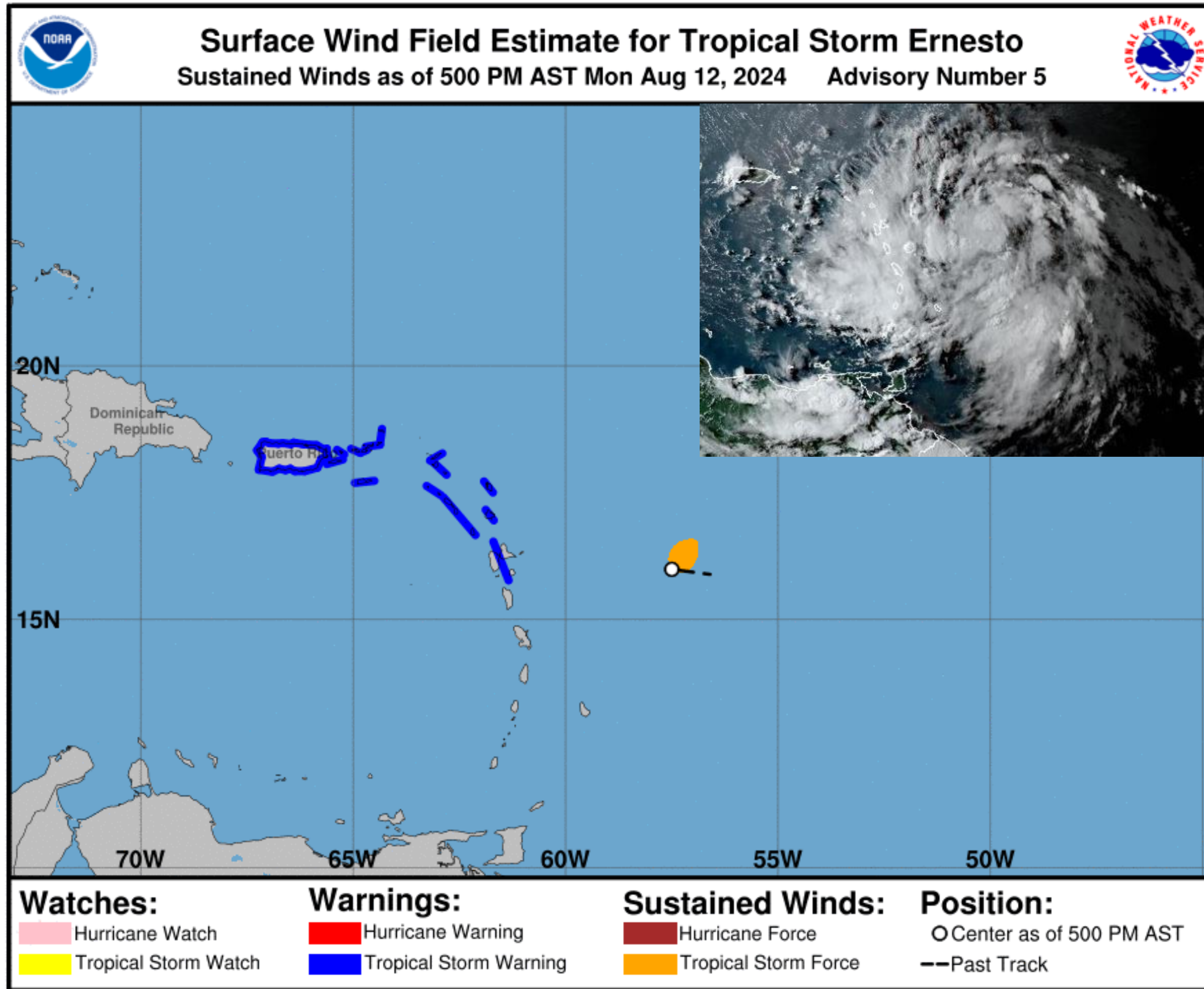
- Ernesto has become tropical storm
- Tropical Storm warnings are now in effect for the USVI/Puerto Rico
- Wind impact has increased from low to medium (particularly for USVI)
- Rainfall has increased from medium to high (particularly in the eastern and southern portion of Puerto Rico)

Situation Overview

Tropical Storm Ernesto



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...DISTURBANCE BECOMES TROPICAL STORM ERNESTO...

...EXPECTED TO BRING TROPICAL STORM FORCE WINDS AND HEAVY RAINS TO PORTIONS OF THE LEEWARD ISLANDS BEGINNING LATE TONIGHT...

Summary of 500 PM EDT Information

Location... 16.0N 57.5W

About 255 nm ESE of Antigua

About 515 nm ESE of San Juan Puerto Rico

Maximum Sustained Winds... 35 kt

Present Movement... WNW at 24 kt

Seas... 13 ft

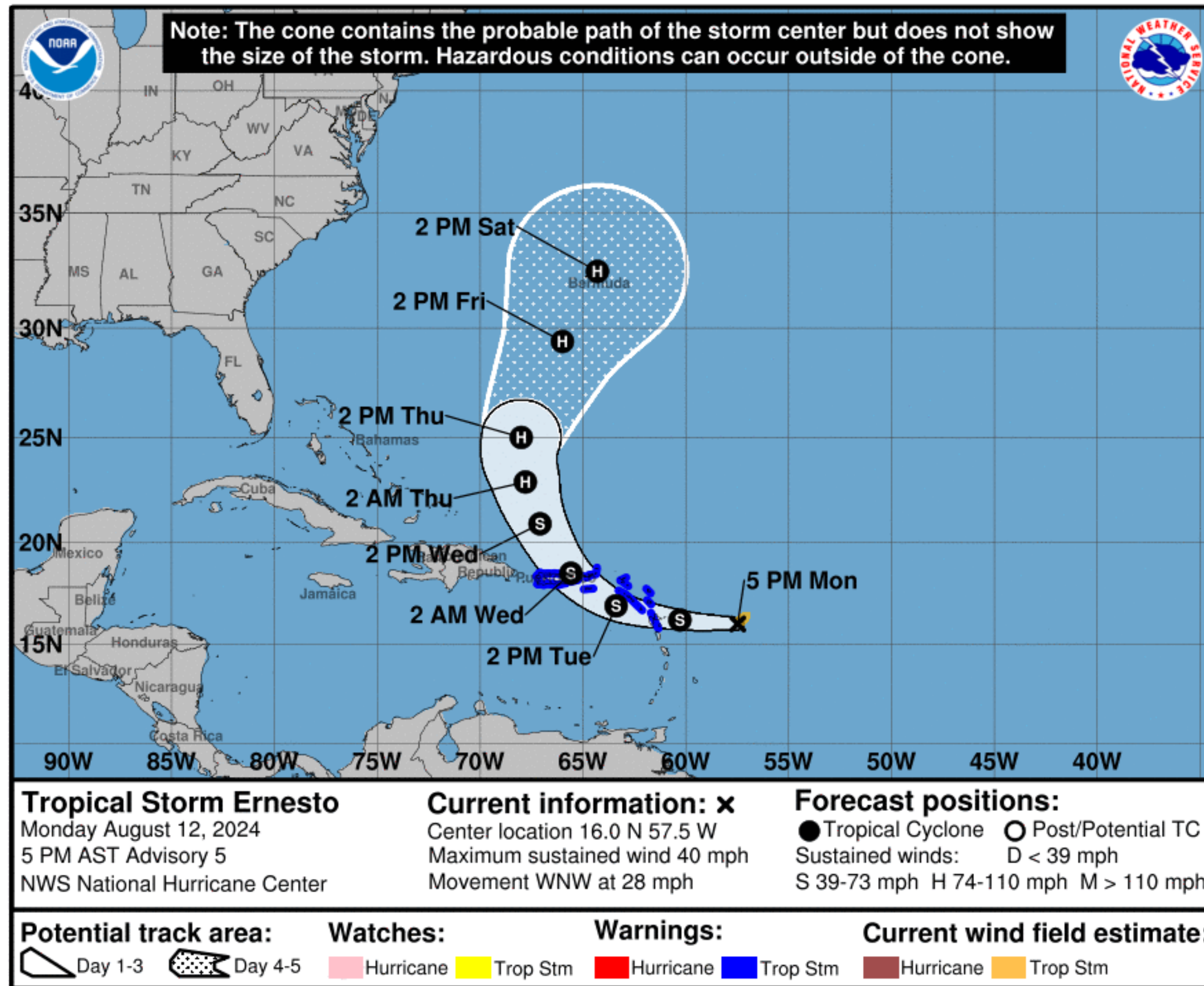
12 ft seas... 150NE 0SE 0SW 0NW.

Forecast Information

Tropical Storm Ernesto



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- A center has officially formed and Tropical Storm Ernesto will continue to move WNW towards the Leeward Islands overnight
- The center is expected to move near/over USVI/PR Tuesday afternoon/Tuesday night
- Strengthening will likely happen but still expected to impact the USVI/PR as a tropical storm
- Current center forecast positions through the next 5 days (if applicable) illustrated by dots
- White swatch of potential track error added to each side of the forecast track through day 3
- Hatched swatch 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.

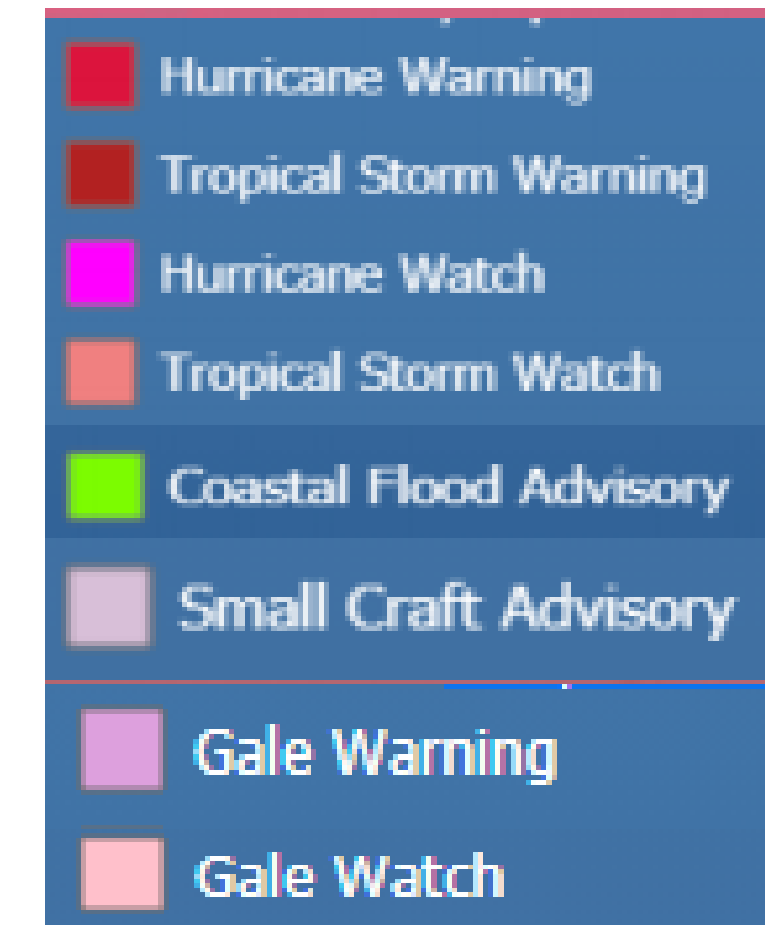
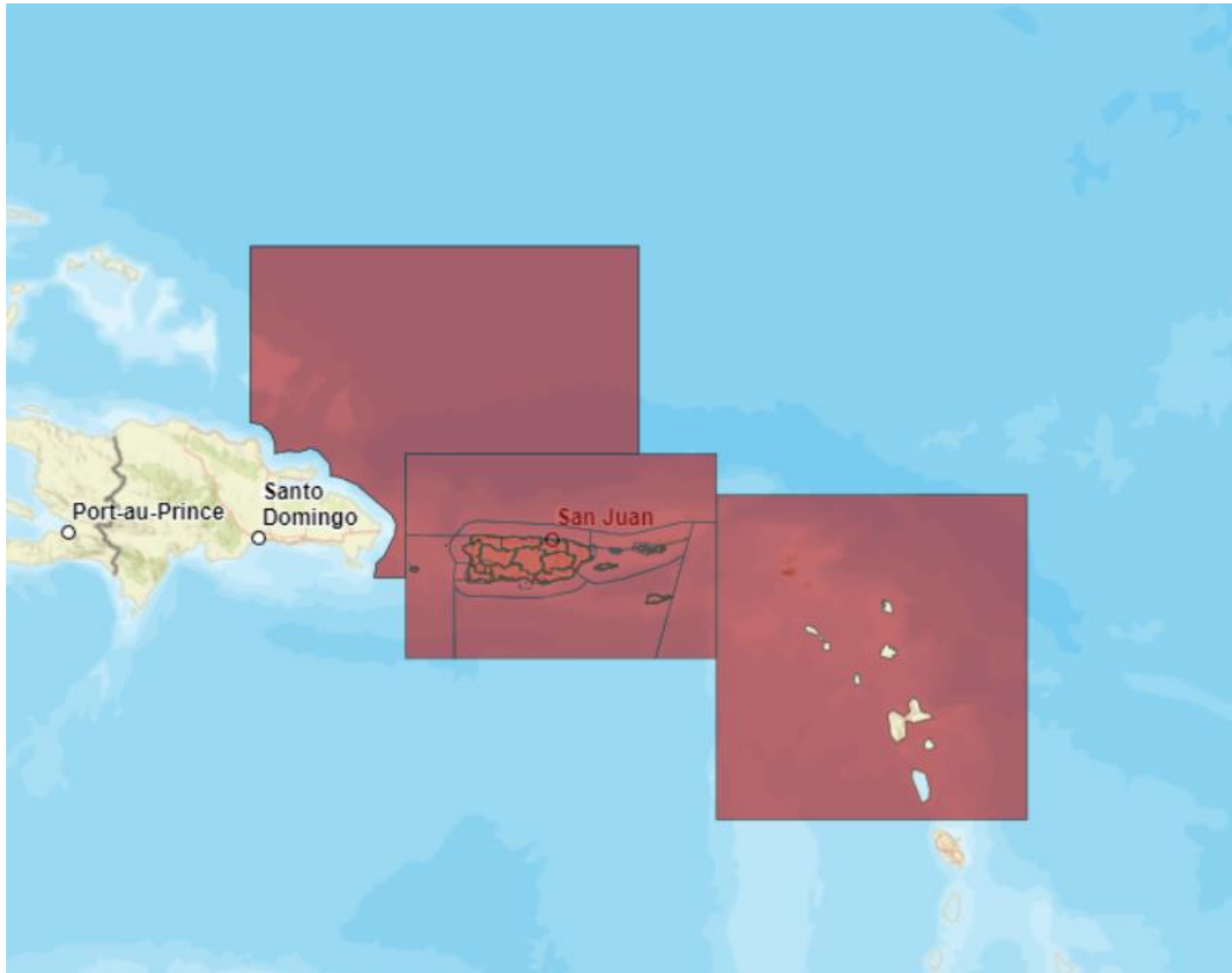
NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

Hazards Map

Tropical Storm Ernesto



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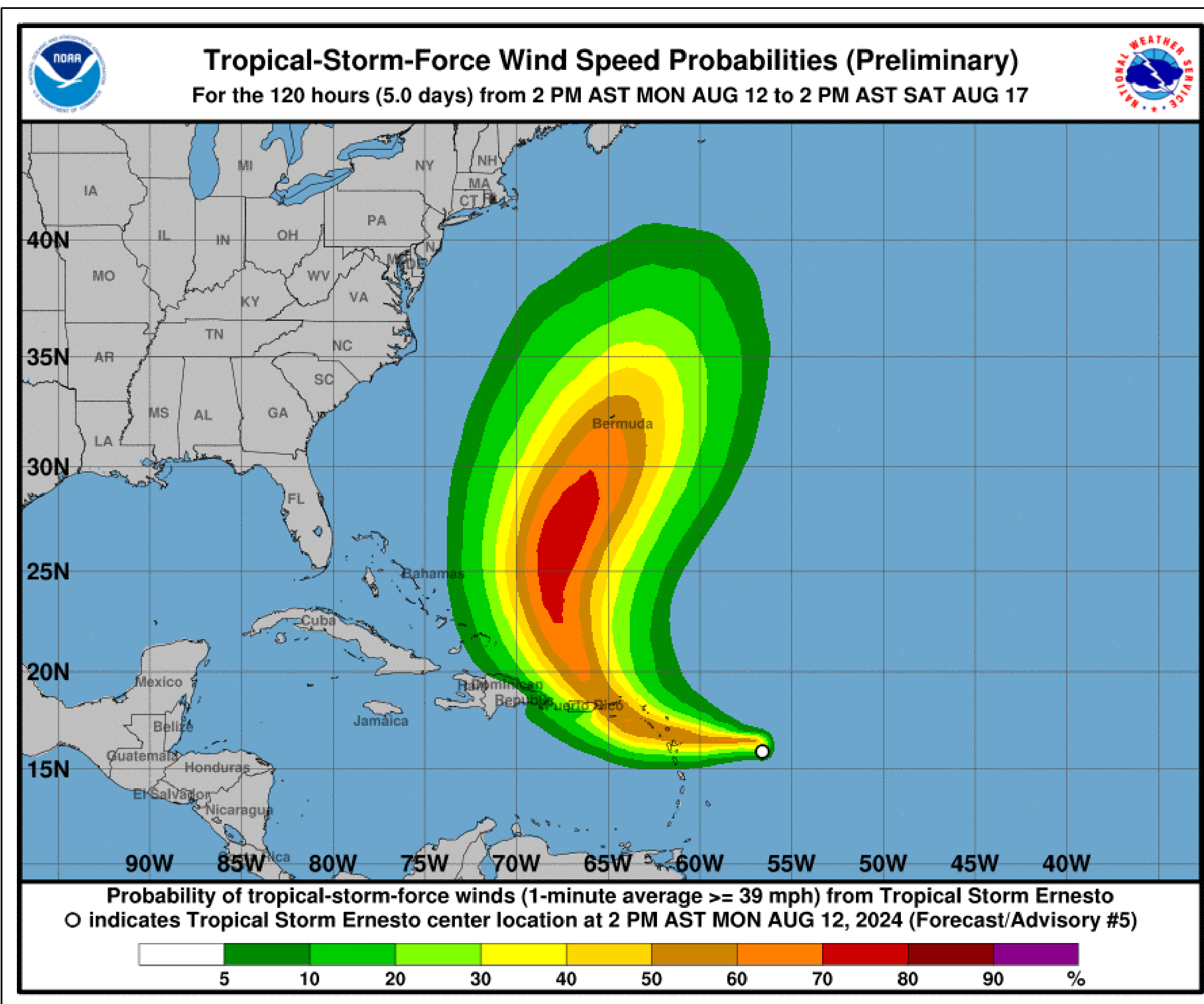


T.S. Wind Speed Probabilities

Tropical Storm Ernesto



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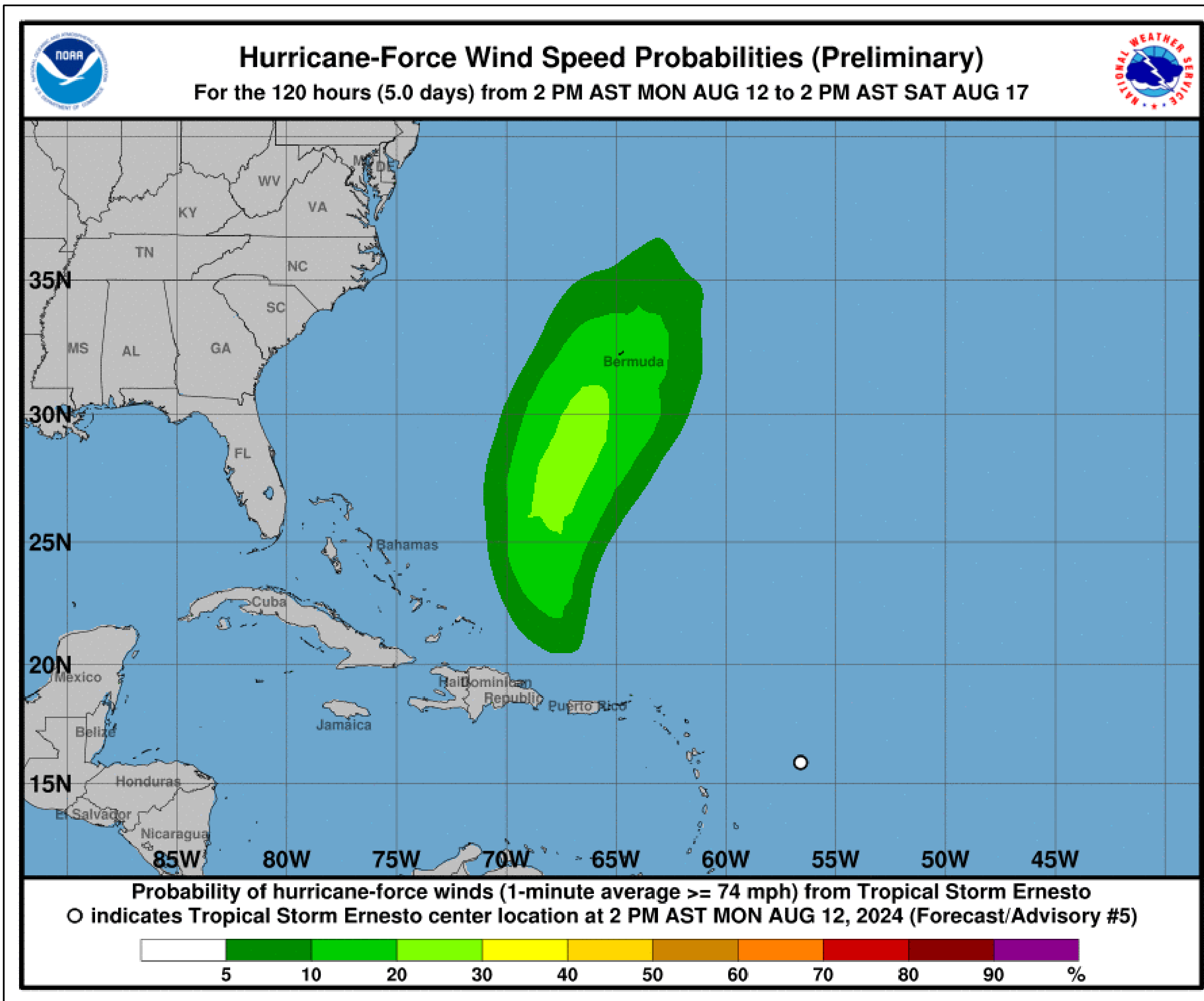
- **Ponce 25%**
 - **Aguadilla 25%**
 - **San Juan 25%**
 - **Vieques 60%**
 - **Saint Thomas 65%**
 - **Saint Croix 60%**
- Green** indicates probabilities have gone down since last briefing
- Red** indicates probabilities have gone up since last briefing
- Black** indicates probabilities remain the 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.

Hurricane Wind Speed Probabilities



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NWS National Hurricane Center

Tropical Storm Ernesto



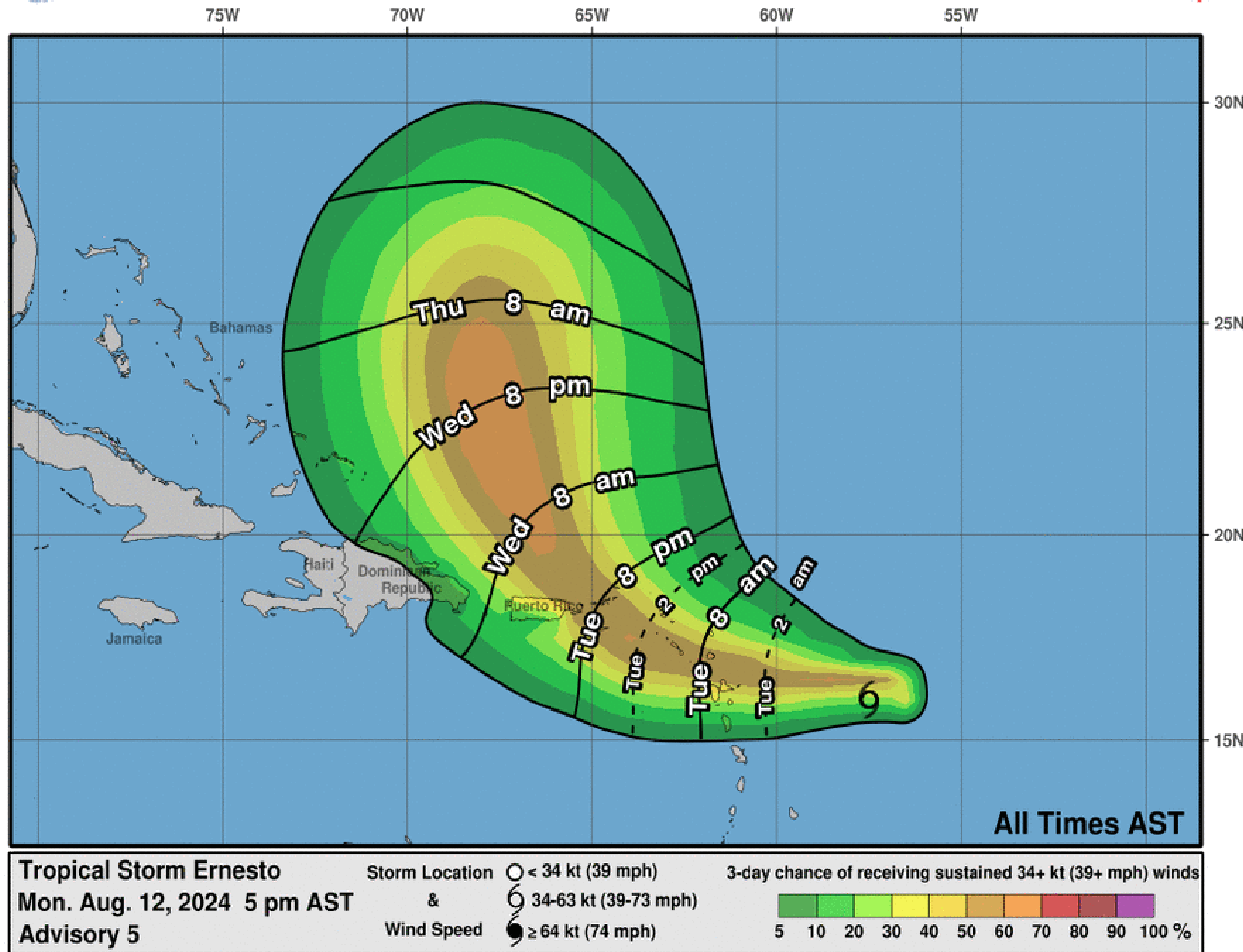
- **None**
- Probabilities of sustained hurricane force winds (64 kt +) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.



Tropical Storm Ernesto



0-3 Day Most Likely Arrival Time of Tropical-Storm-Force Winds



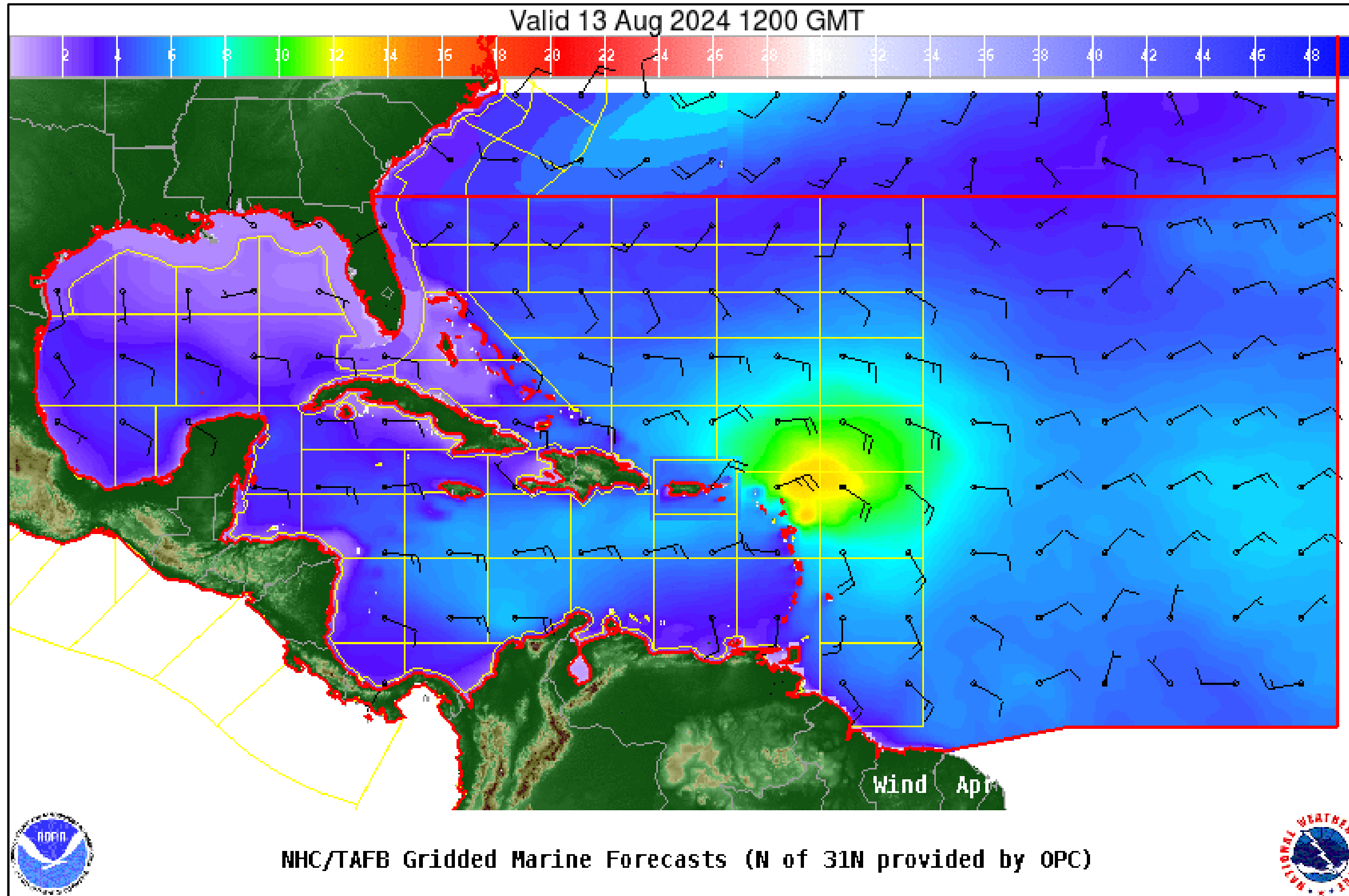
- USVI – Tuesday evening
- Puerto Rico - Tuesday evening into Tuesday night
- The most likely time of arrival of Tropical Storm Force Winds (34kt to 63 kt) for this cyclone based off the current track and wind radii.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- 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 Ernesto



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12 Hour Forecast

Tuesday, August 13th at 8am EDT

Peak Winds: 40 kt

Peak Seas: 13 ft

- Wave heights are in feet



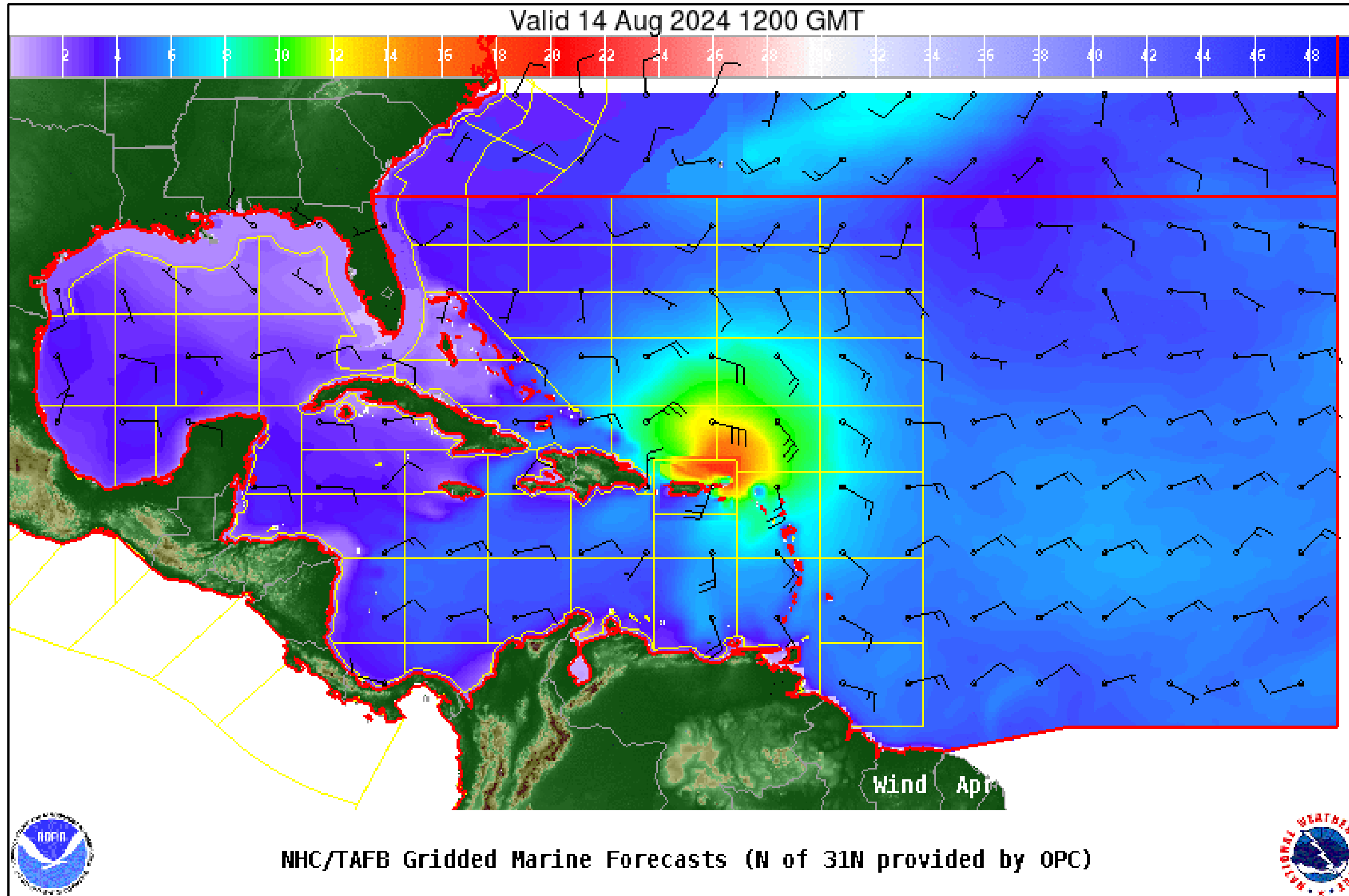
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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36 Hour Forecast

Wednesday, August 14th at 8am EDT

Peak Winds: 50 kt

Peak Seas: 18 ft

- Wave heights are in feet



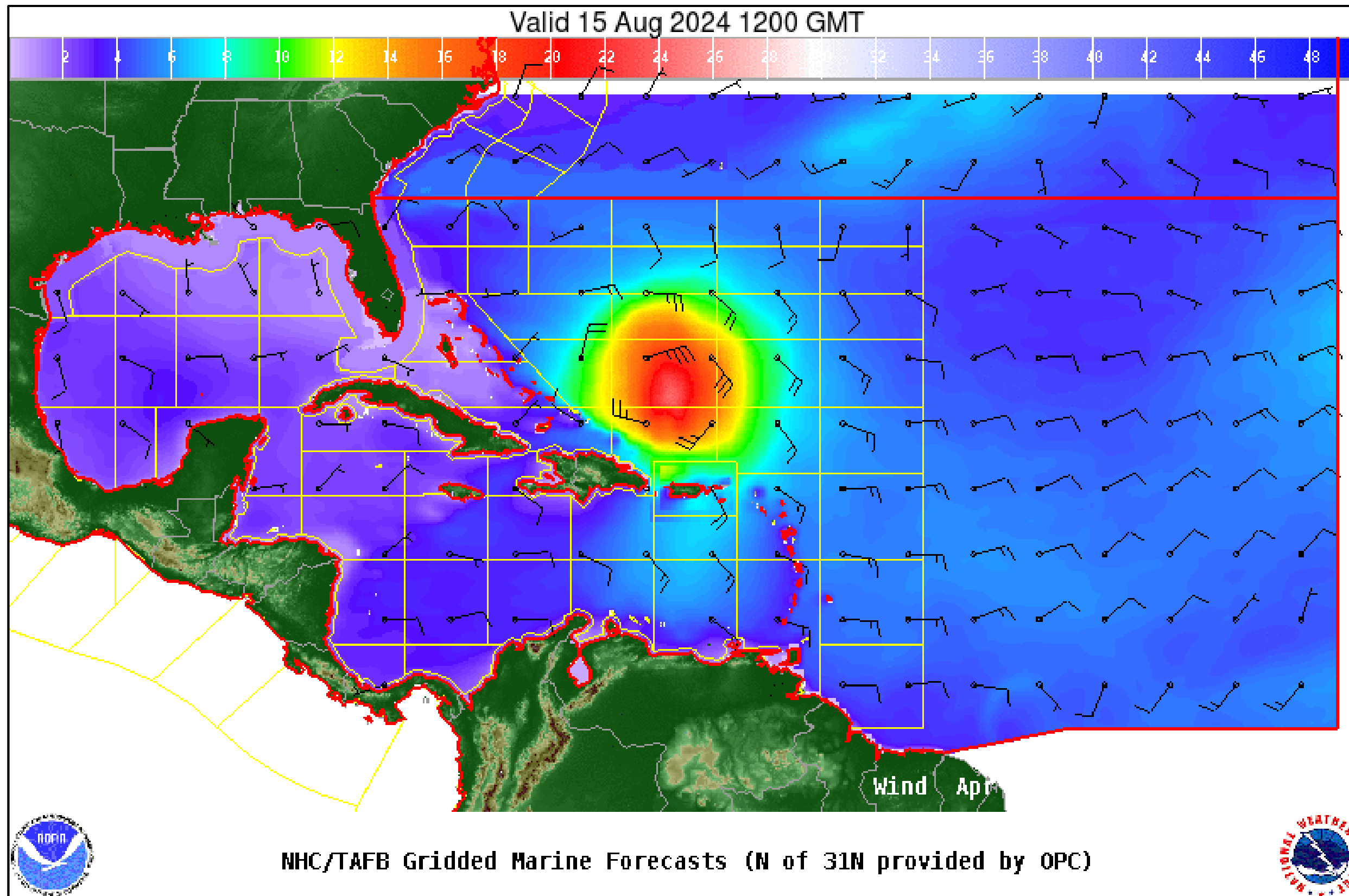
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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60 Hour Forecast

Thursday, August 15th at 8am EDT

Peak Winds: 65 kt

Peak Seas: 26 ft (12 ft near USVI/PR)

- Wave heights are in feet



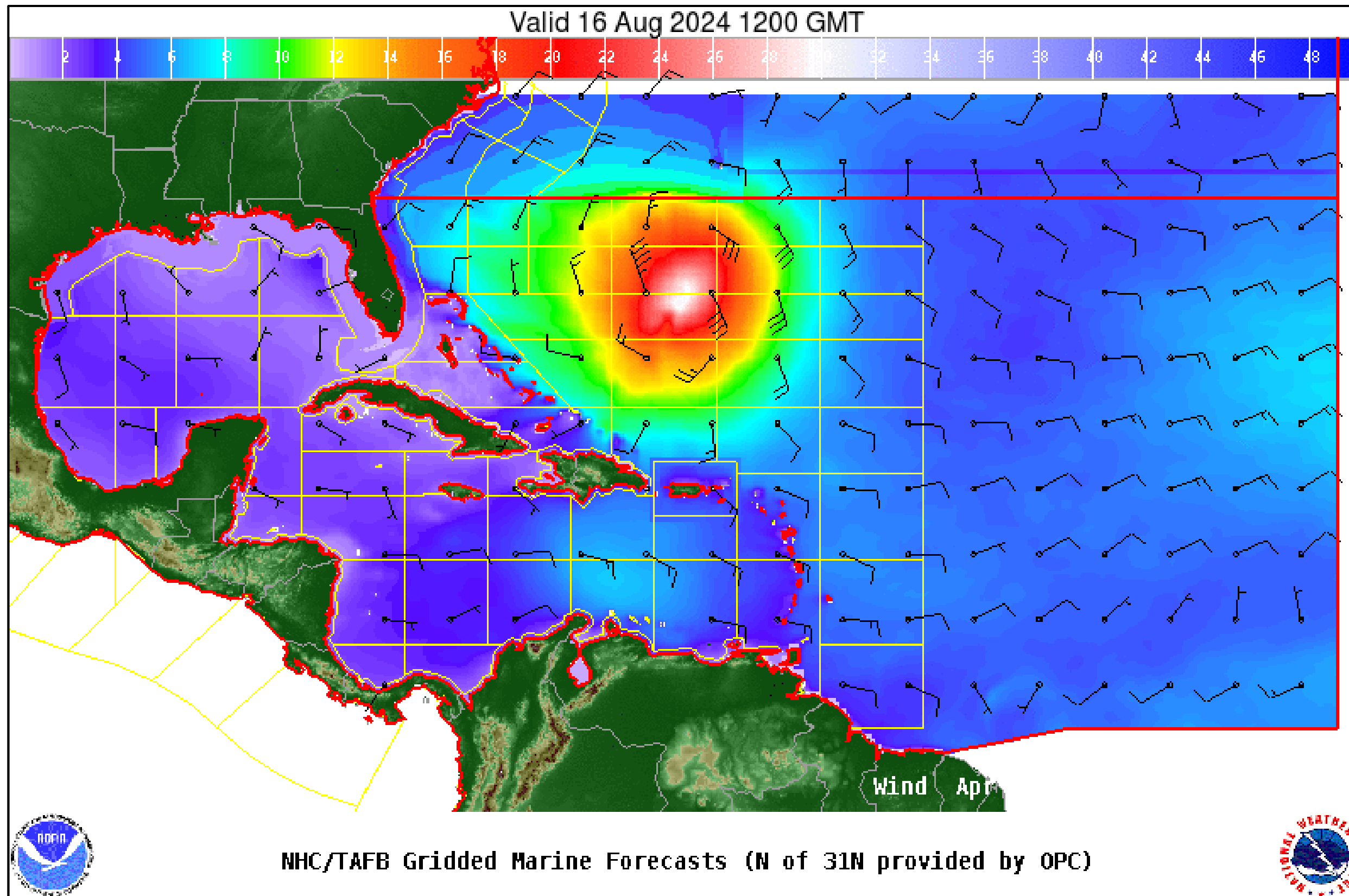
Significant Wave Height (ft)

Wind And Waves

Tropical Storm Ernesto



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84 Hour Forecast

Friday, August 16th at 8am EDT

Peak Winds: 80 kt

Peak Seas: 27 ft (less than 8 ft near USVI/PR)

Wave heights are in feet



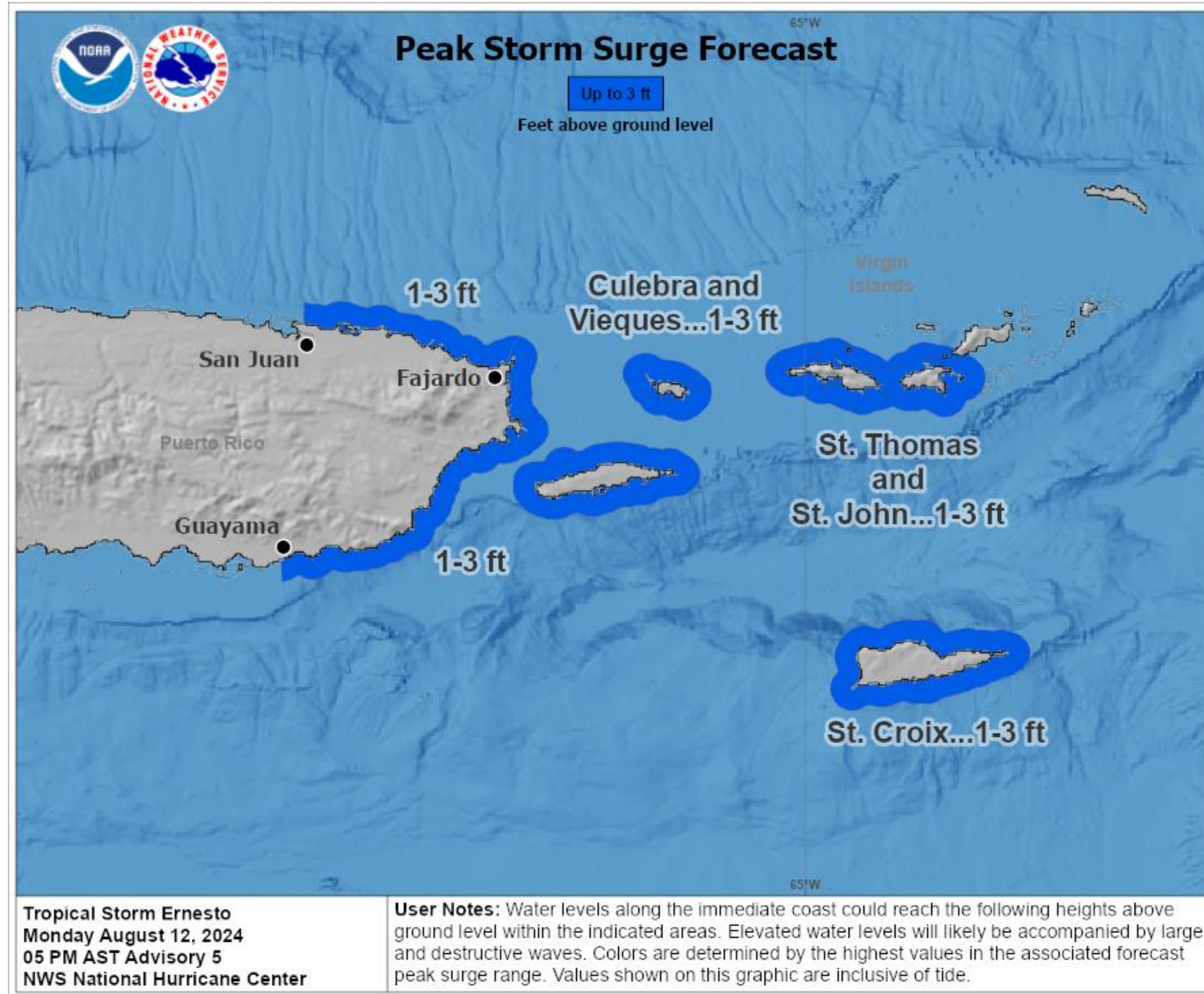
Significant Wave Height (ft)

Potential Peak Storm Surge / Watches and Warnings



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Tropical Storm Ernesto



- *No changes to peak surge since the 5 AM advisory
- * Expect coastal flooding and water levels to remain elevated

Expected Storm Total Rainfall and Chance of Rainfall Flooding

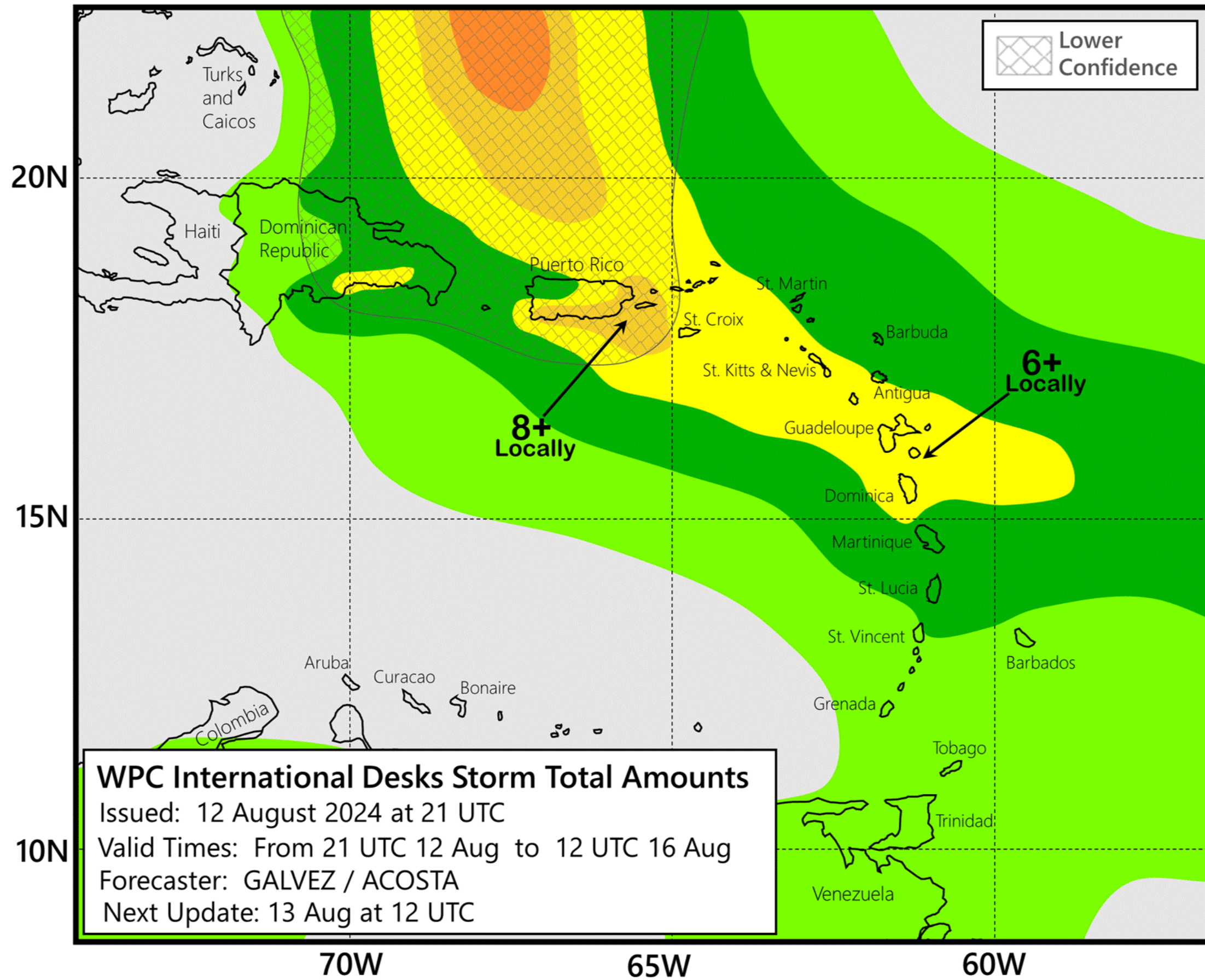


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Tropical Storm Ernesto

Images from NWS Weather Prediction Center

Tropical Storm Ernesto Total Forecast Rainfall



Rainfall	
inches	mm
30+	750+
20-30	500-750
16-20	400-500
12-16	300-400
8-12	200-300
6-8	150-200
4-6	100-150
2-4	50-100
1-2	25-50

NOTE
This forecast is for planning purposes. A detailed official forecast will be issued by the respective National Hydro Meteorological Service.

WPC International Desks Storm Total Amounts
 Issued: 12 August 2024 at 21 UTC
 Valid Times: From 21 UTC 12 Aug to 12 UTC 16 Aug
 Forecaster: GALVEZ / ACOSTA
 Next Update: 13 Aug at 12 UTC


Rainfall: For Puerto Rico, 3 to 6 inches of rainfall, with maximum amounts of 10 inches, is expected.

Key Messages

Tropical Storm Ernesto



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Key Messages for Tropical Storm Ernesto


Advisory 5: 5:00 PM AST Mon Aug 12, 2024

1. Ernesto is expected to bring tropical storm conditions to portions of the Leeward Islands late tonight and Tuesday and to the Virgin Islands and Puerto Rico by late Tuesday. Tropical Storm Warnings are in effect for this entire area.

2. Heavy rainfall may result in locally considerable flash flooding and mudslides in areas of the Leeward and Virgin Islands through Wednesday, and over Puerto Rico late Tuesday into Thursday.

3. It is too soon to know what impacts Ernesto could bring to Bermuda late this week, and interests there should monitor the progress of this system.

For more information go to hurricanes.gov



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

Tropical Storm Ernesto
Monday August 12, 2024
5 PM AST Advisory 5
NWS National Hurricane Center

Current information: x
Center location 16.0 N 57.5 W
Maximum sustained wind 40 mph
Movement WNW at 28 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

Tropical Storm Ernesto Total Forecast Rainfall

Rainfall (inches)	Rainfall (mm)
30+	750+
20-30	500-750
16-20	400-500
12-16	300-400
8-12	200-300
6-8	150-200
4-6	100-150
2-4	50-100
1-2	25-50

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Marine Key Messages:

- Seas will begin to increase across the USVI and PR Tuesday afternoon into Tuesday night
- Seas could peak around 20 ft near the islands
- Conditions will begin to improve Thursday morning, with seas dropping below 8 ft by Thursday afternoon

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



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TROPICAL STORM ERNESTO BRIEFING

TIME of NEXT NHC Advisory:
3 UTC: 11 PM EDT

The Next Briefing Will Be:
Tuesday, 8:30 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