

IMPACTS FOR **D7** for Tropical Storm Fred

Winds – **Moderate**

Storm Surge – **Moderate**

Rainfall/Flash Flooding – **High**

Tornadoes – **Low**

Waves - **Moderate**

IMPACTS FOR **D7** for Tropical Depression Grace

Winds – **Moderate**

Storm Surge – **None**

Rainfall/Flash Flooding – **Moderate**

Tornadoes – **None**

Waves - **Low**

TROPICAL STORM FRED, TROPICAL DEPRESSION GRACE AND TROPICAL DEPRESSION EIGHT BRIEFING



9:00 AM EDT
Monday, August 16, 2021

Prepared by:
Andrew Hagen

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*

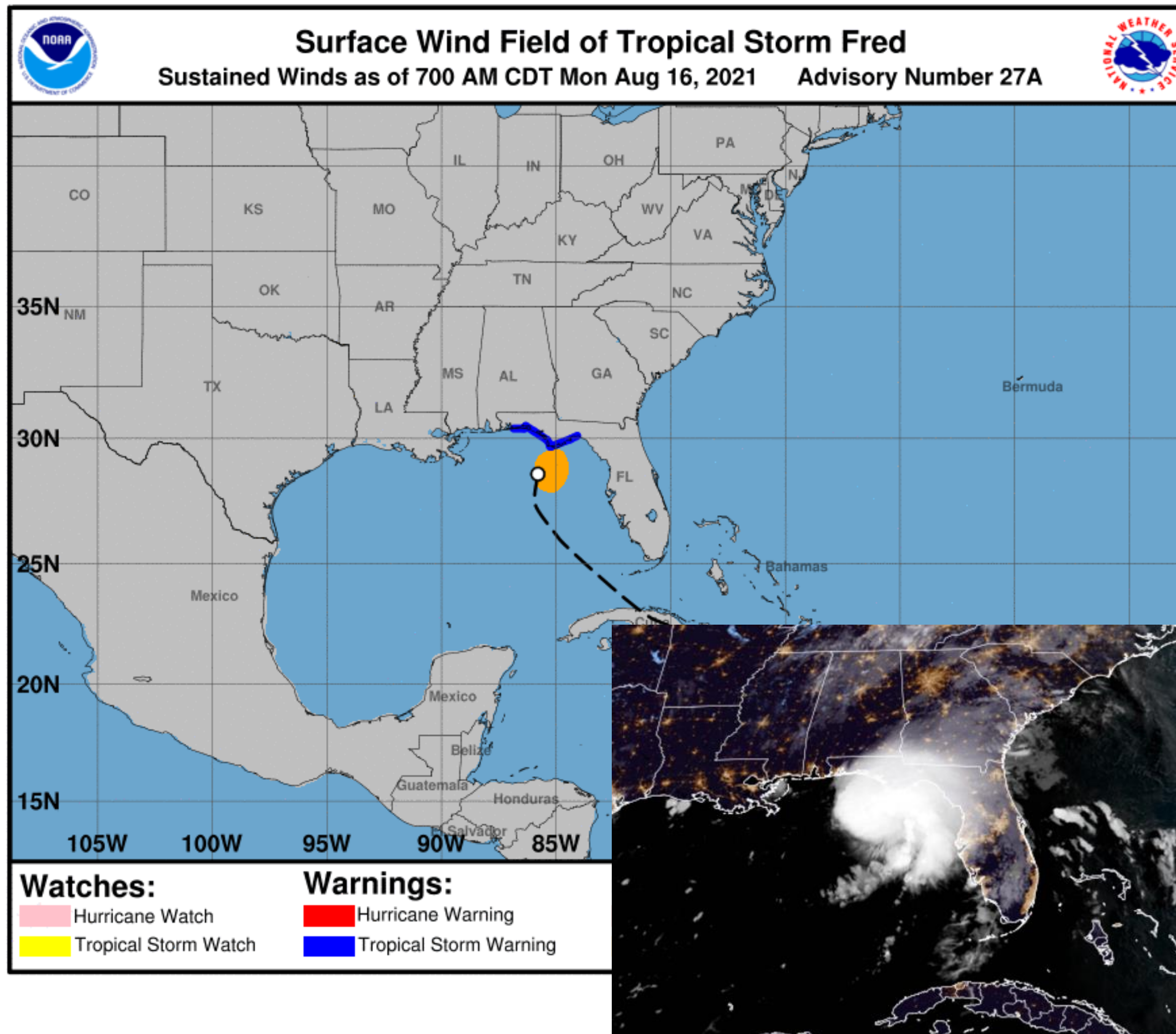


Situation Overview

Tropical Storm Fred



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NWS National Hurricane Center



...**HEAVY RAINFALL AND A DANGEROUS STORM SURGE EXPECTED ALONG THE COAST OF FLORIDA PANHANDLE AND BIG BEND LATER TODAY...**

Summary of 800 AM EDT...1200 UTC...Information

Location... 28.6N 85.8W
About 80 nm...SSW of Apalachicola, FL
Maximum Sustained Winds... 45 kt
Present Movement... N of 360 degrees at 8 kt

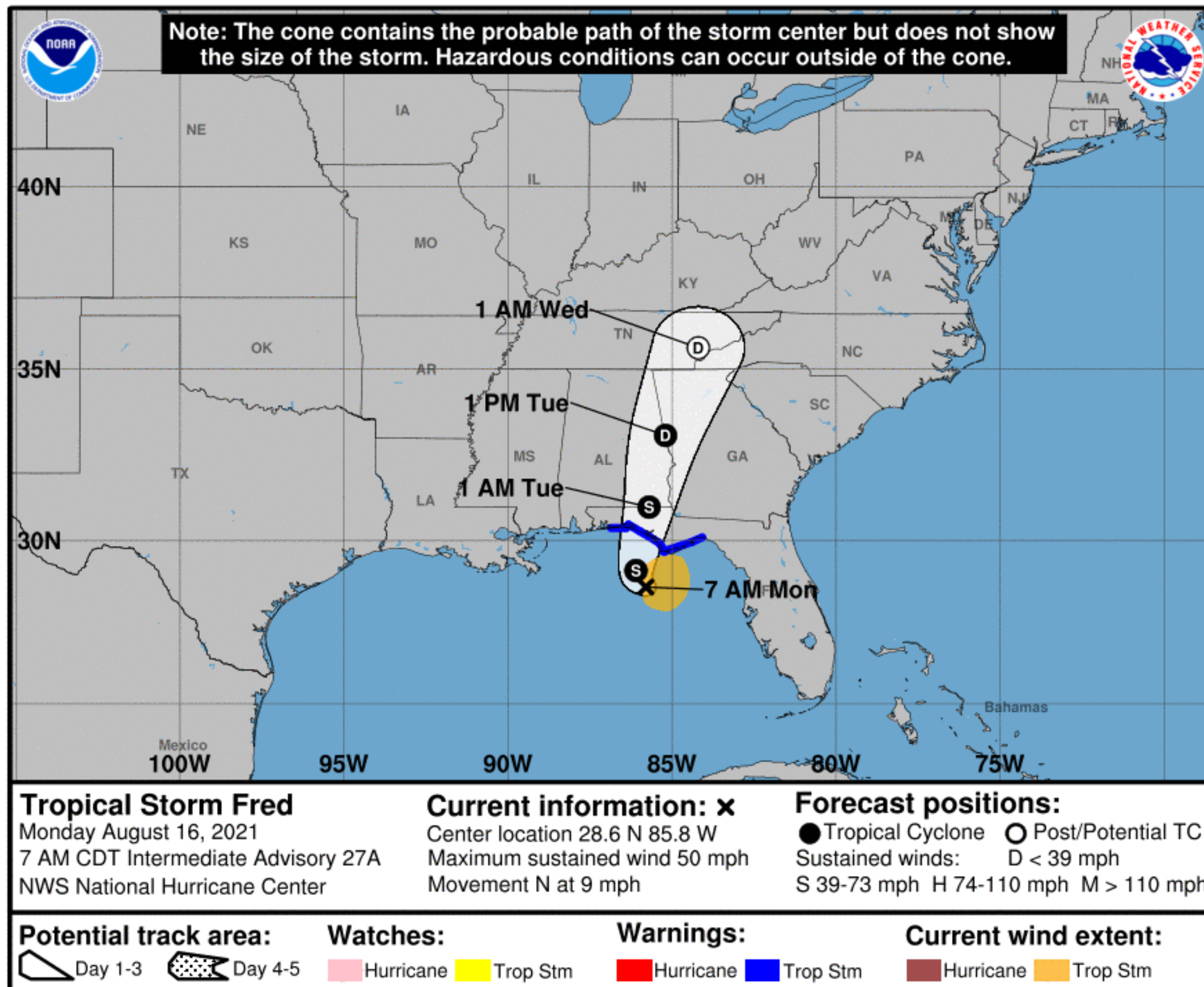
PEAK SEAS 18 FT
SIZE 34 KT: 80 NE 60 SE 0 SW 0 NW

Forecast Information

Tropical Storm Fred



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

- **Fred will move N and make landfall in the Florida Panhandle late today or this evening**
- **Some slight additional strengthening is forecast before landfall**
- 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

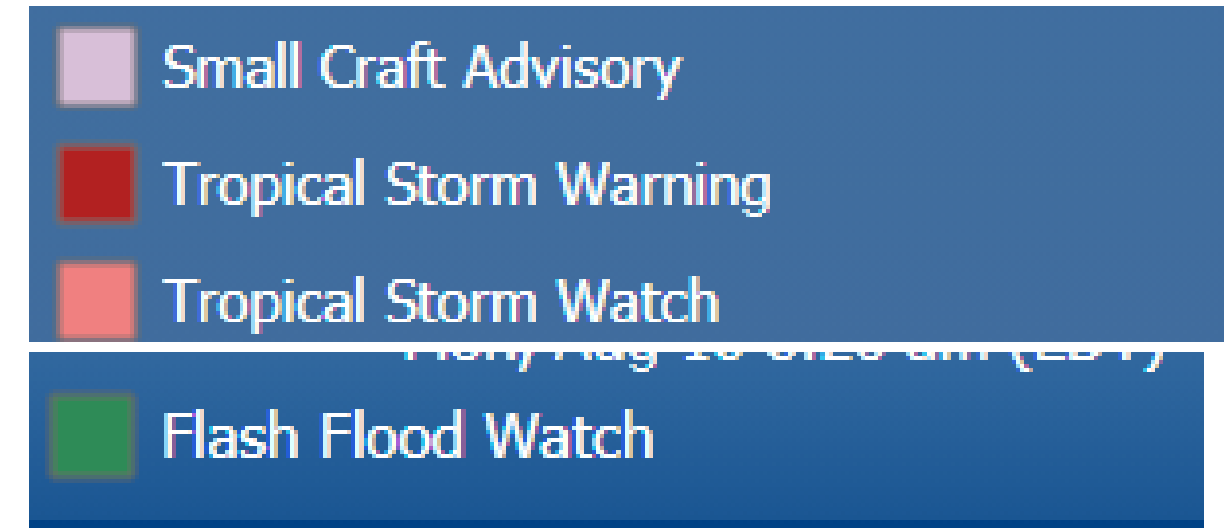
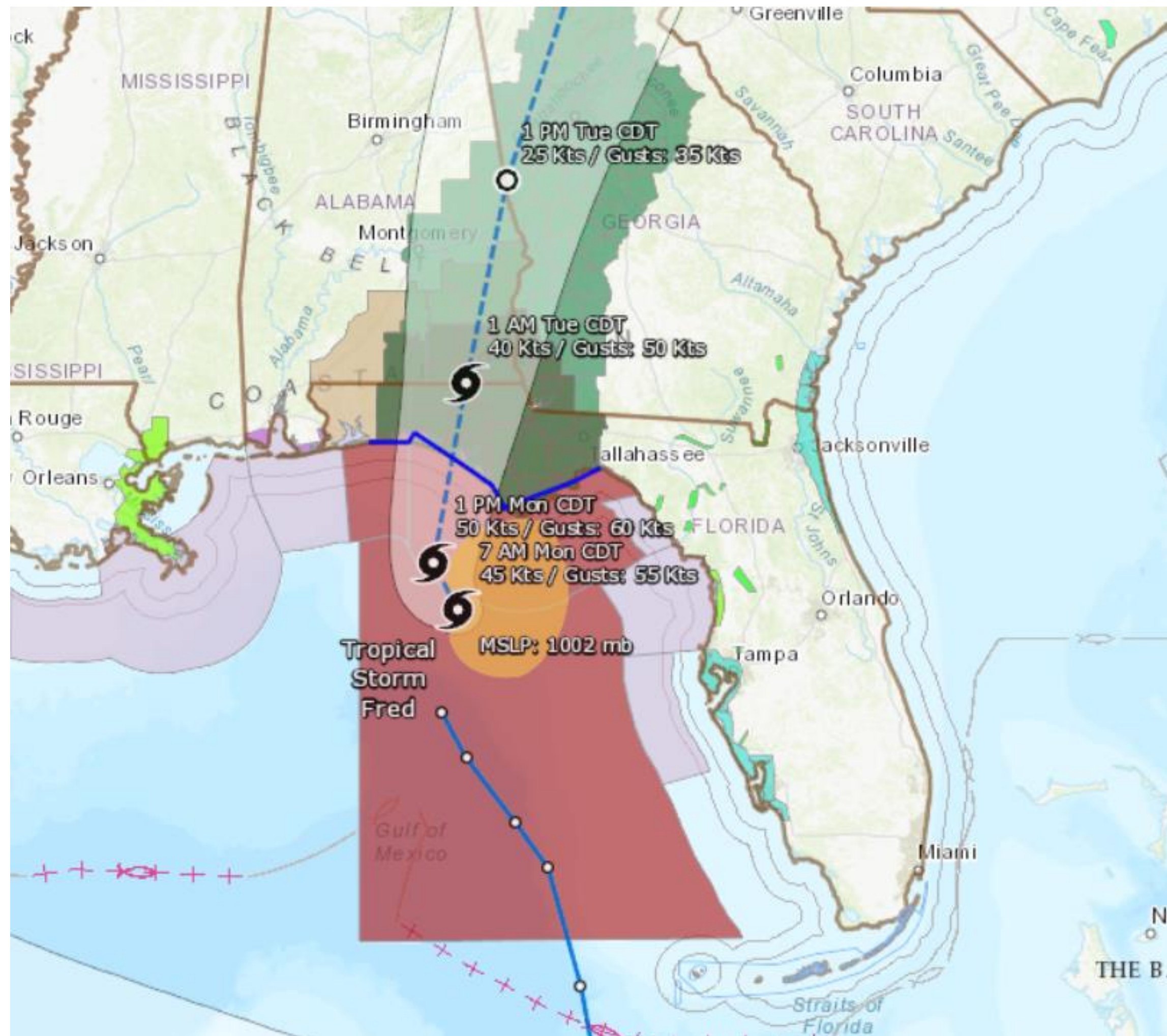
** Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

Hazards Map

Tropical Storm Fred



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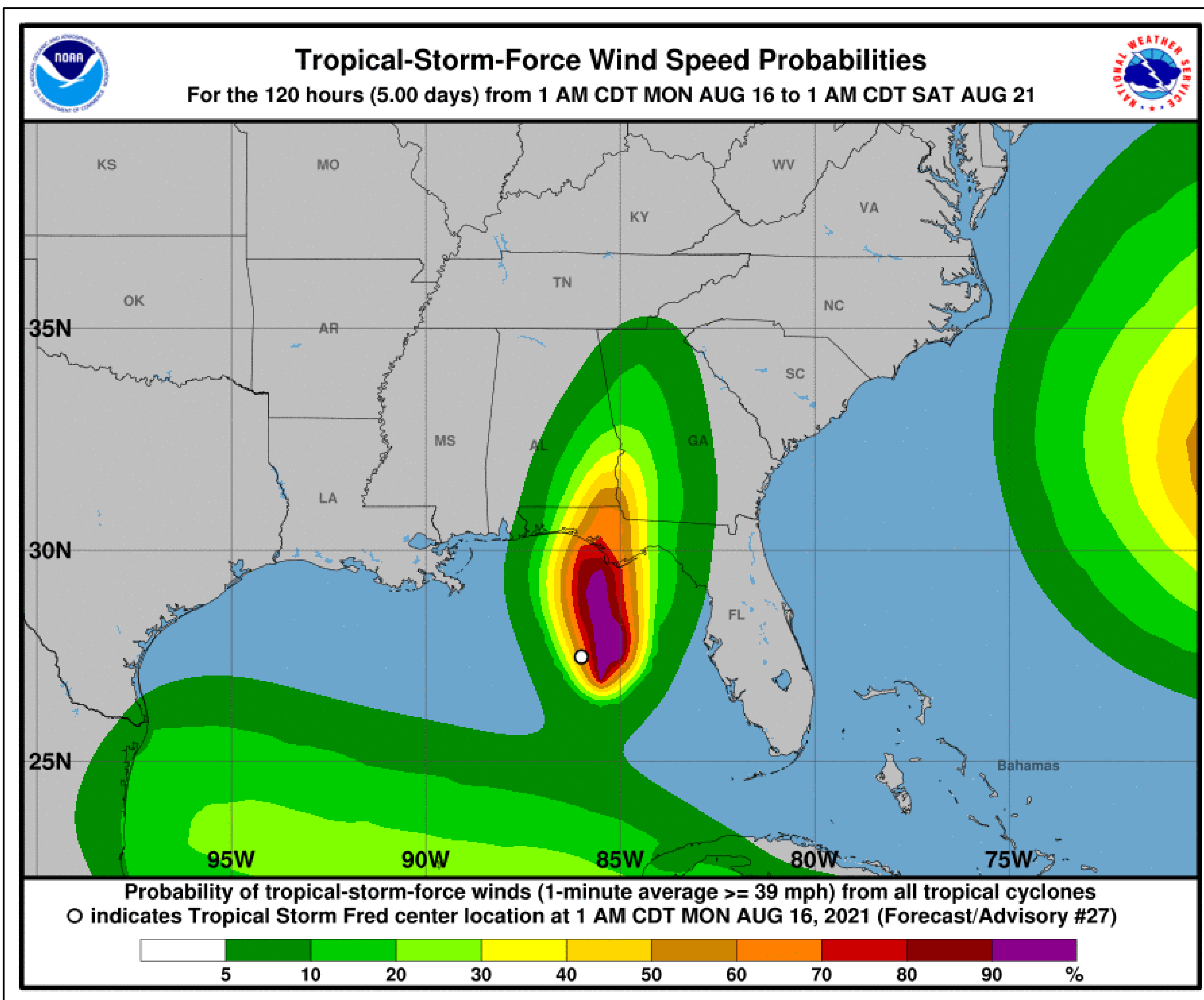
- <https://nowcoast.noaa.gov/>

T.S. Wind Speed Probabilities

Tropical Storm Fred



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NWS National Hurricane Center

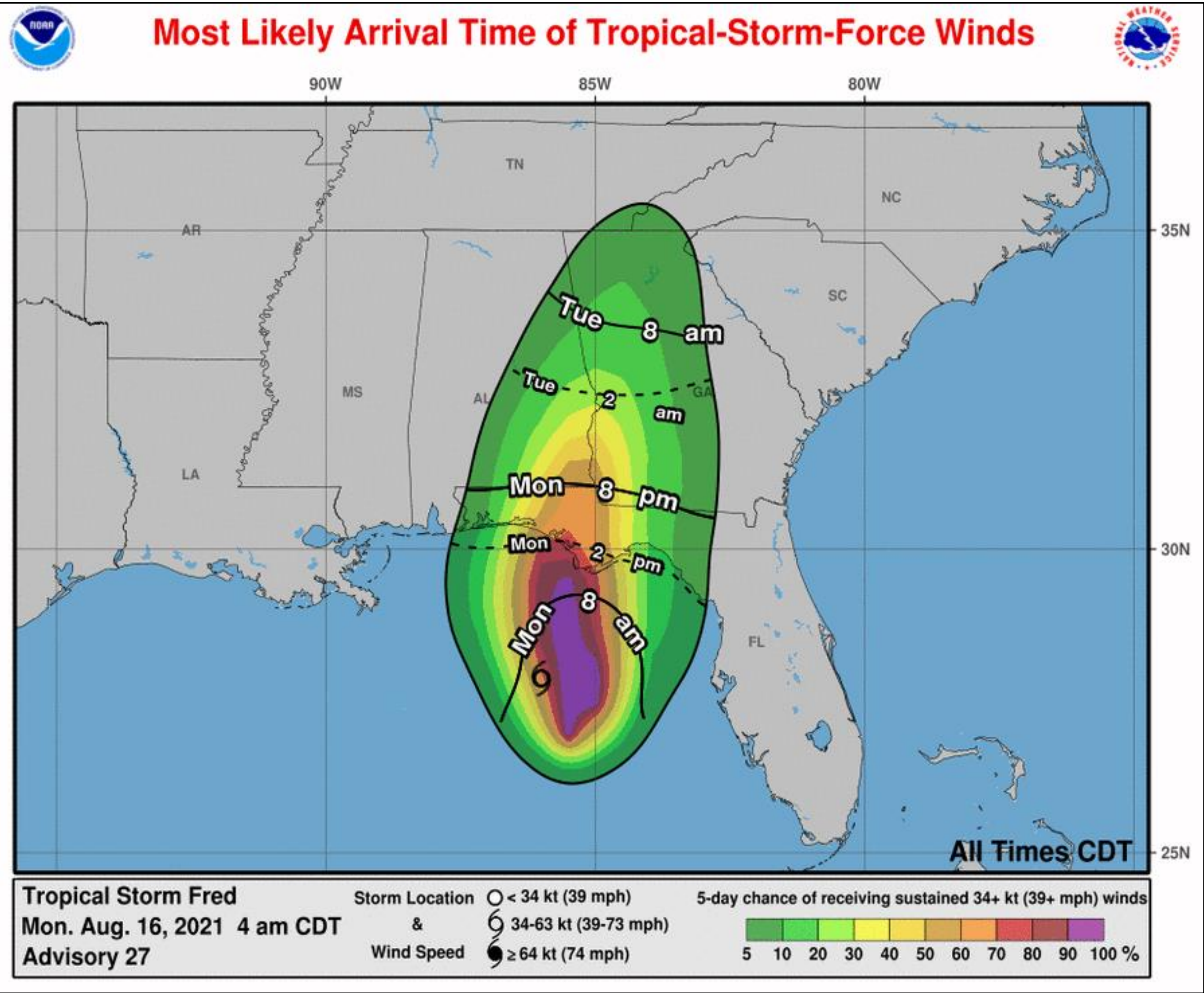


- **Apalachicola: 75%**
- **Panama City: 85%**
- **Destin: 30%**
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.

Tropical Storm Fred



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- **Florida Panhandle: Midday to early afternoon today**
- 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%.
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- Red through purple are the highest probabilities of 71%-100%
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Time of Departure

Tropical Storm Fred



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**Most likely time of departure of
tropical storm force winds:**

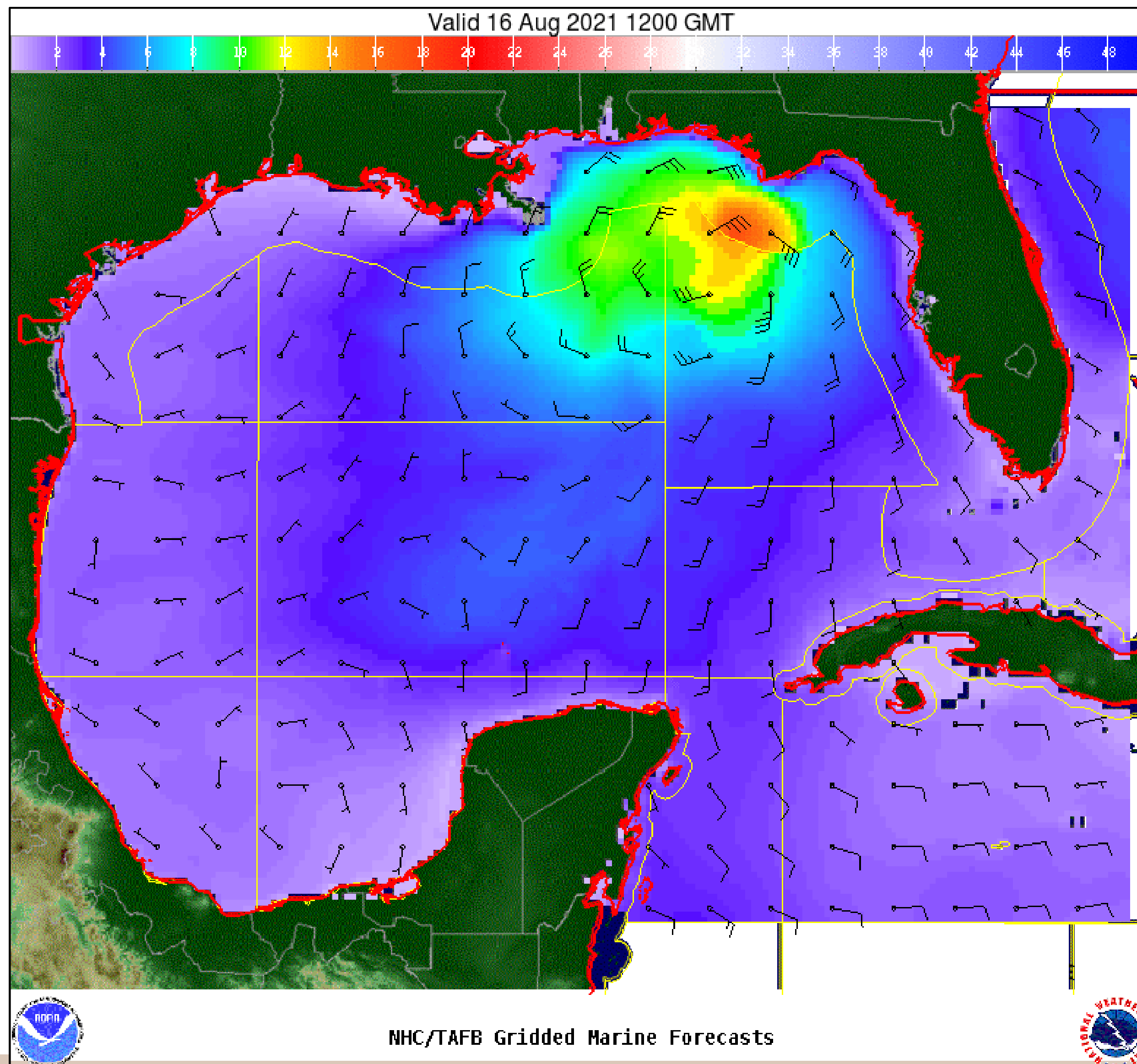
- **Apalachicola: Mon 8pm EDT**
- **Panama City: Mon 11pm EDT**

Wind And Waves

Tropical Storm Fred



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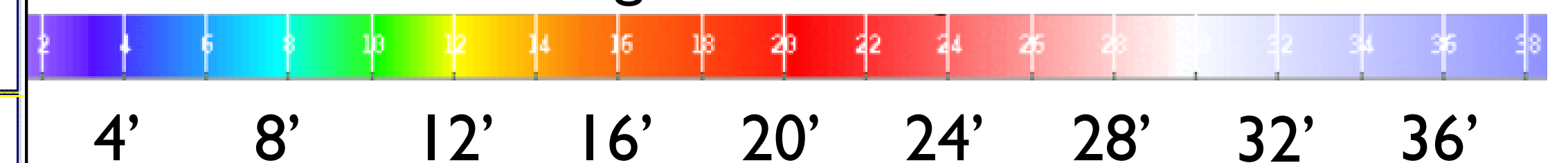
Current Conditions

Mon 8/16 8am EDT

Peak Winds: 45 kt

Peak Seas: 18 ft

■ Wave heights are in feet

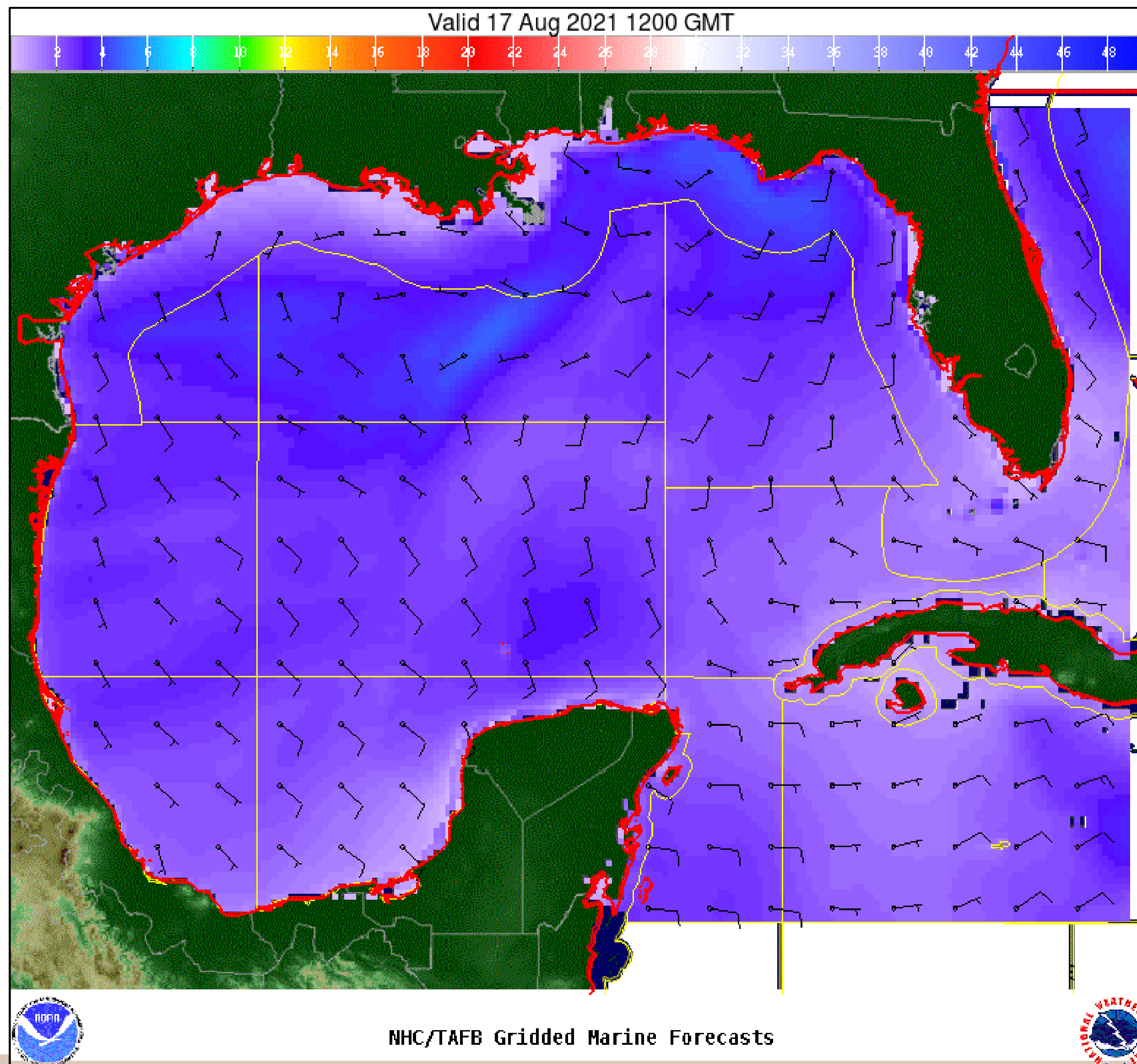


Wind And Waves

Tropical Storm Fred



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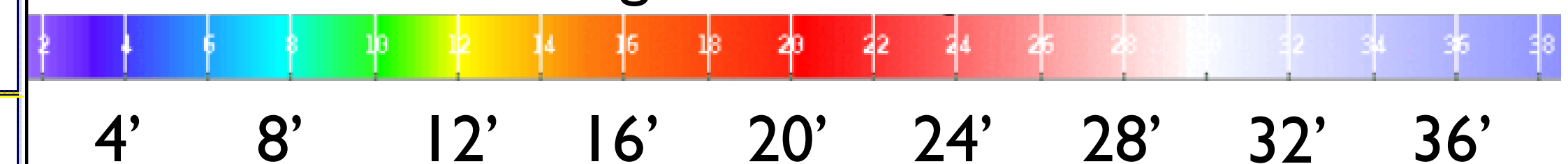
24 Hour Forecast

Tue 8/17 8am

Peak Winds: 30 kt (15-20 kt over water)

Peak Seas: 5 ft

■ Wave heights are in feet



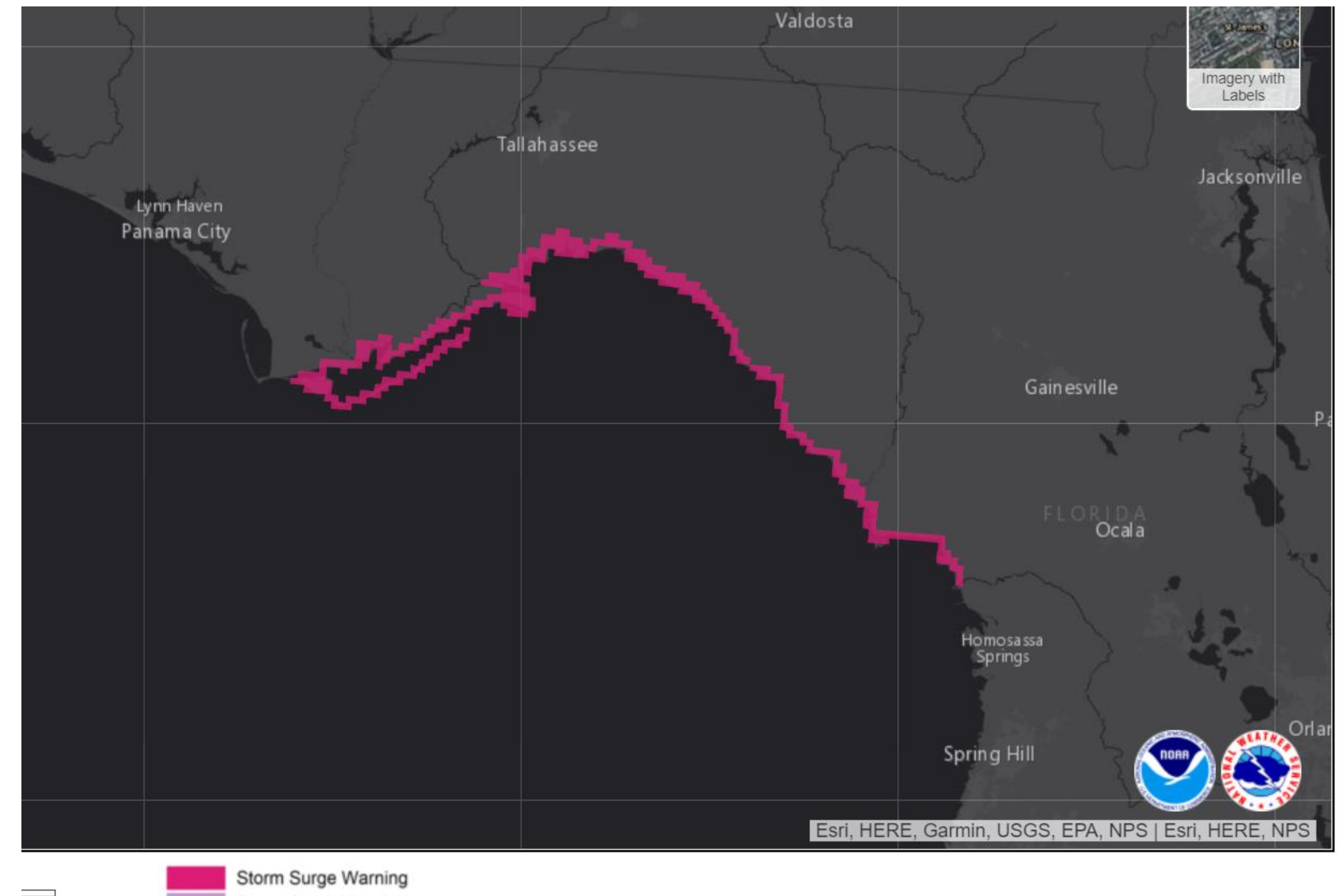
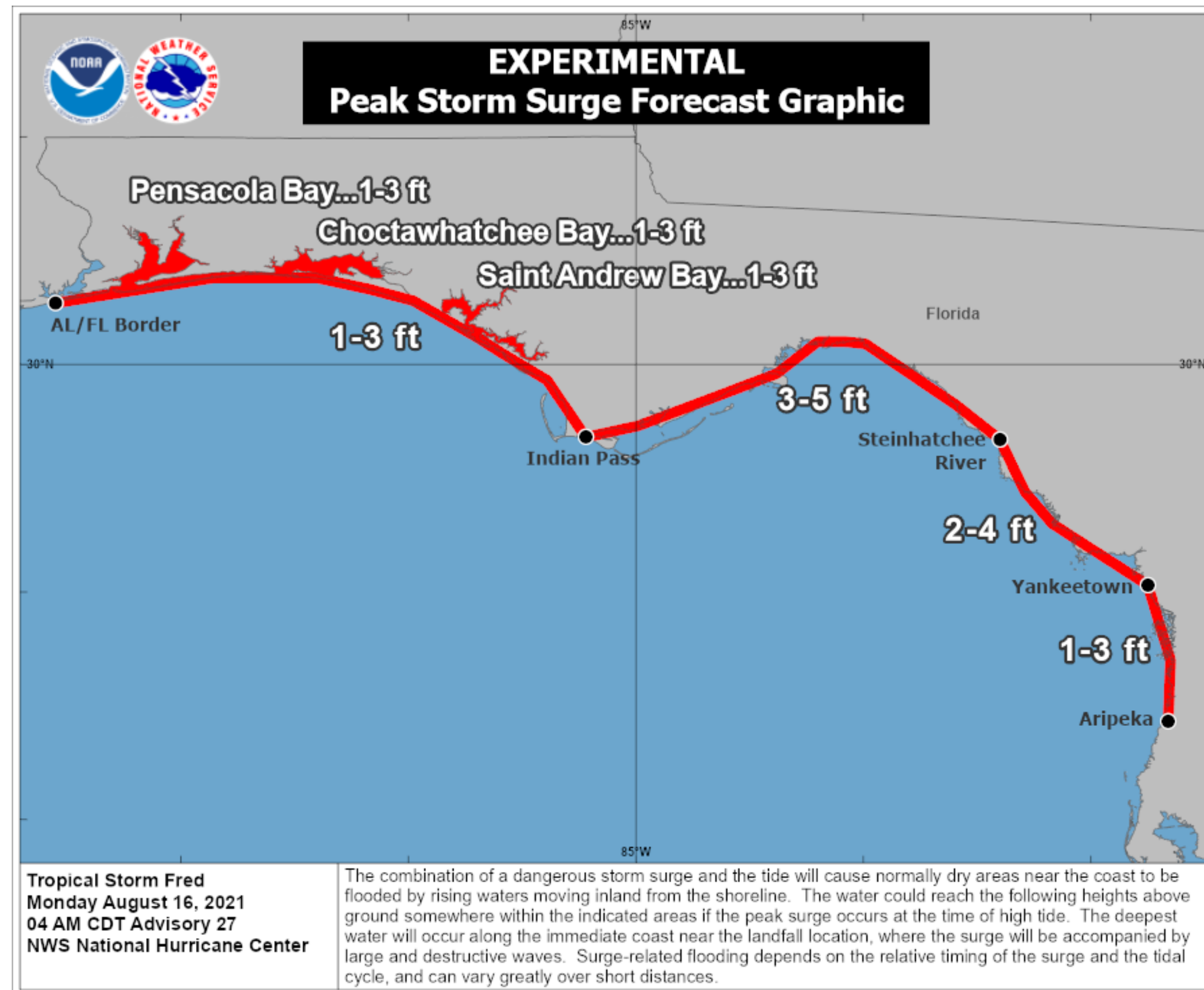
Potential Peak Storm Surge / Watches and Warnings



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NWS National Hurricane Center

Tropical Storm Fred

Storm Surge Warning



- Potential storm surge is represented in feet above the ground at any given point.

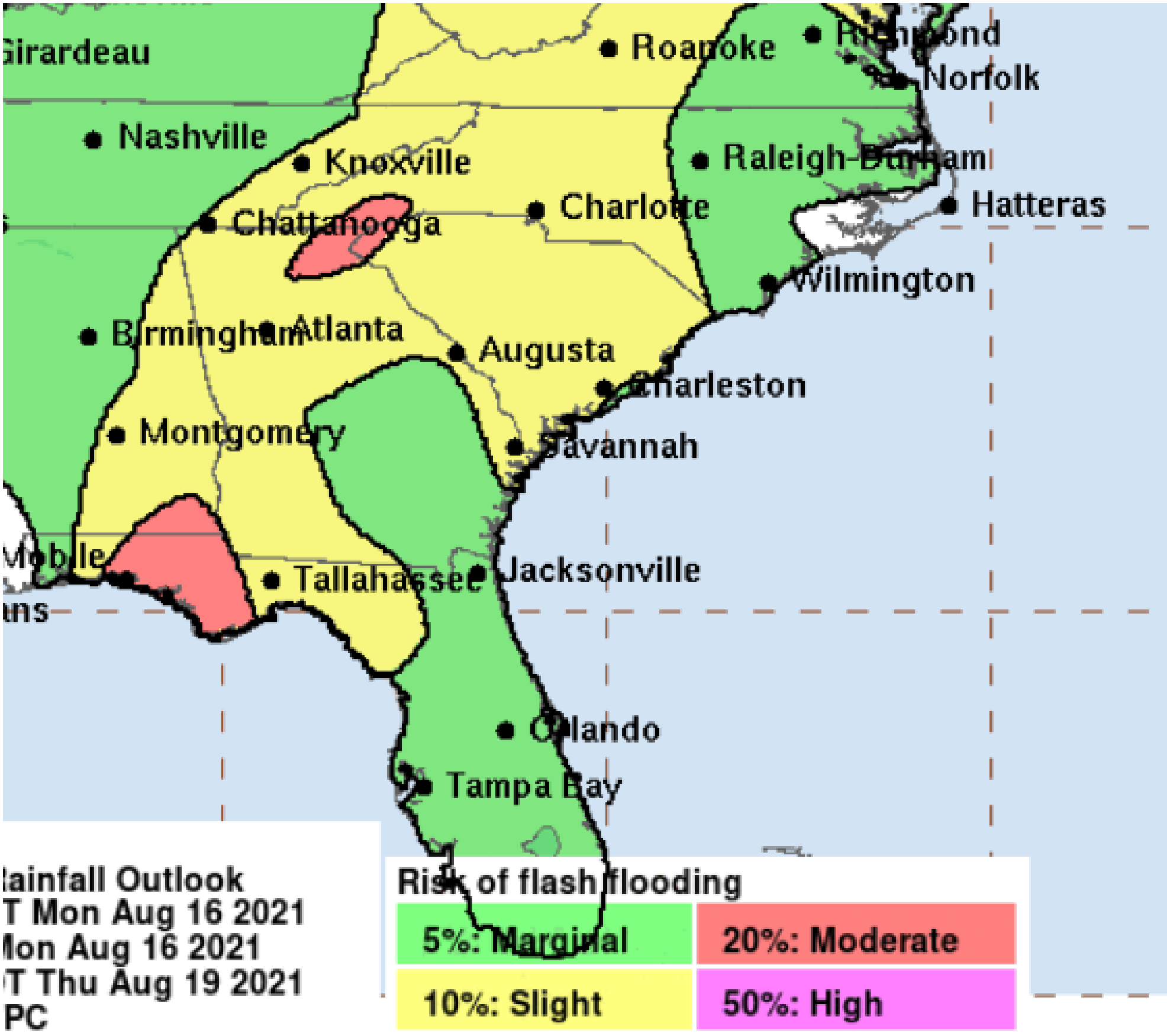
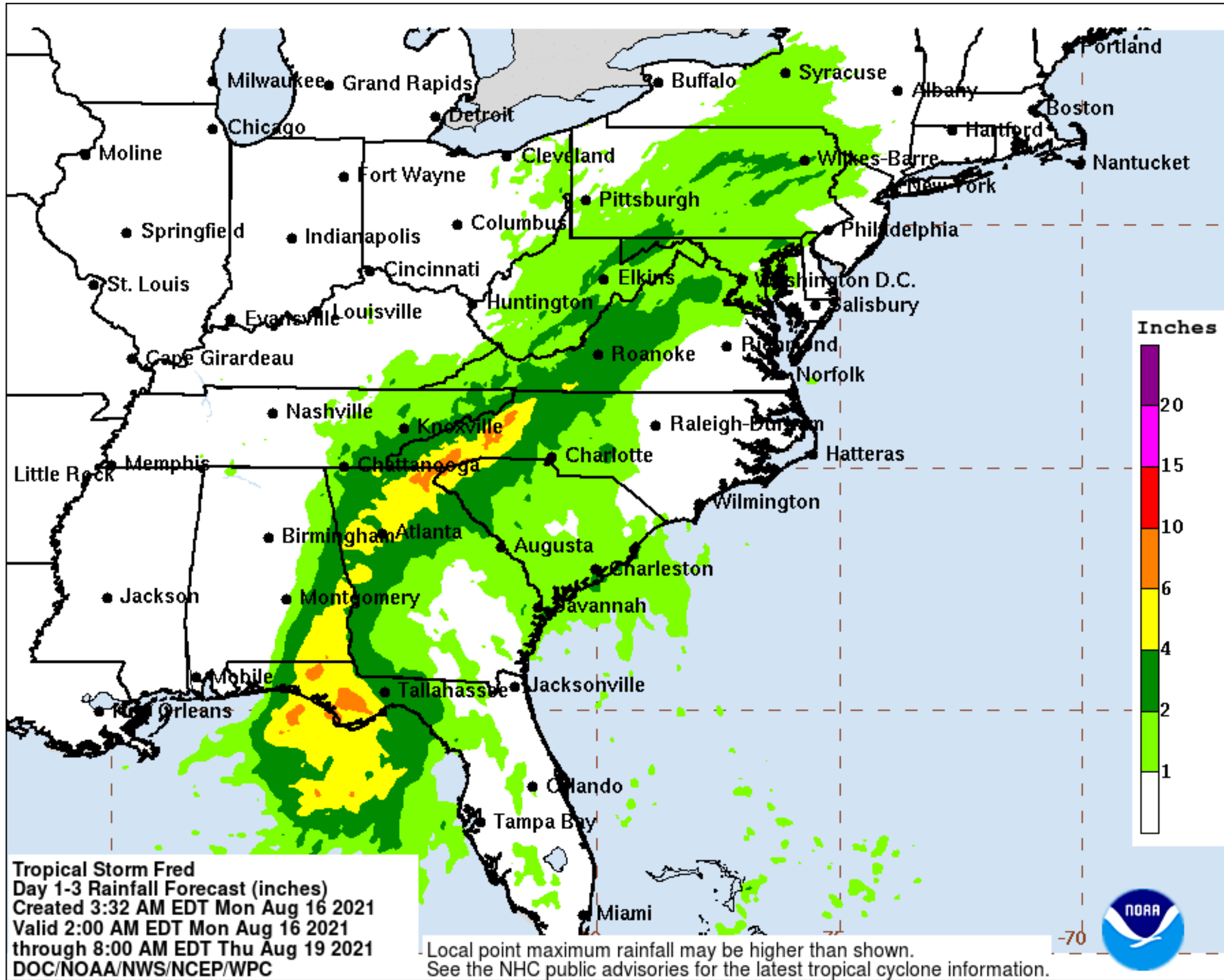
Expected Storm Total Rainfall and Chance of Rainfall Flooding



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NWS National Hurricane Center

Tropical Storm Fred

Images from NWS Weather Predication Center



- Total rainfall in inches through Thu morning

Risk of rainfall exceeding flash flood guidance within 25 miles of a point
HIGH: > 50% **SLGT: 10%-20%**
MDT: 20%-50% **MRGL: 5%-10%**
Through Thu morning

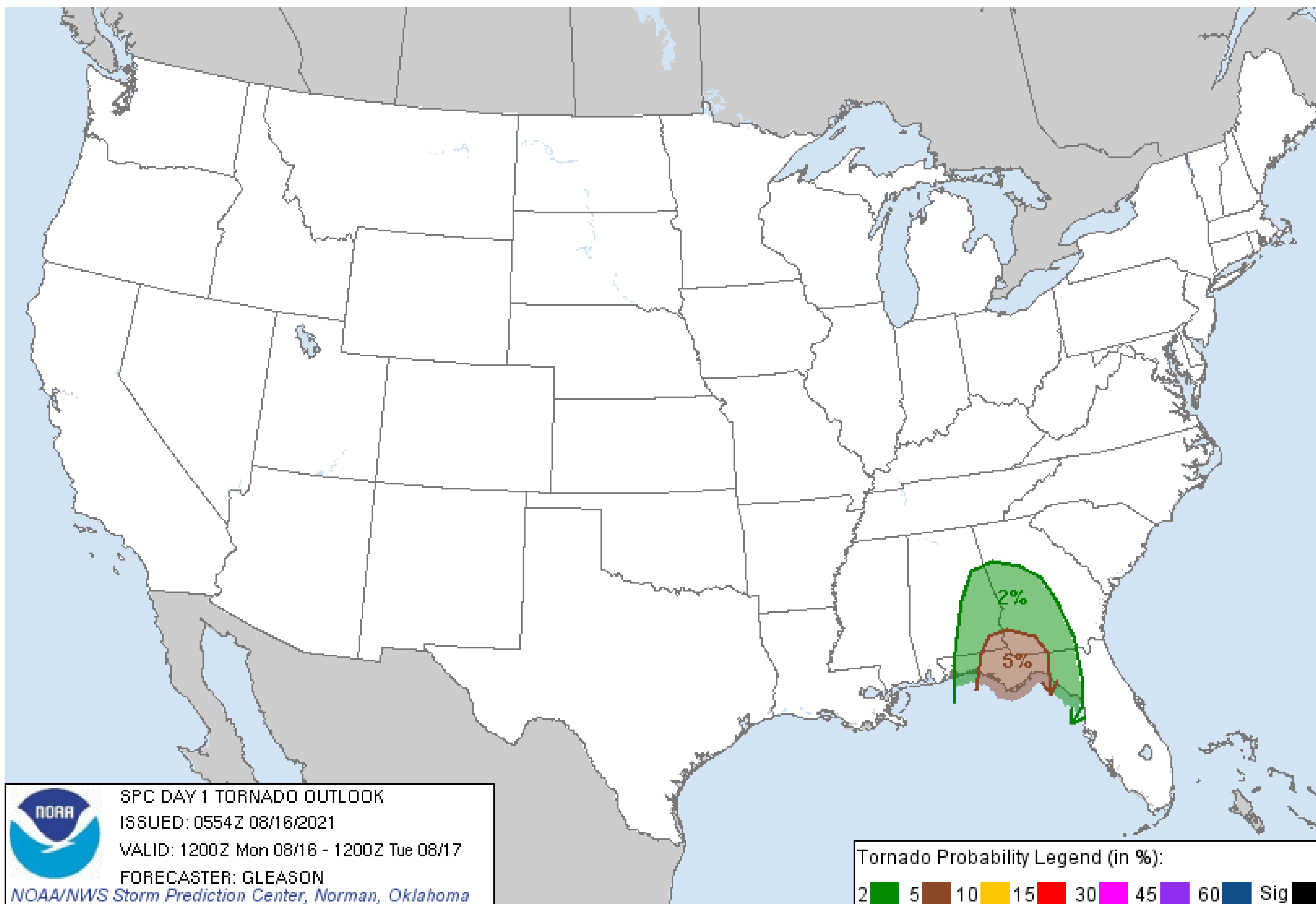
Tornado Outlook – Day 1

Tropical Storm Fred

Image from NWS Storm Prediction Center



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NWS National Hurricane Center



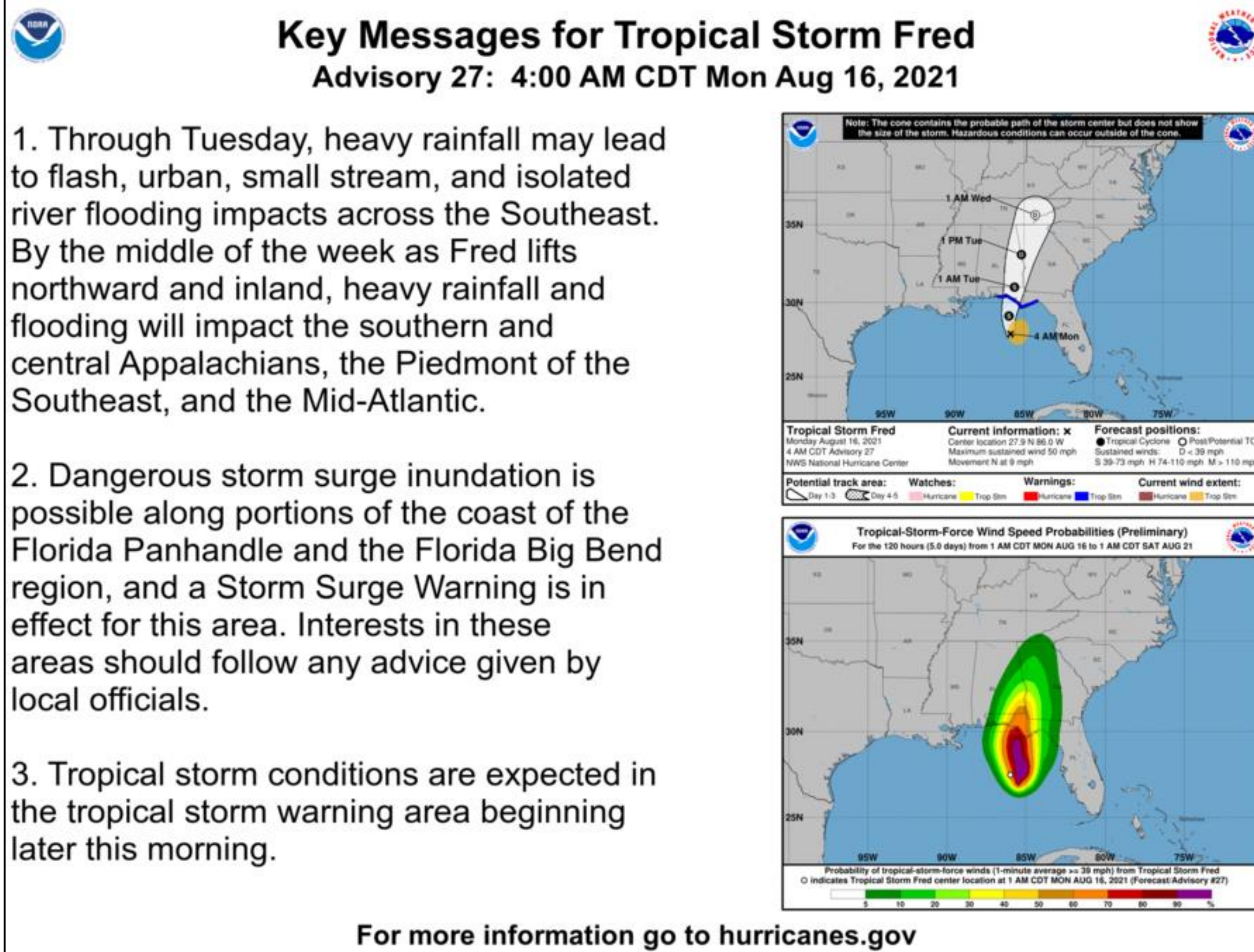
- An isolated tornado or two are possible through Tue morning

Key Messages

Tropical Storm Fred



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NWS National Hurricane Center



IMPACTS FOR D7 for Tropical Storm Fred

Winds – Moderate

Storm Surge – Moderate

Rainfall/Flash Flooding – High

Tornadoes – Low

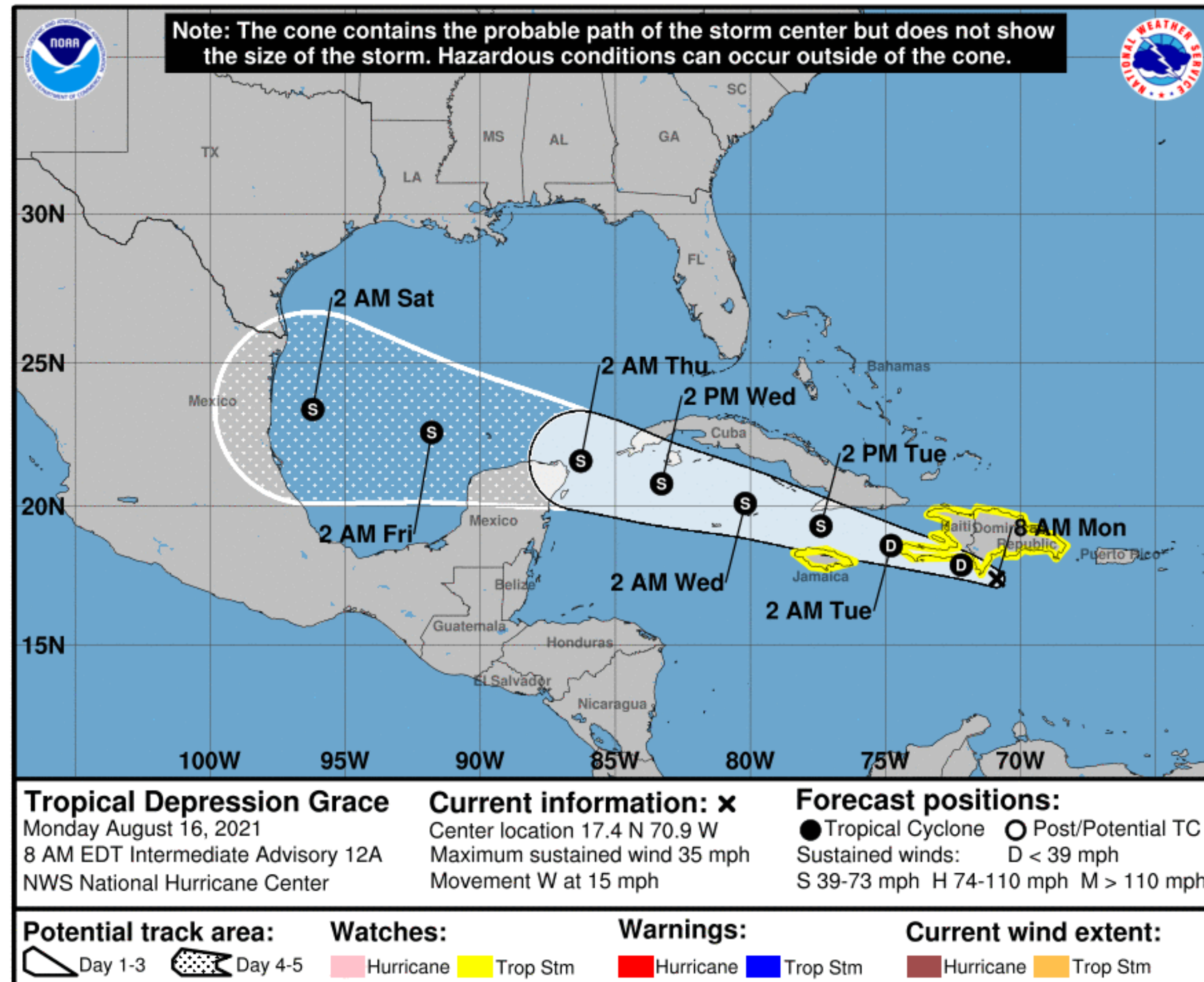
Waves - Moderate

Situation Overview

Tropical Depression Grace



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



... **FLASH FLOODING AND MUDSLIDES POSSIBLE ACROSS THE DOMINICAN REPUBLIC AND HAITI TODAY...**

Summary of 800 AM EDT...1200 UTC...Information

Location... 17.4N 70.9W

About 110 nm...SE of Port-Au-Prince, Haiti

Maximum Sustained Winds... 30 kt

Present Movement... W or 275 degrees at 13 kt

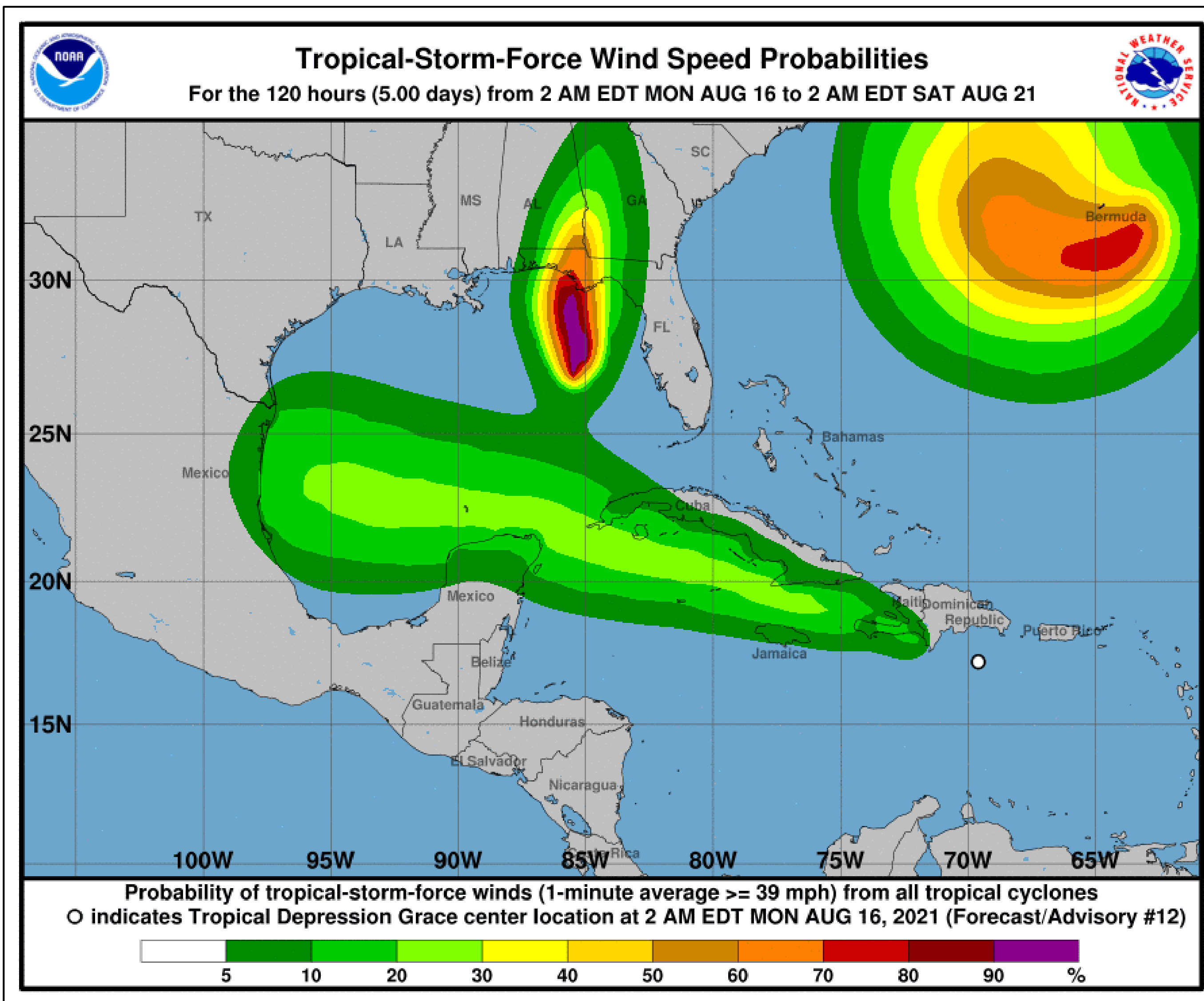
PEAK SEAS 10 FT

T.S. Wind Speed Probabilities

Tropical Depression Grace



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



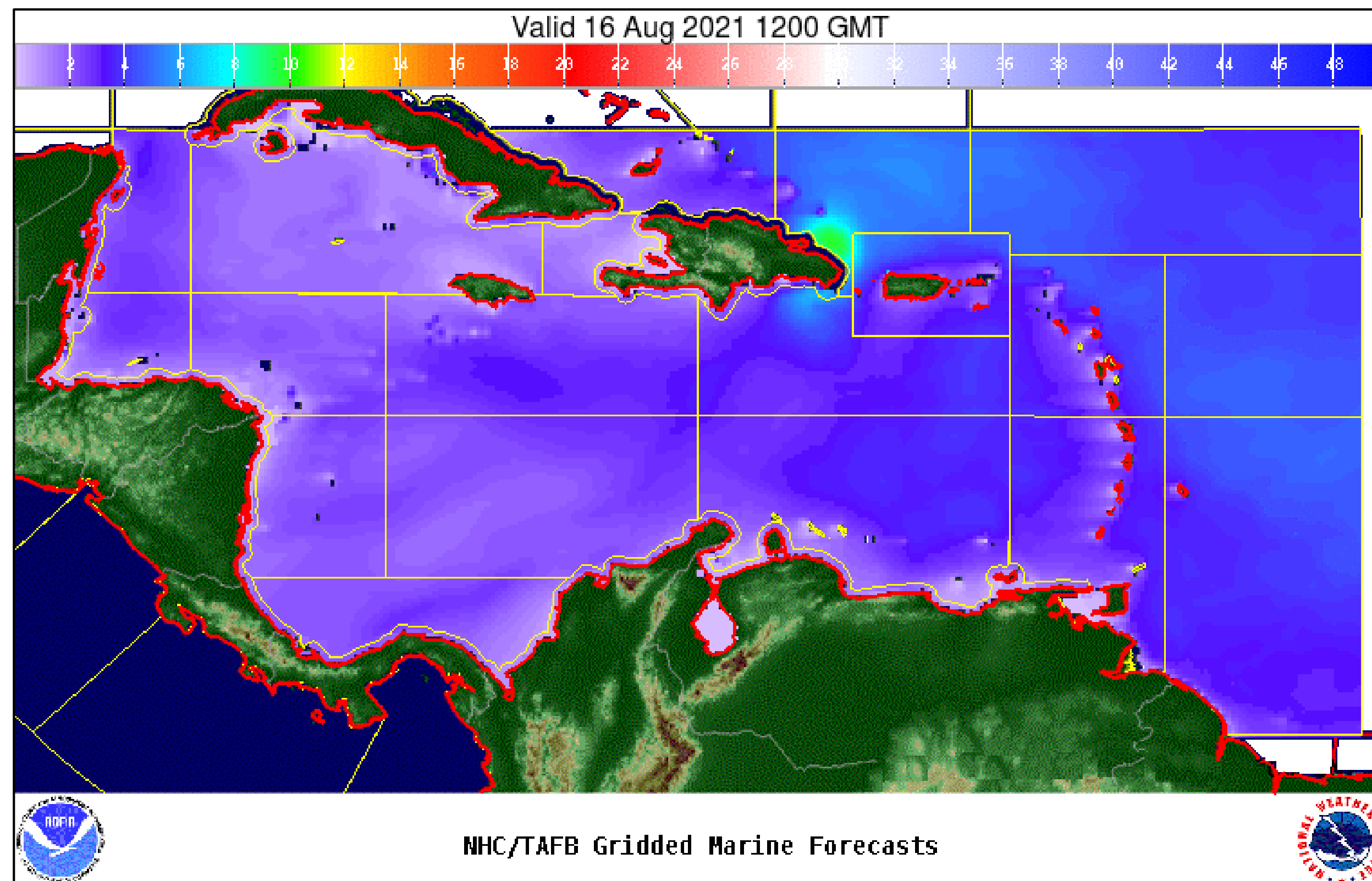
- **Port-Au-Prince, Haiti: 10%**
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
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Wind And Waves

Tropical Depression Grace



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Current Time

Mon 8/16 8am EDT

Peak Winds: 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet



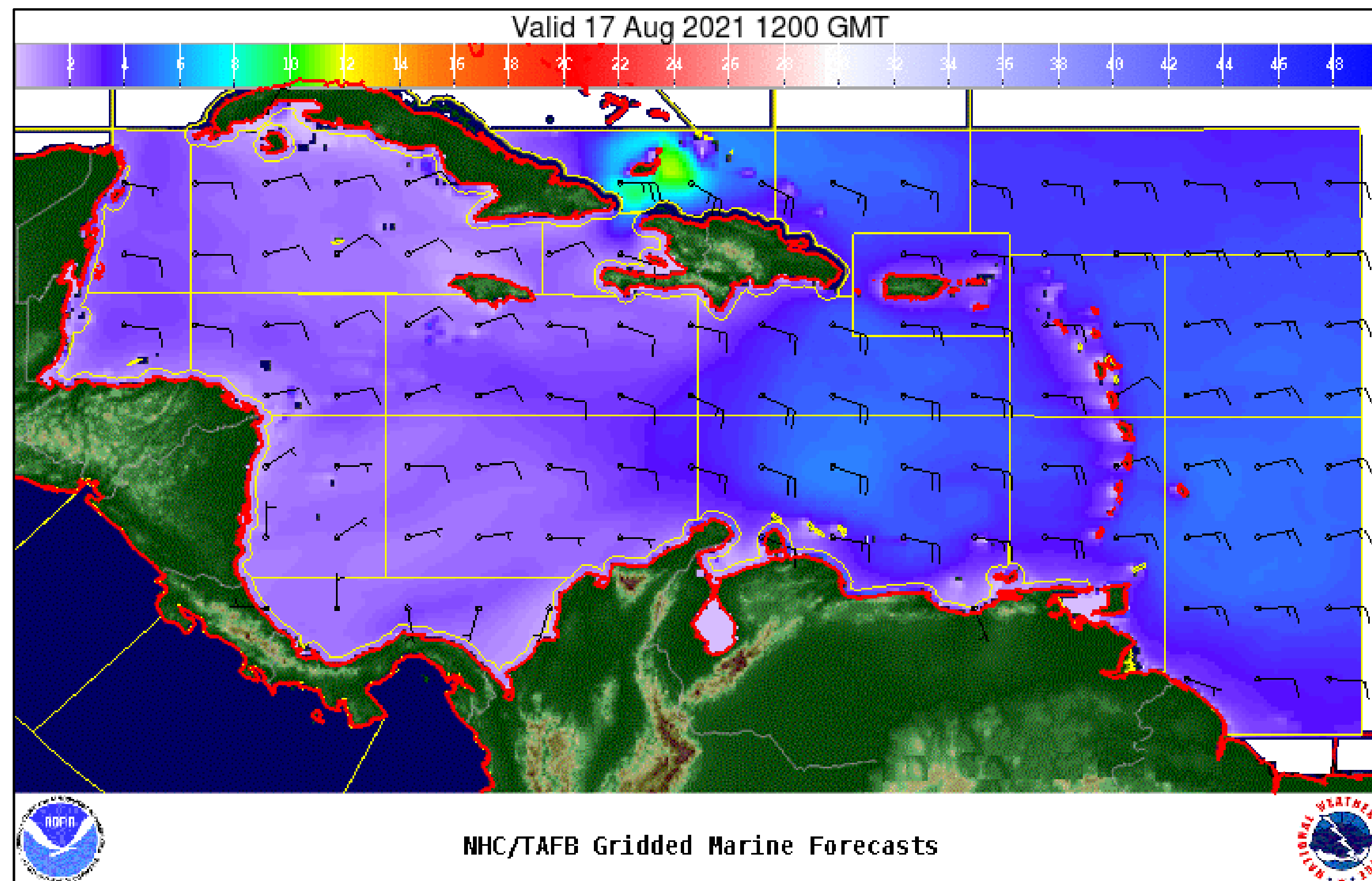
4' 8' 12' 16' 20' 24' 28' 32' 36'

Wind And Waves

Tropical Depression Grace



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



24 Hour Forecast

Tue 8/17 8am EDT

Peak Winds: 30 kt

Peak Seas: 11 ft

■ Wave heights are in feet



4' 8' 12' 16' 20' 24' 28' 32' 36'

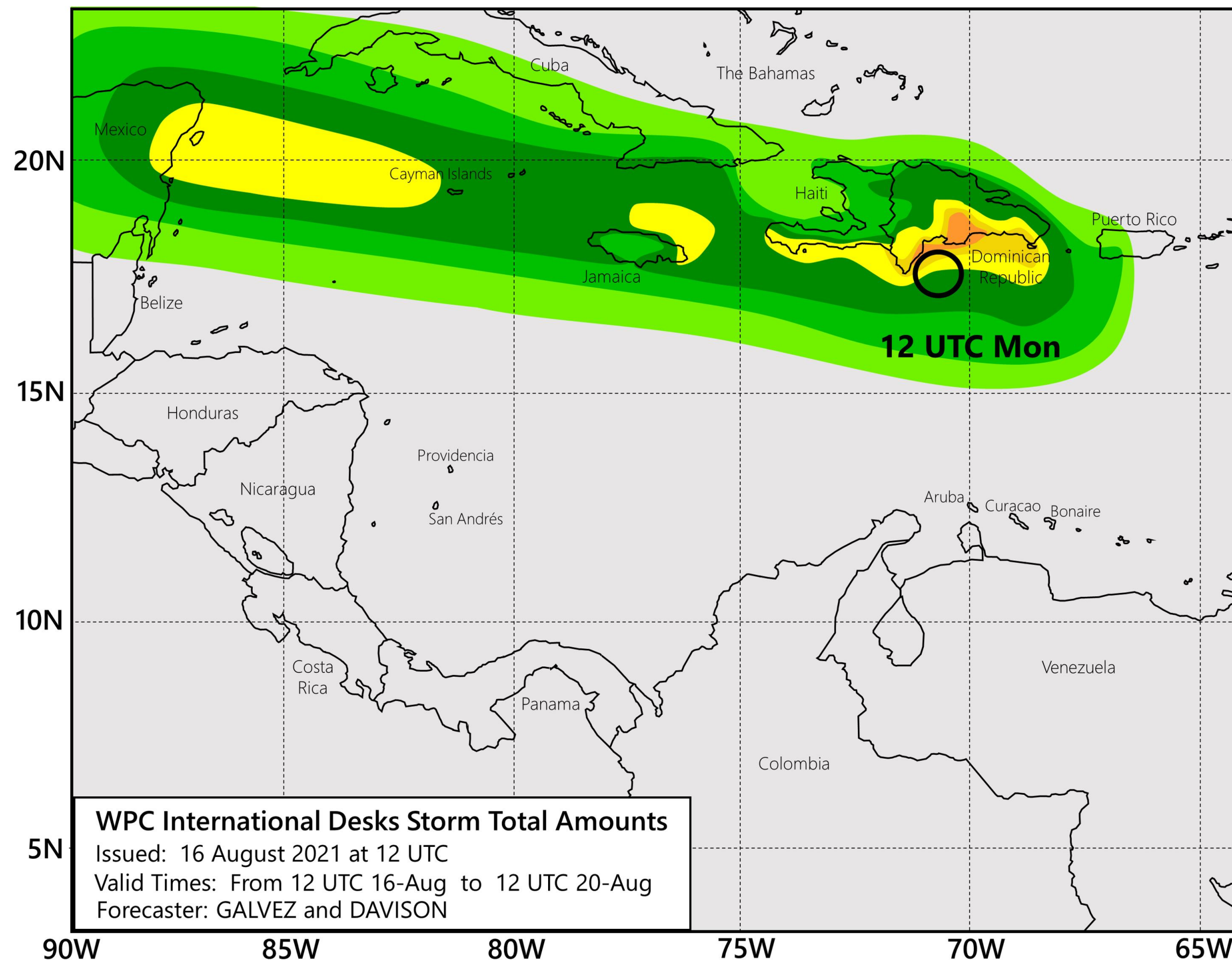
Forecast Information

Tropical Depression Grace



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NWS National Hurricane Center

Tropical Depression Grace 4-Day Rainfall



Rainfall (in)	Rainfall (mm)
30+	750+
20-30	500-750
15-20	375-500
10-15	250-375
8-10	200-250
6-8	150-200
4-6	100-150
3-4	75-100
2-3	50-75
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.

- Heavy rainfall today through tonight could cause flash flooding and mudslides across the Dominican Republic and Haiti

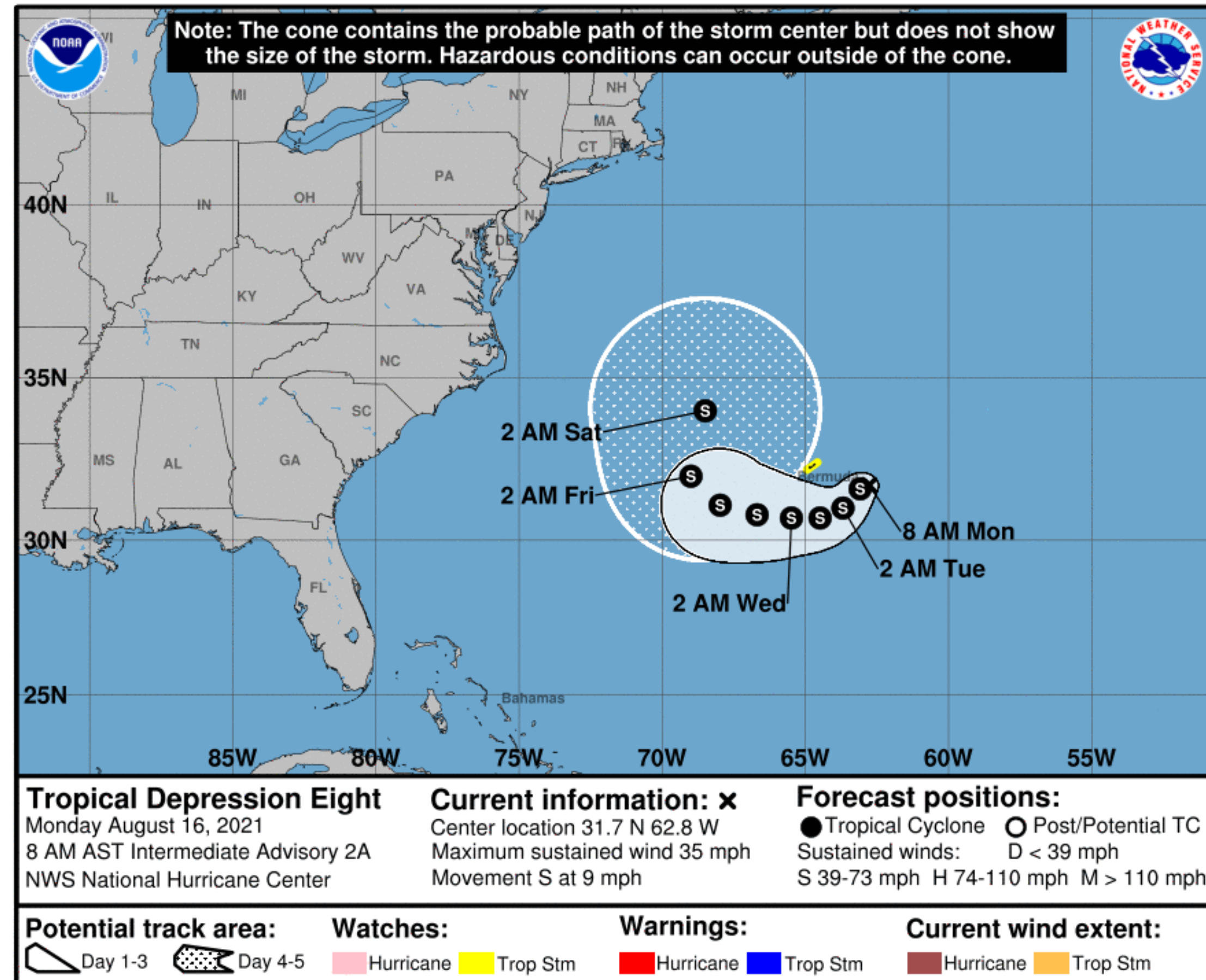
NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

Forecast Information

Tropical Depression Eight



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



- Tropical Depression Eight expected to strengthen to a tropical storm later today
- Forecast to move slowly in a clockwise loop through the next 5 days

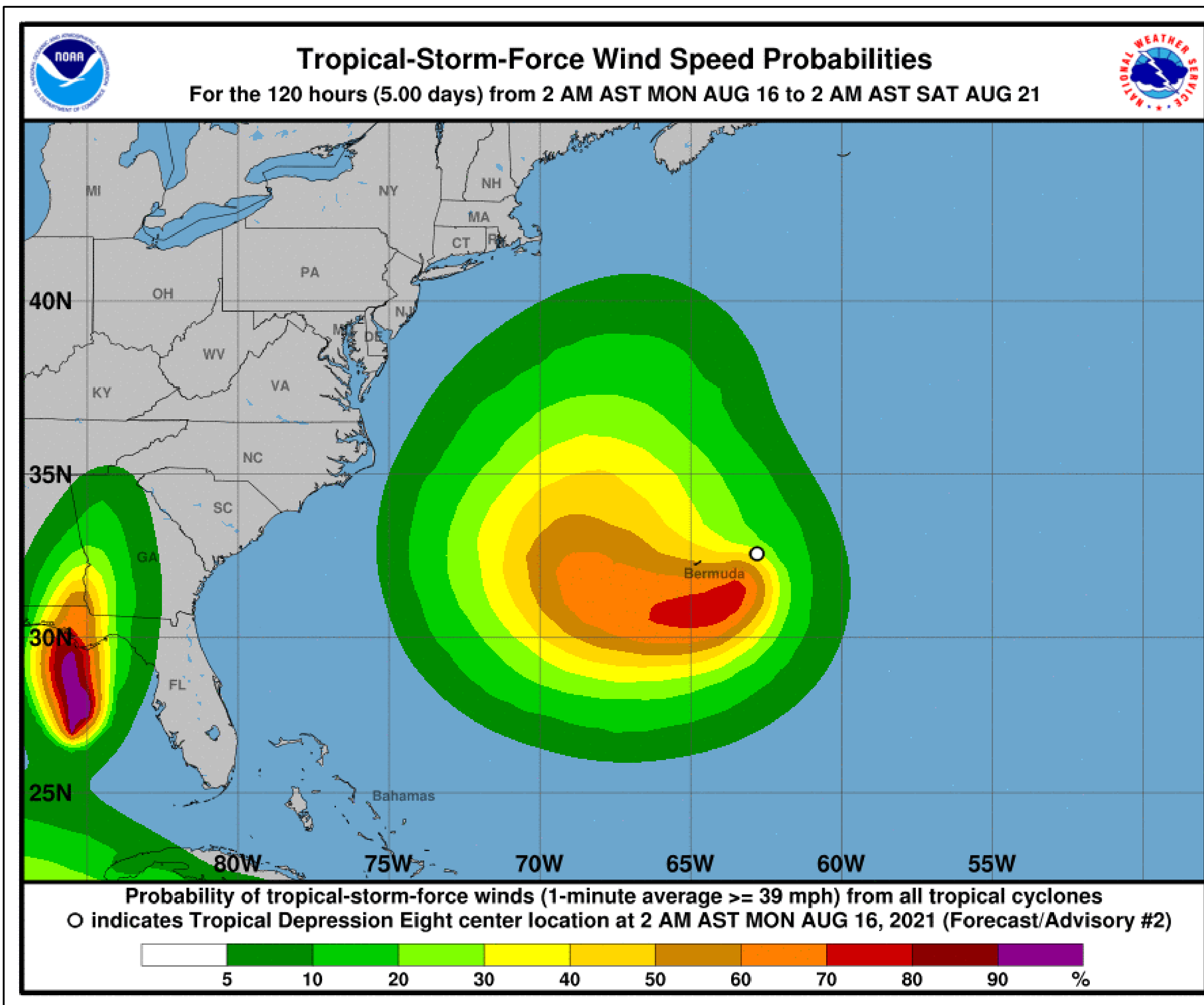
NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

T.S. Wind Speed Probabilities

Tropical Depression Eight



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- **Bermuda is under a tropical storm watch**
- 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.
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TROPICAL STORM FRED, TROPICAL STORM GRACE AND TROPICAL DEPRESSION EIGHT BRIEFING

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

*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