

**IMPACTS FOR D7 for Fred** (through next 5 days)

Winds – Moderate

Storm Surge – Low

Rainfall/Flash Flooding – Moderate

Tornadoes – Low

Waves - Low

**IMPACTS FOR D7 for Grace** (through next 5 days)

Winds – Moderate

Storm Surge – None

Rainfall/Flash Flooding – Low

Tornadoes – None

Waves - Moderate

# REMNANTS OF FRED/ TROPICAL STORM GRACE BRIEFING



9:00 AM EDT  
Sunday, August 15, 2021

Prepared by:  
Chris Landsea

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*



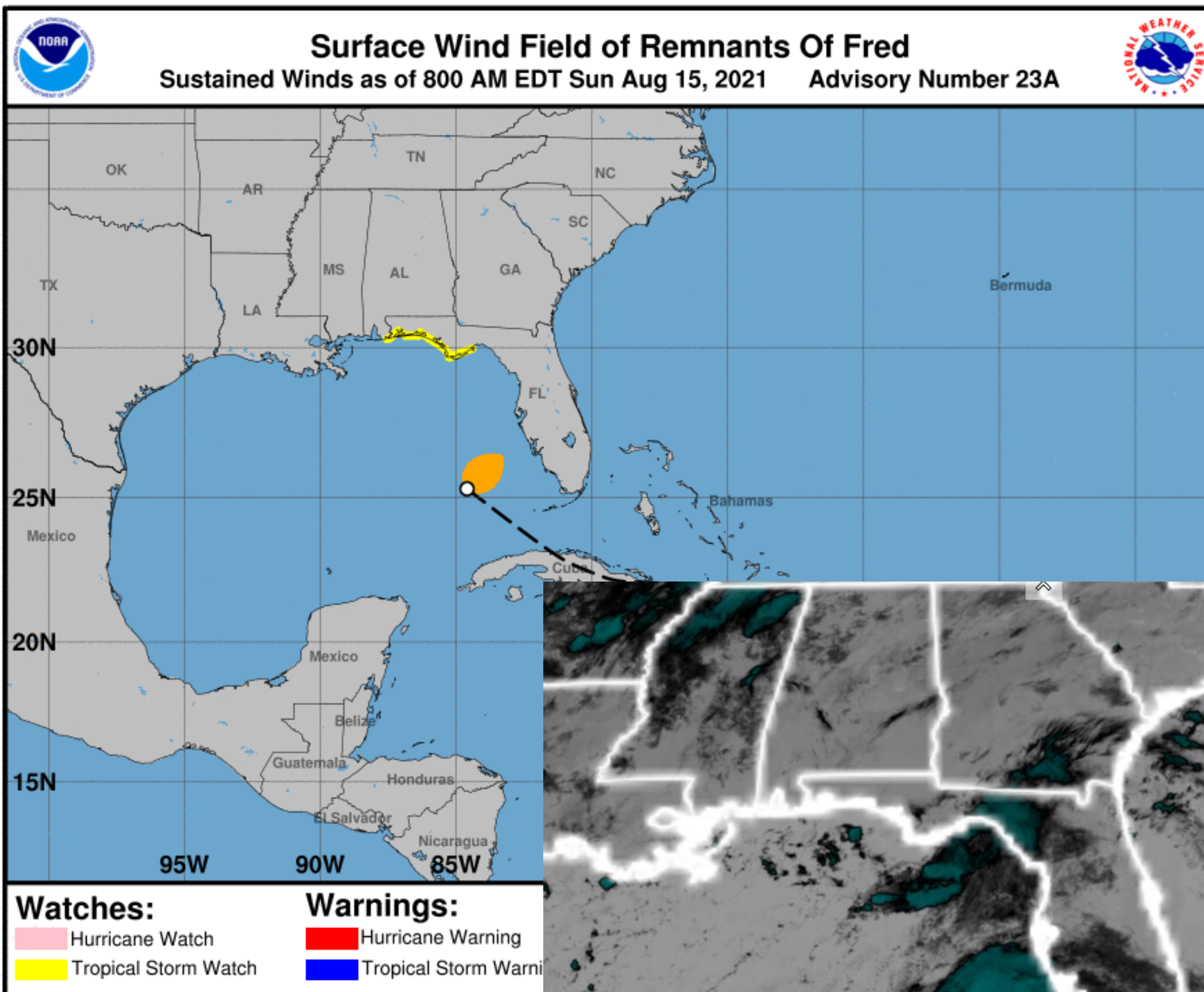


# Situation Overview



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Remnants of Fred



**...AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INVESTIGATING THE REMNANTS OF FRED...**

**SUMMARY OF 800 AM EDT INFORMATION**

-----  
LOCATION...25.3N 84.6W  
ABOUT 140 NM WNW OF DRY TORTUGAS  
ABOUT 330 NM SSE OF PENSACOLA FL  
MAXIMUM SUSTAINED WINDS...35 KT  
PRESENT MOVEMENT...NNW AT 7 KT  
PEAK SEAS 10 FT  
SIZE  
34 KT.....100NE 0SE 0SW 0NW

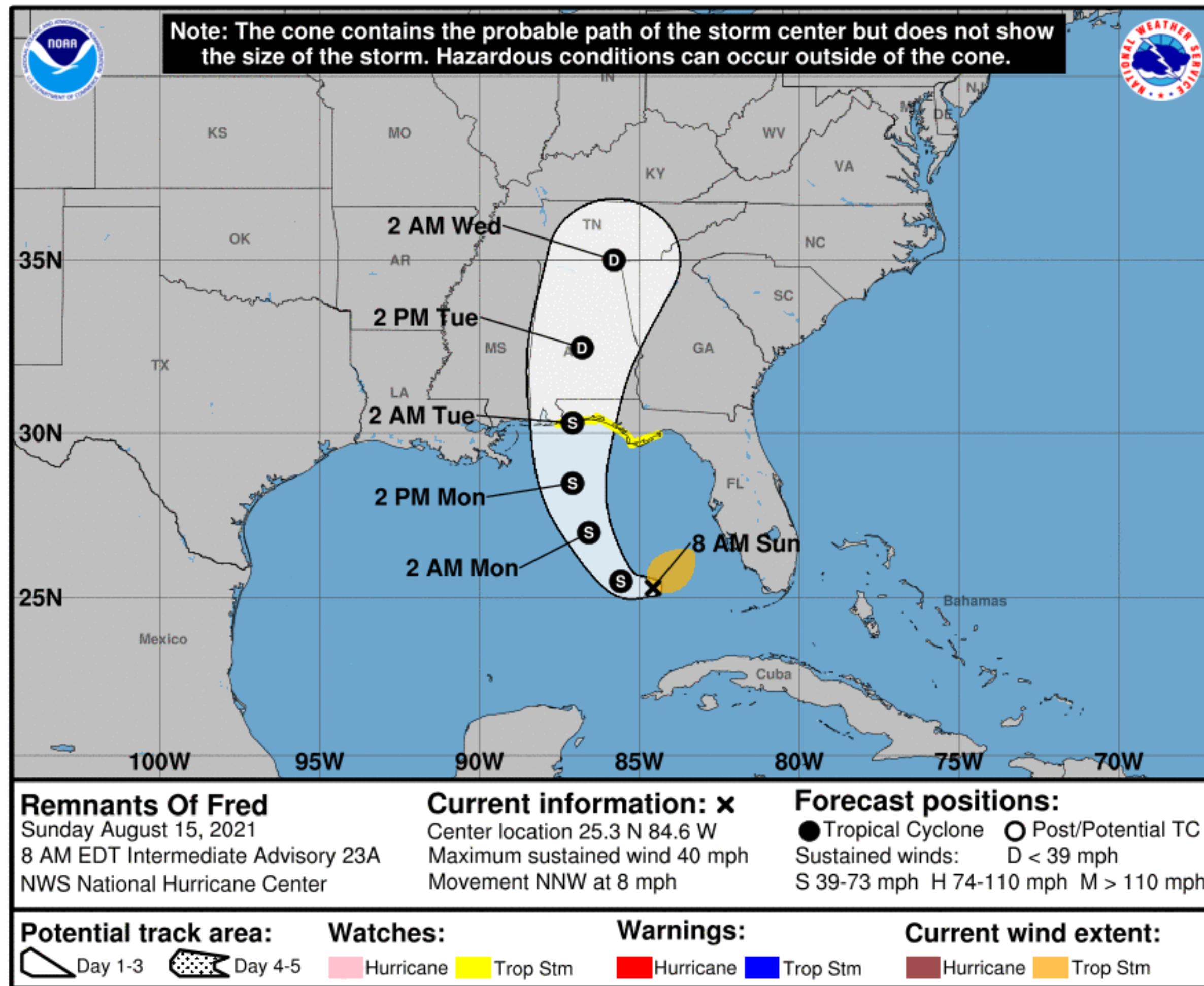


# Forecast Information



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## Remnants of Fred



- **Fred is forecast to turn and accelerate toward the N by Monday**
- **Fred is expected to become a tropical storm later today, but not reach hurricane force**
- **Tropical Storm landfall along the Florida Panhandle/Alabama coast Monday night**
- Current center forecast positions through the next 3 days illustrated by dots
- White swath of potential track error added to each side of the forecast track through day 3

\*\* 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.

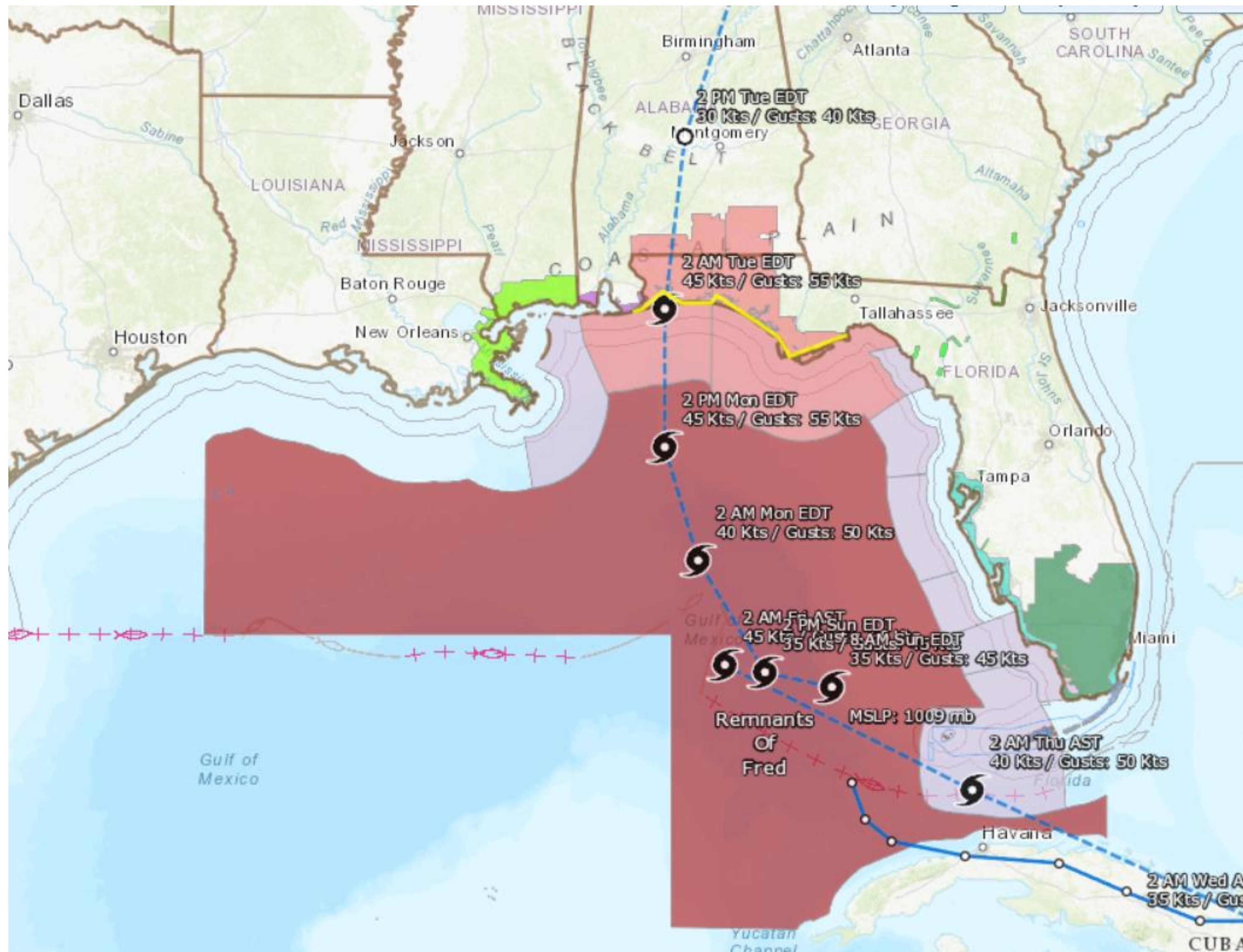


# Hazards Map

## Remnants of Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



■ <https://nowcoast.noaa.gov/>

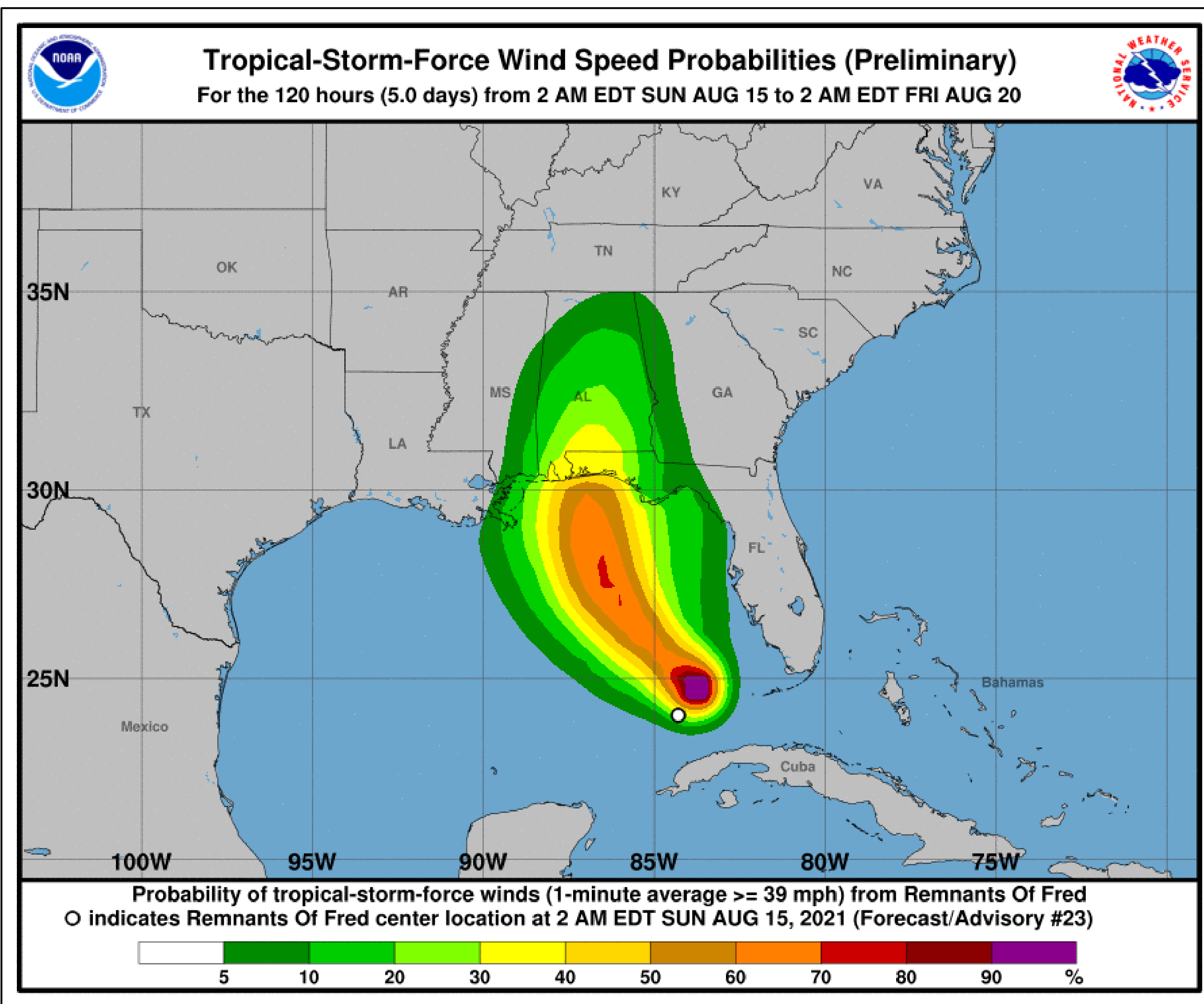


# T.S. Wind Speed Probabilities

Remnants of Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

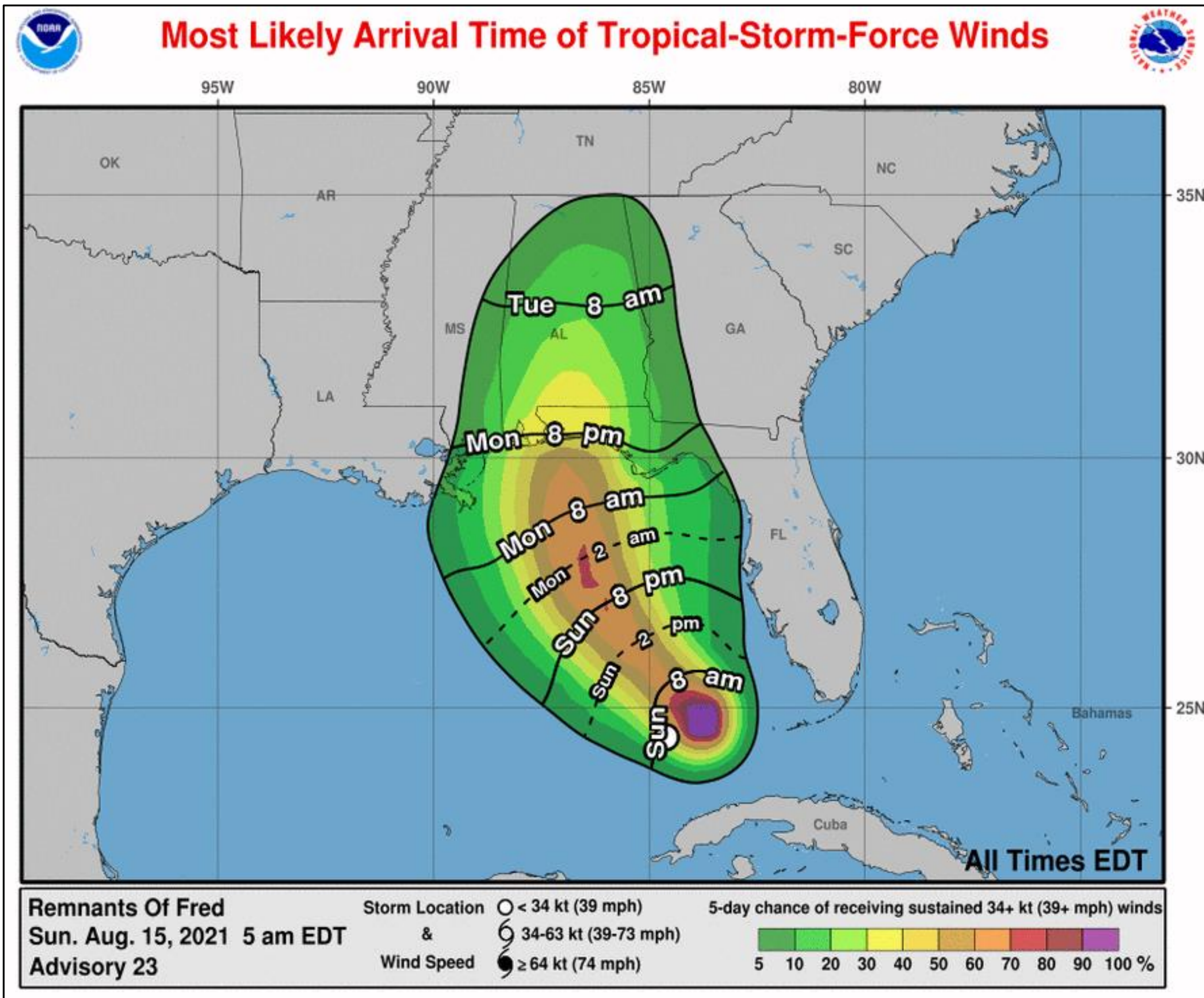


- **Apalachicola, FL – 25%**
- **Panama City, FL – 35%**
- **Pensacola, FL - 35%**
- **Mobile, AL – 15%**
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- 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.





## Remnants of Fred



- **FL Panhandle/AL – Mon 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.



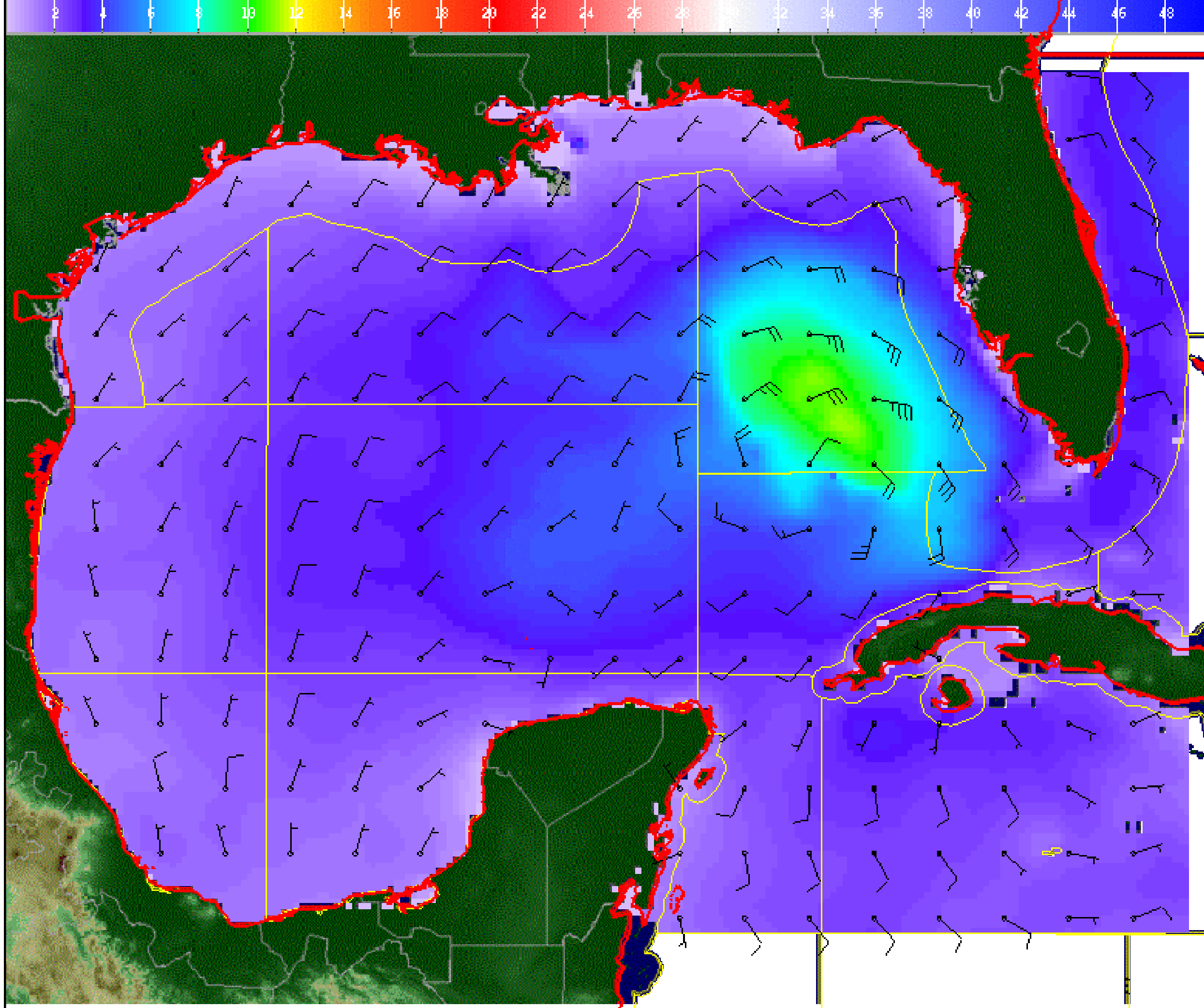
# Wind And Waves

Remnants of Fred



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NWS National Hurricane Center

Valid 15 Aug 2021 1200 GMT



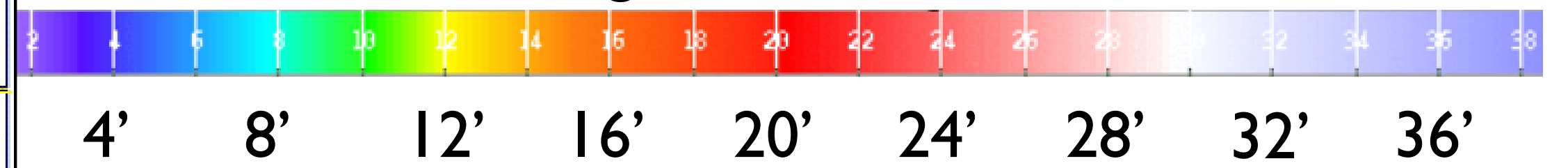
## Current Conditions

8am EDT, Sunday, August 15th

Peak Winds: 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet



NHC/TAFB Gridded Marine Forecasts



8/15/2021 8:51 AM

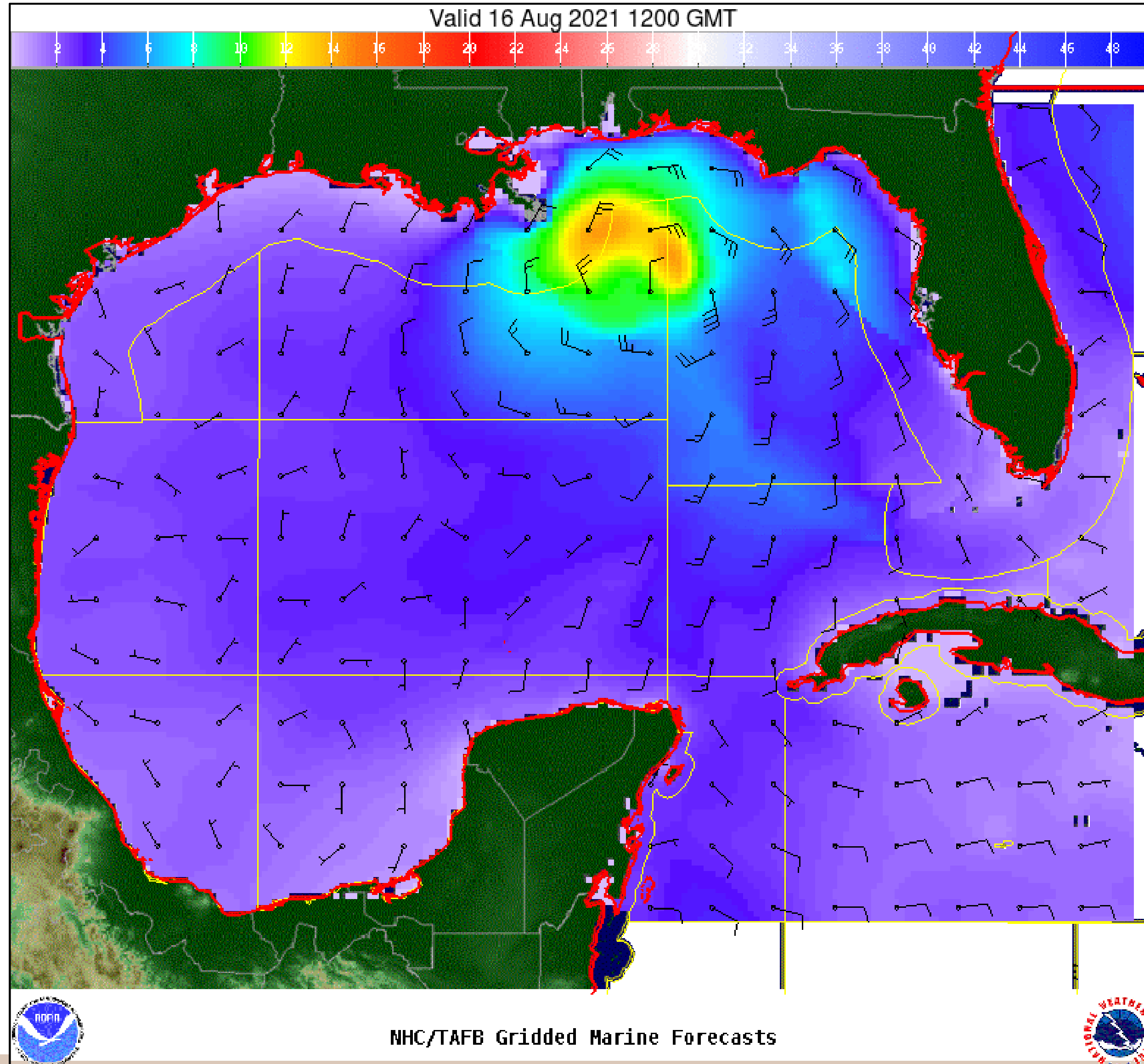
www.nhc.noaa.gov

# Wind And Waves

Post-Tropical Cyclone Fred

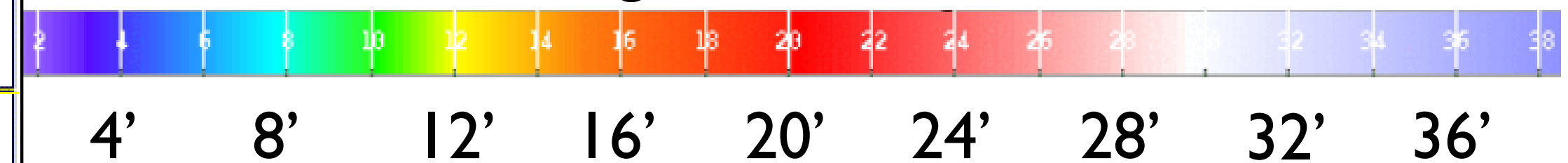


Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



24 Hour Forecast  
8am EDT, Monday, August 16<sup>th</sup>  
Peak Winds: 40 kt  
Peak Seas: 14 ft

■ Wave heights are in feet



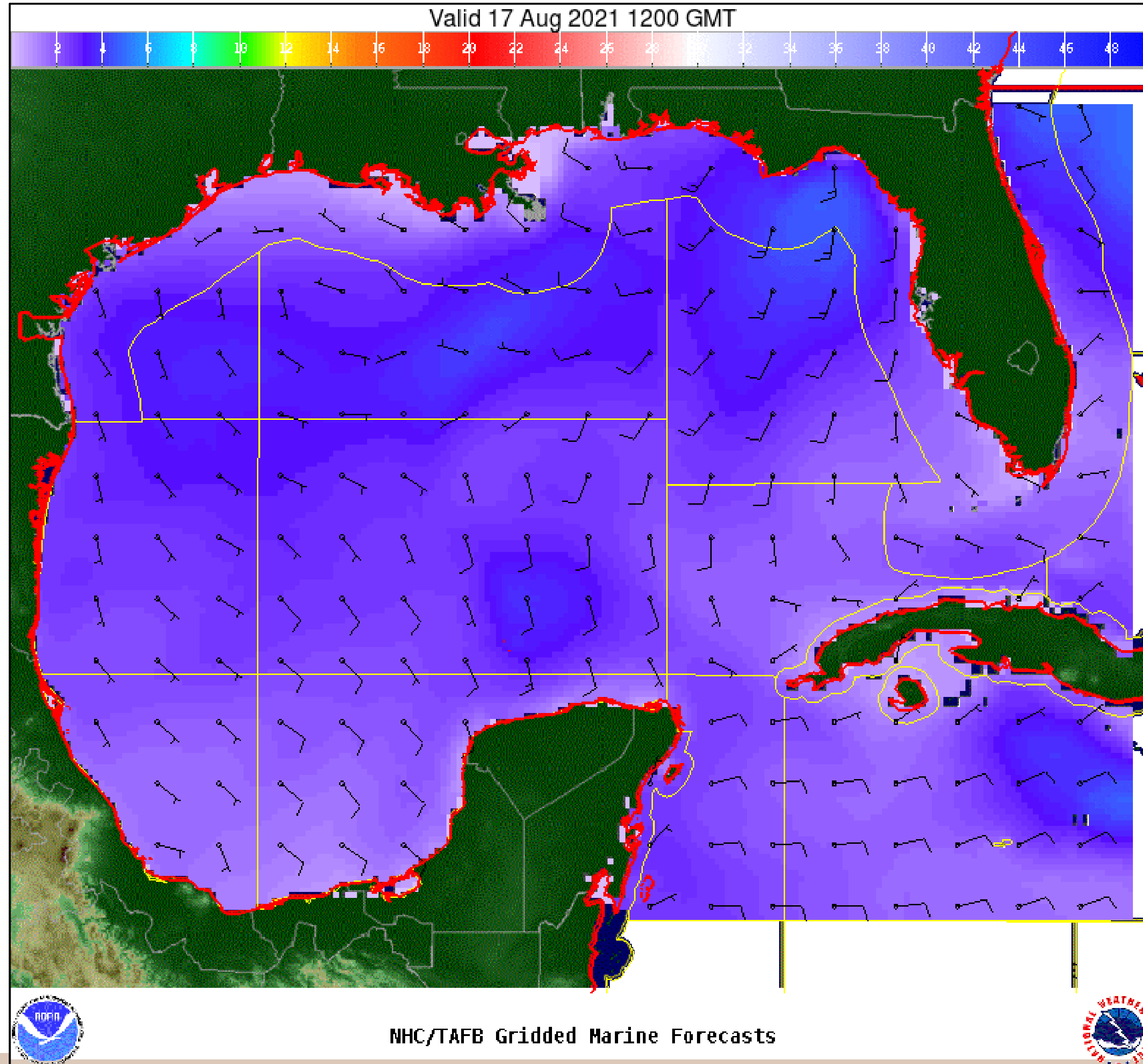


# Wind And Waves

Post-Tropical Cyclone Fred

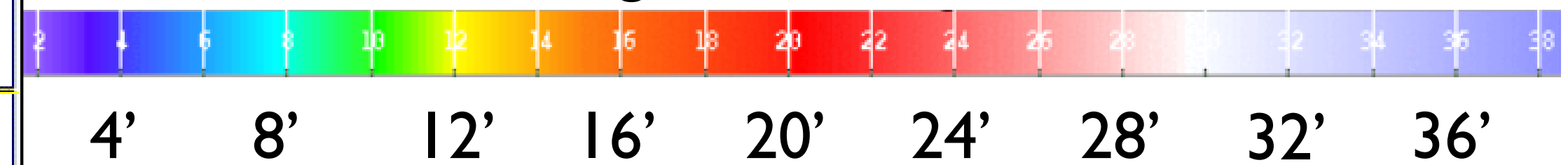


Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



48 Hour Forecast  
8am EDT, Tuesday, August 17<sup>th</sup>  
Peak Winds: 35 kt (inland)  
Peak Seas: 6 ft

■ Wave heights are in feet



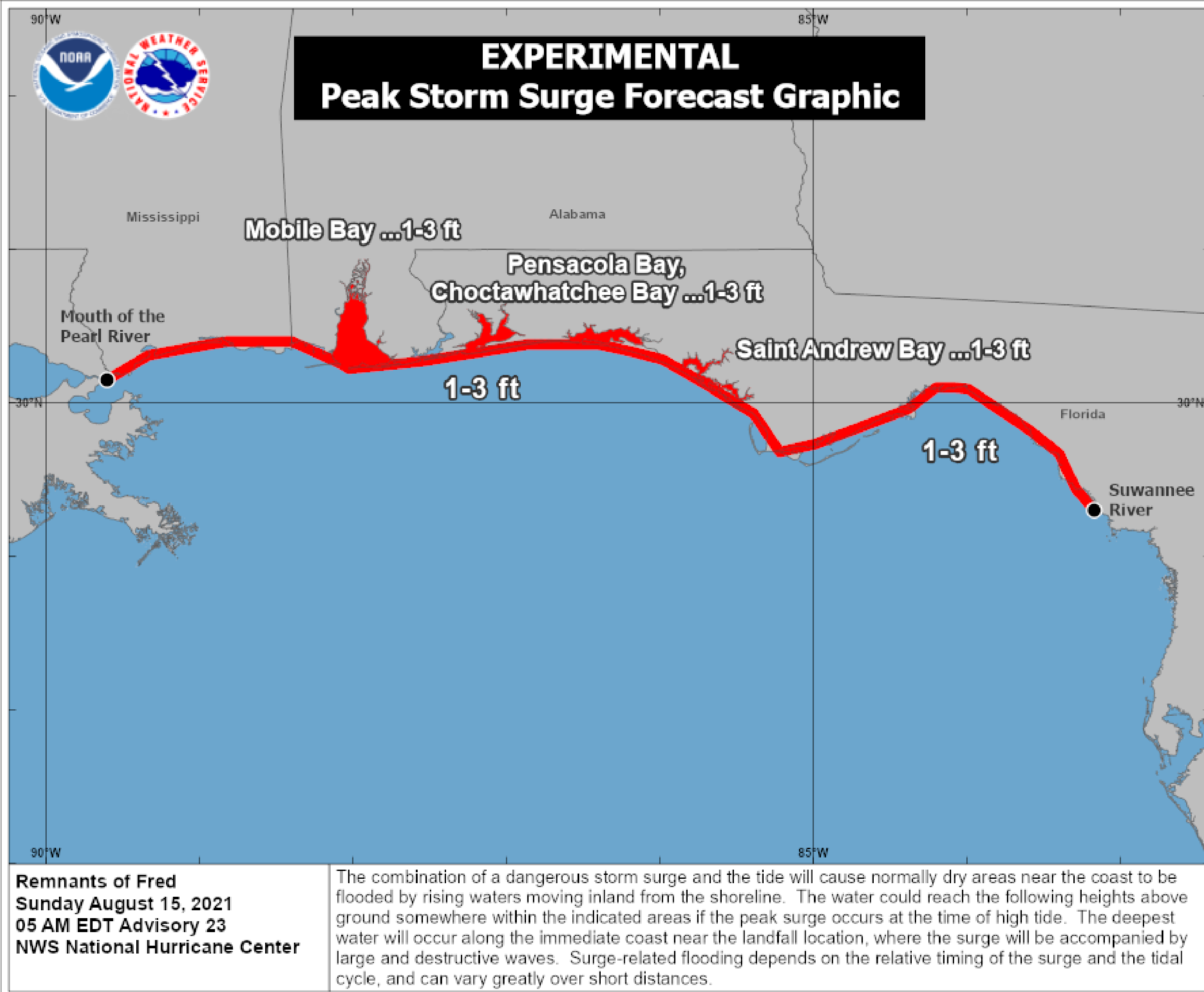


# Peak Storm Surge Forecast



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## Remnants of Fred



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



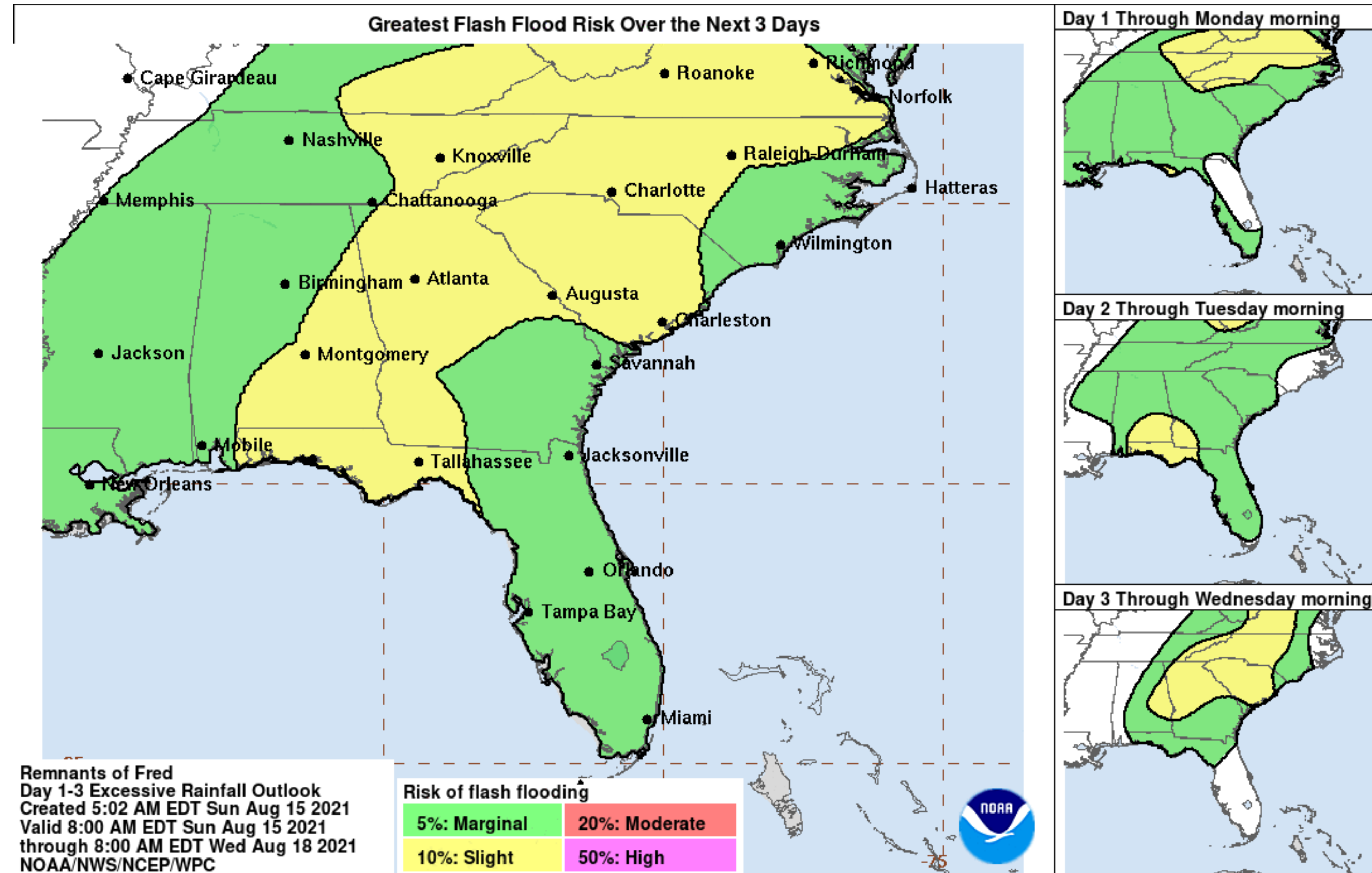
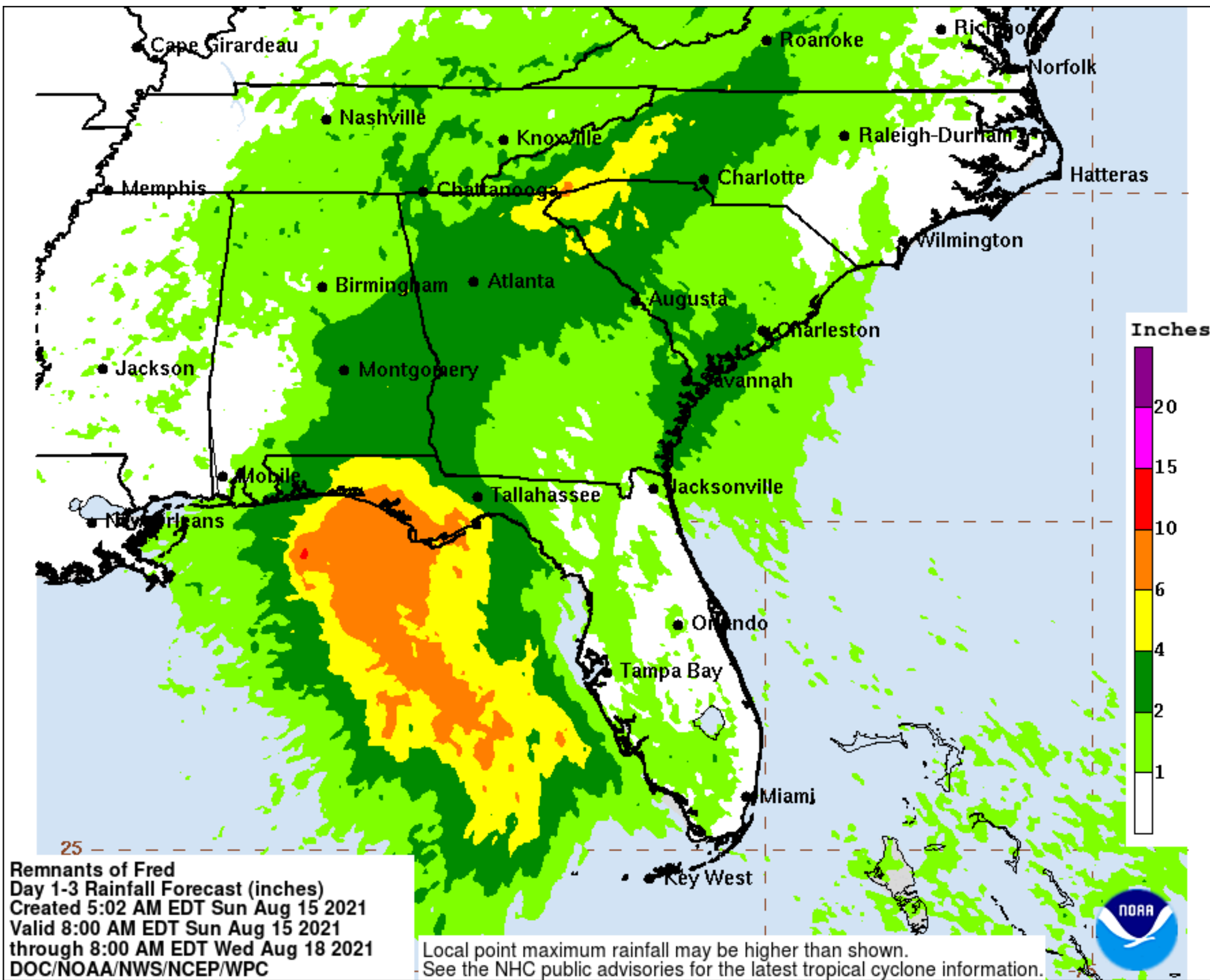
# Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Remnants of Fred

Images from NWS Weather Prediction Center



- Total rainfall in inches through Wednesday 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%**

Valid through Wednesday morning



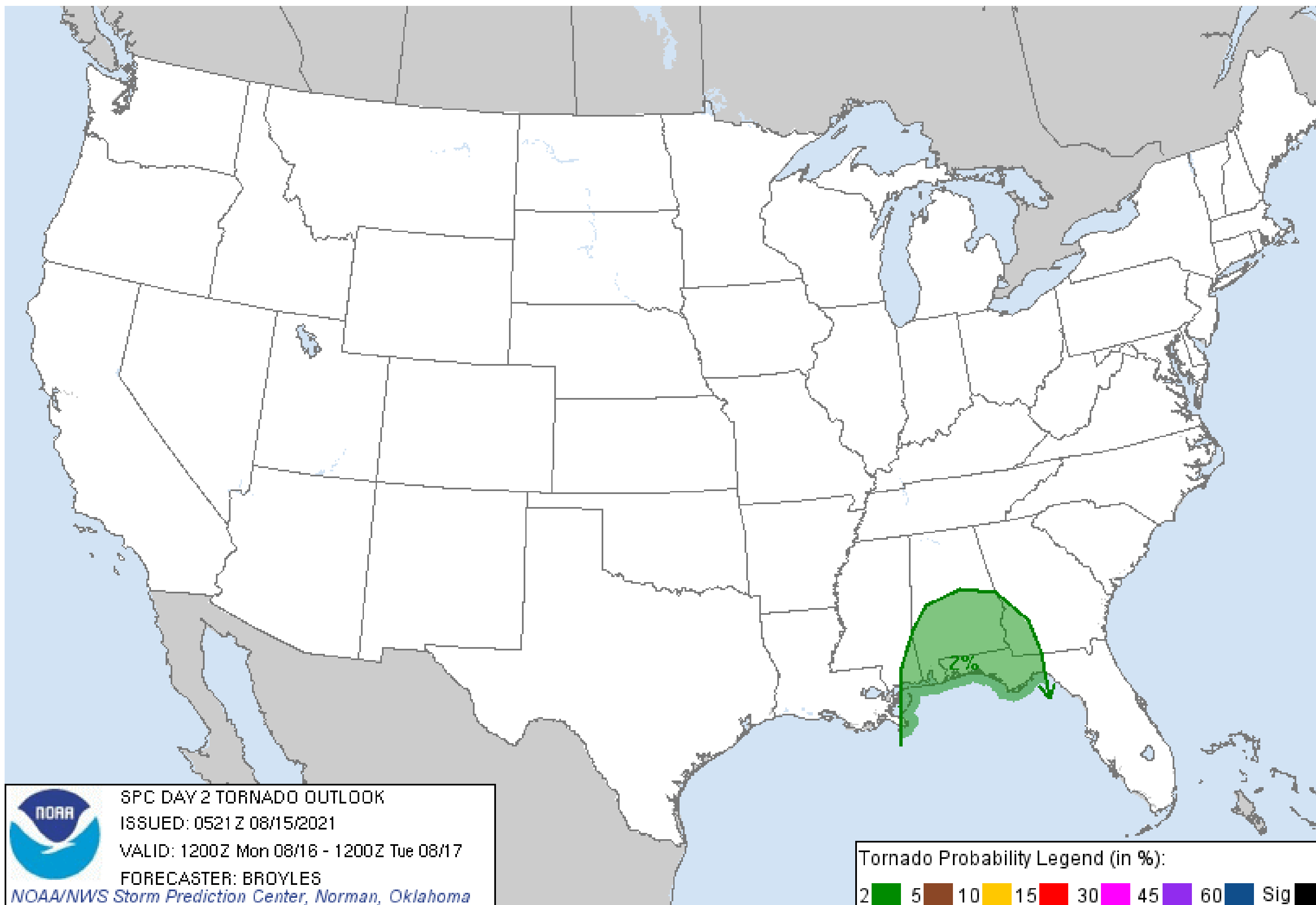
# Tornado Outlook – Day 2



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Remnants of Fred

Image from NWS Storm Prediction Center



- Isolated, weak tornadoes are possible through Tuesday morning

# Key Messages

## Remnants of Fred



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NWS National Hurricane Center



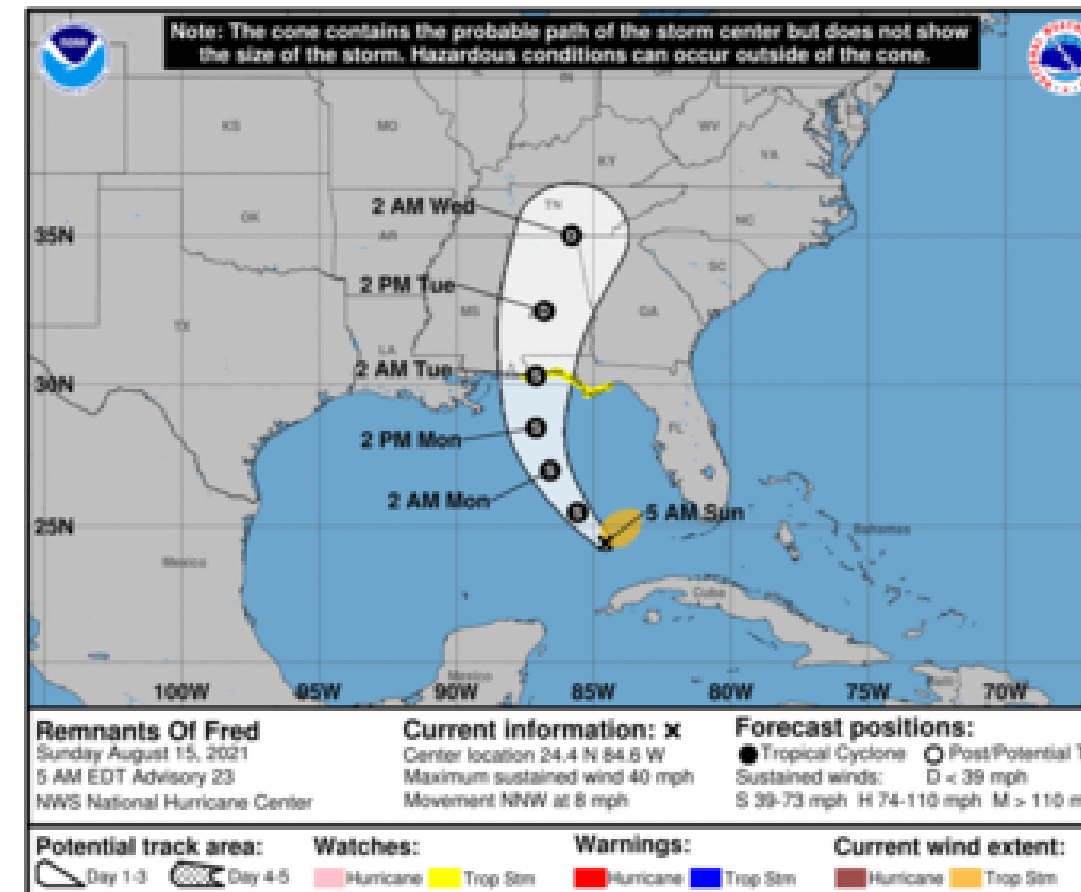
### Key Messages for Remnants Of Fred

Advisory 23: 5:00 AM EDT Sun Aug 15, 2021



1. Today through Monday, heavy rainfall could lead to areal, urban, and small stream flooding impacts, and cause new and renewed river flooding across southern Florida, the Big Bend, and Panhandle. From Monday onward, heavy rain and flood impacts could extend into other portions of the Southeast and into the southern and central Appalachians and Piedmont as Fred interacts with a front in the area.

2. Fred is forecast to regenerate as a tropical cyclone over the Gulf of Mexico later today, and bring a risk of tropical storm conditions to portions of the northern Gulf coast, especially from coastal Mississippi to the Florida Panhandle beginning Monday night. A Tropical Storm Warning will likely be required for a portion of this area later this morning.



For more information go to [hurricanes.gov](http://hurricanes.gov)

### IMPACTS FOR D7 for Fred (through next 5 days)

Winds – Moderate

Storm Surge – Low

Rainfall/Flash Flooding – Moderate

Tornadoes – Low

Waves - Low

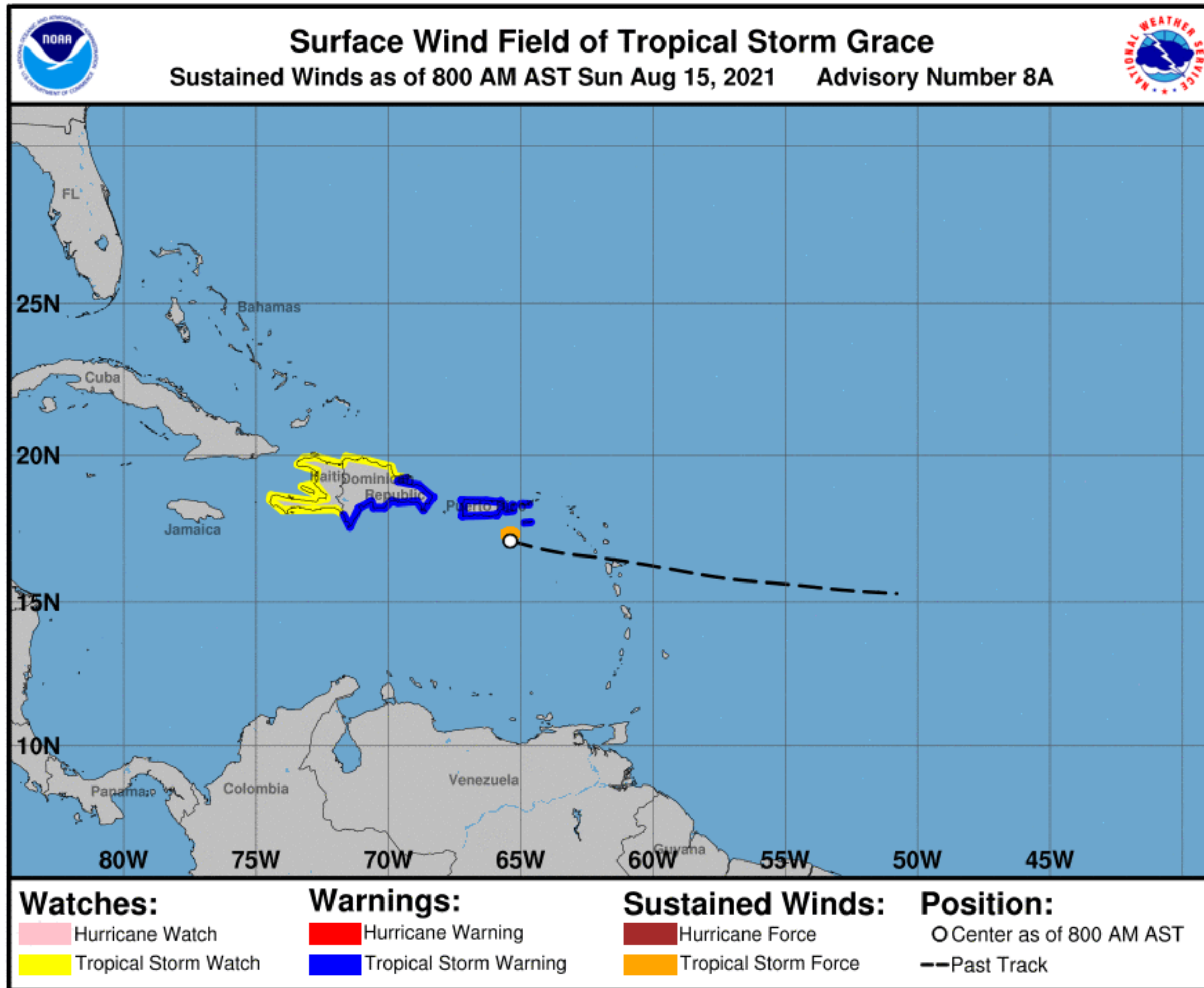


# Situation Overview

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



**...DISORGANIZED GRACE CONTINUES  
MOVING WEST-NORTHWESTWARD  
OVER THE NORTHEASTERN  
CARIBBEAN SEA...**

### SUMMARY OF 800 AM AST INFORMATION

-----  
LOCATION...17.1N 65.4W  
ABOUT 45 NM SW OF ST. CROIX  
ABOUT 85 NM SSE OF SAN JUAN PR  
MAXIMUM SUSTAINED WINDS...35 KT  
PRESENT MOVEMENT...WNW AT 14 KT  
PEAK SEAS 11 FT  
SIZE  
34 KT..... 30NE 0SE 0SW 30NW.

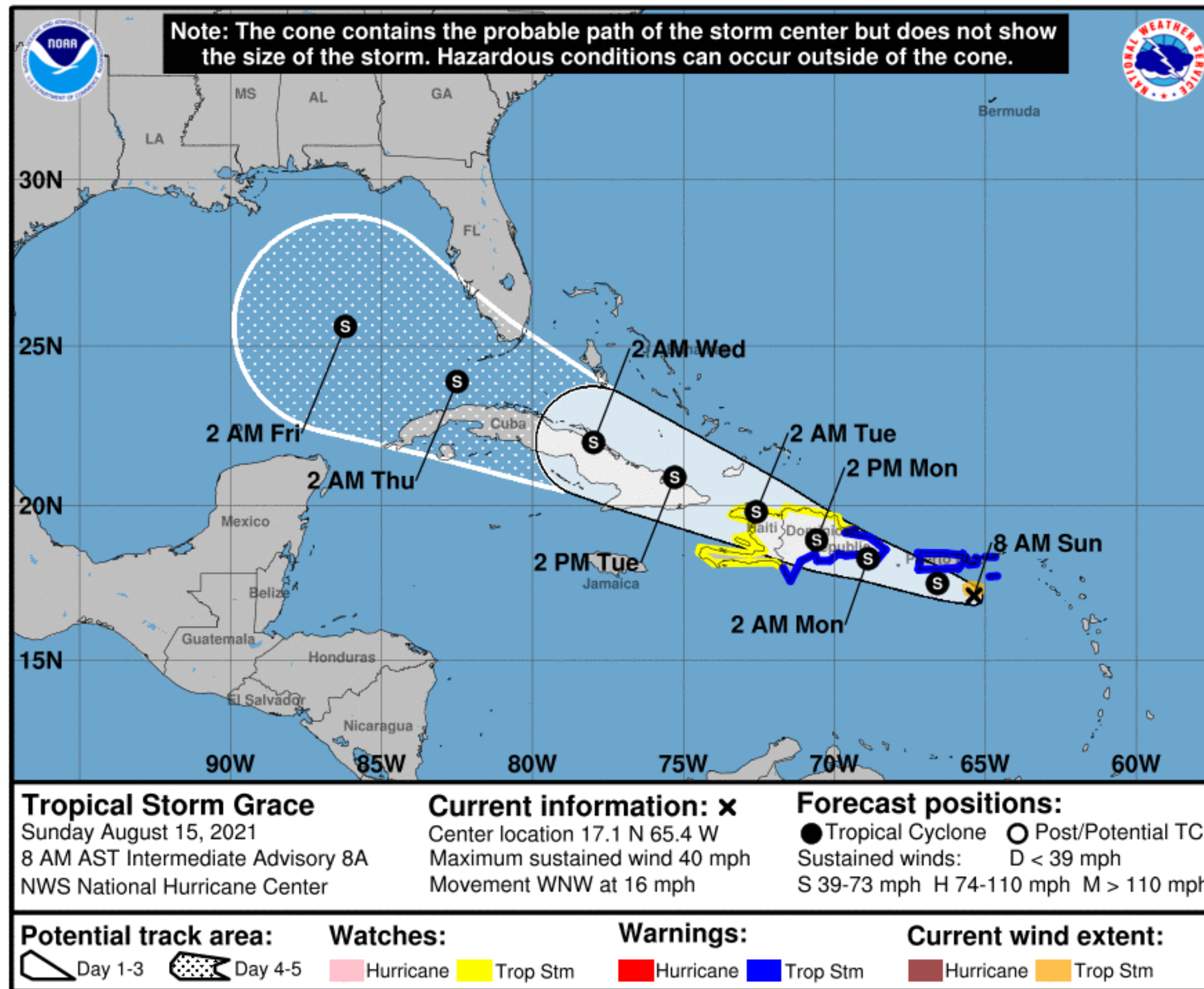


# Forecast Information

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- Grace should track WNW at about the same forward speed for the next five days
- System expected to intensify some, but remain below hurricane intensity
- Impacting US Virgin Islands and Puerto Rico as a Tropical Storm currently
- South Florida potentially at risk Wednesday/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.

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

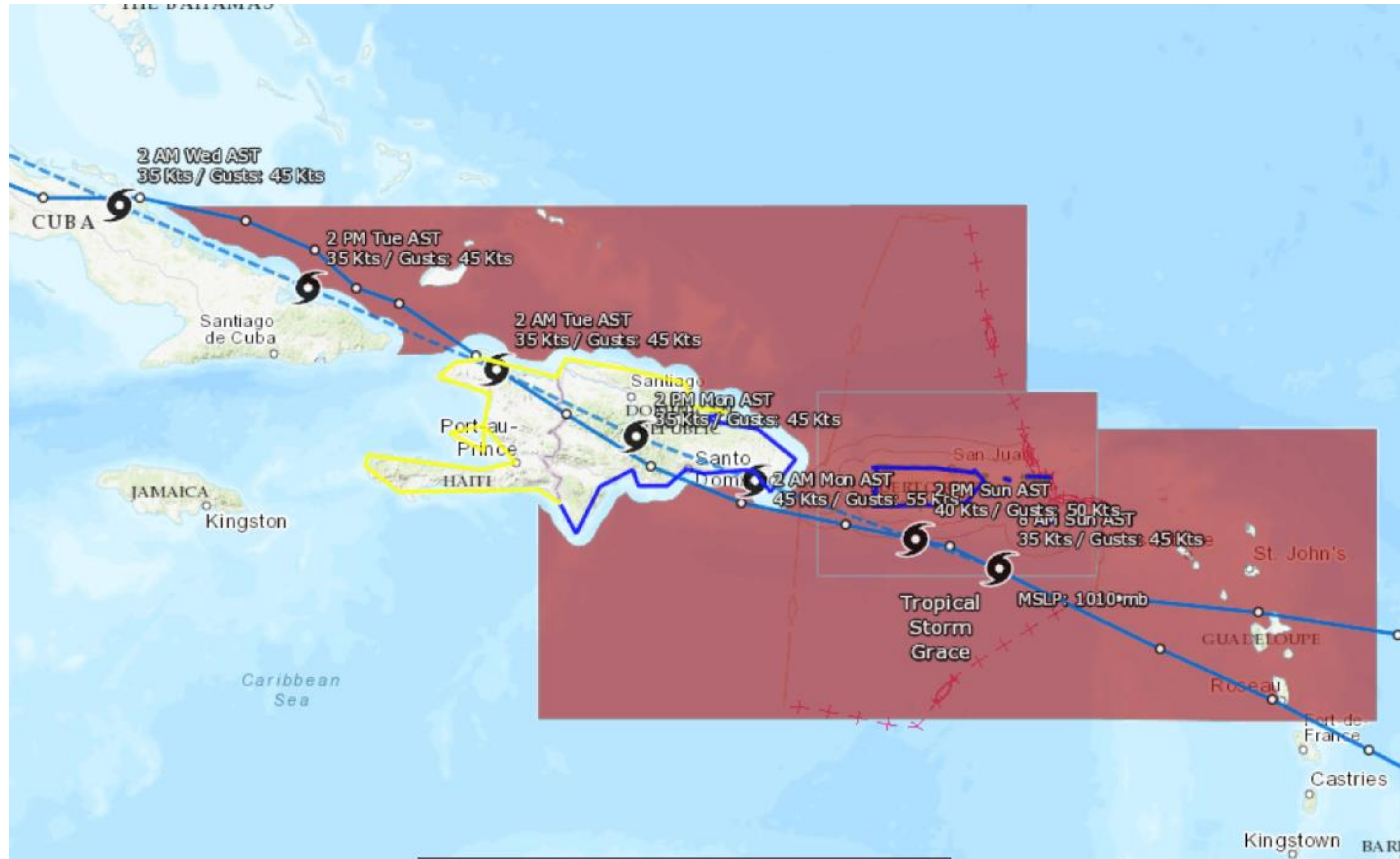


# Hazards Map

## Tropical Storm Grace



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NWS National Hurricane Center



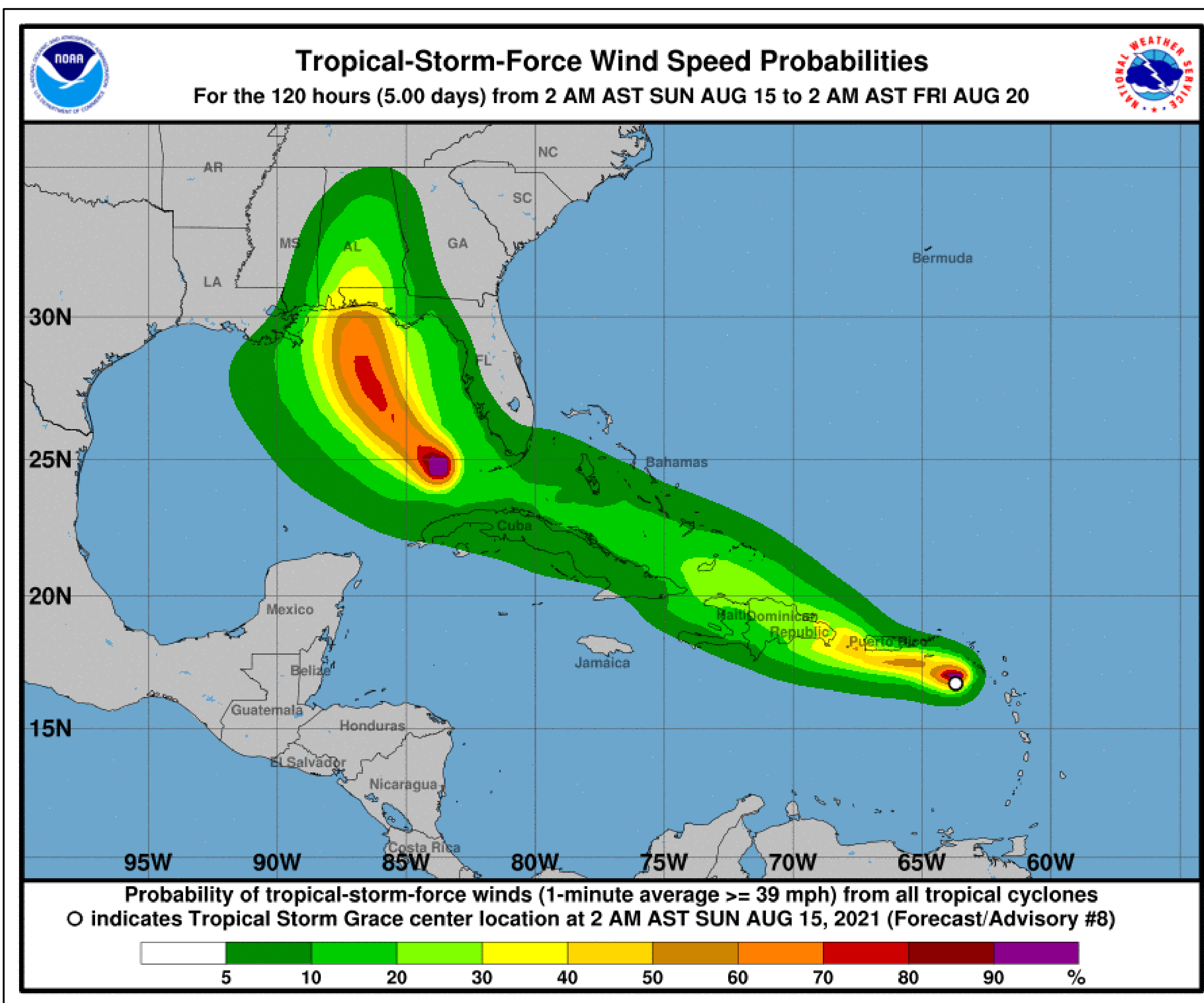
- <https://nowcoast.noaa.gov/>

# T.S. Wind Speed Probabilities

Tropical Storm Grace



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NWS National Hurricane Center

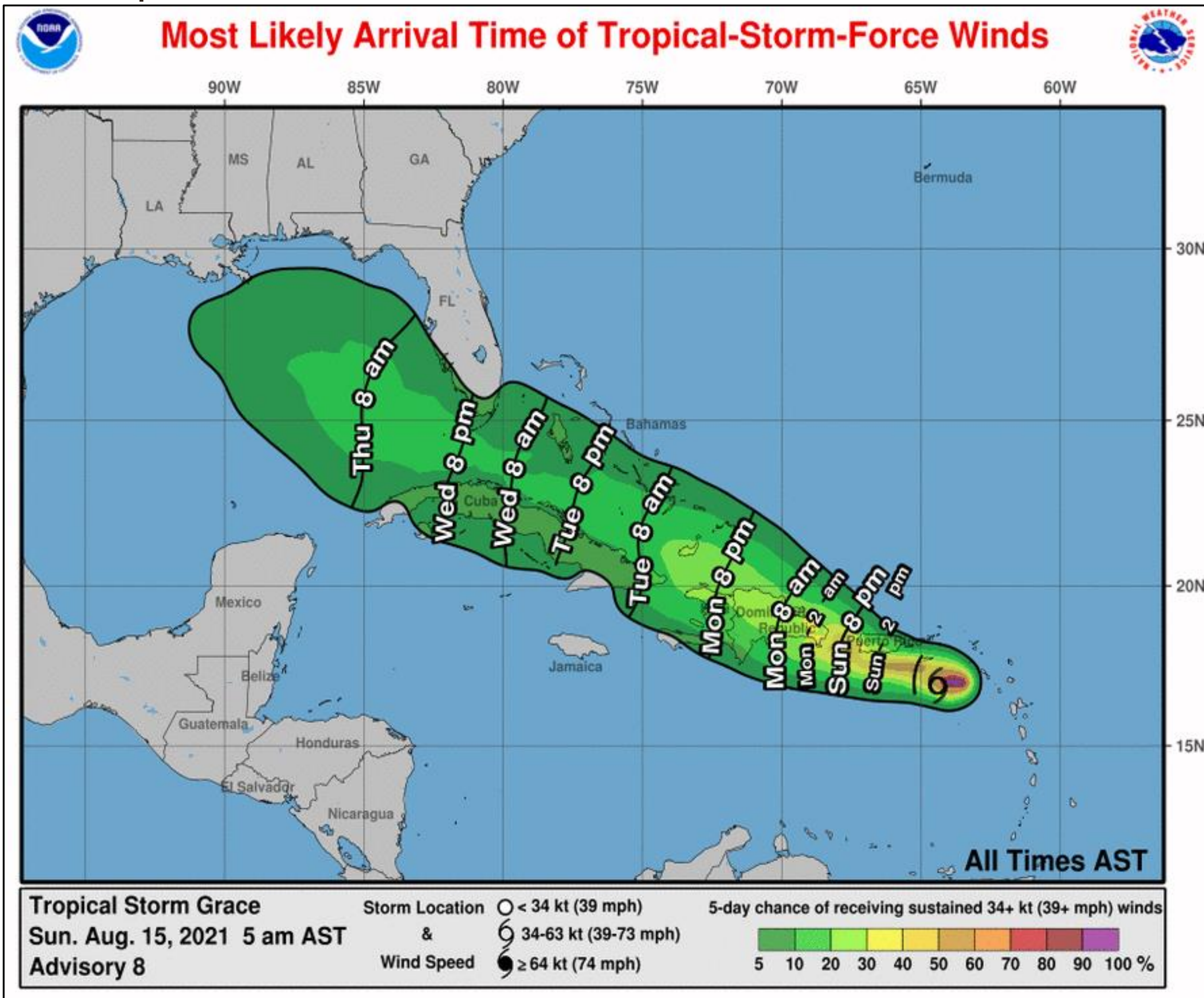


- Ponce, PR – 30%
- Aguadilla, PR – 30%
- San Juan, PR – 5%
- Vieques, PR – 5%
- Saint Croix, VI – 10%
  
- Key West, FL – 10%
- Marathon, FL – 10%
- Naples, FL – 10%
  
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
  
- 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 Grace



- **South Florida – Wednesday afternoon**
- 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.

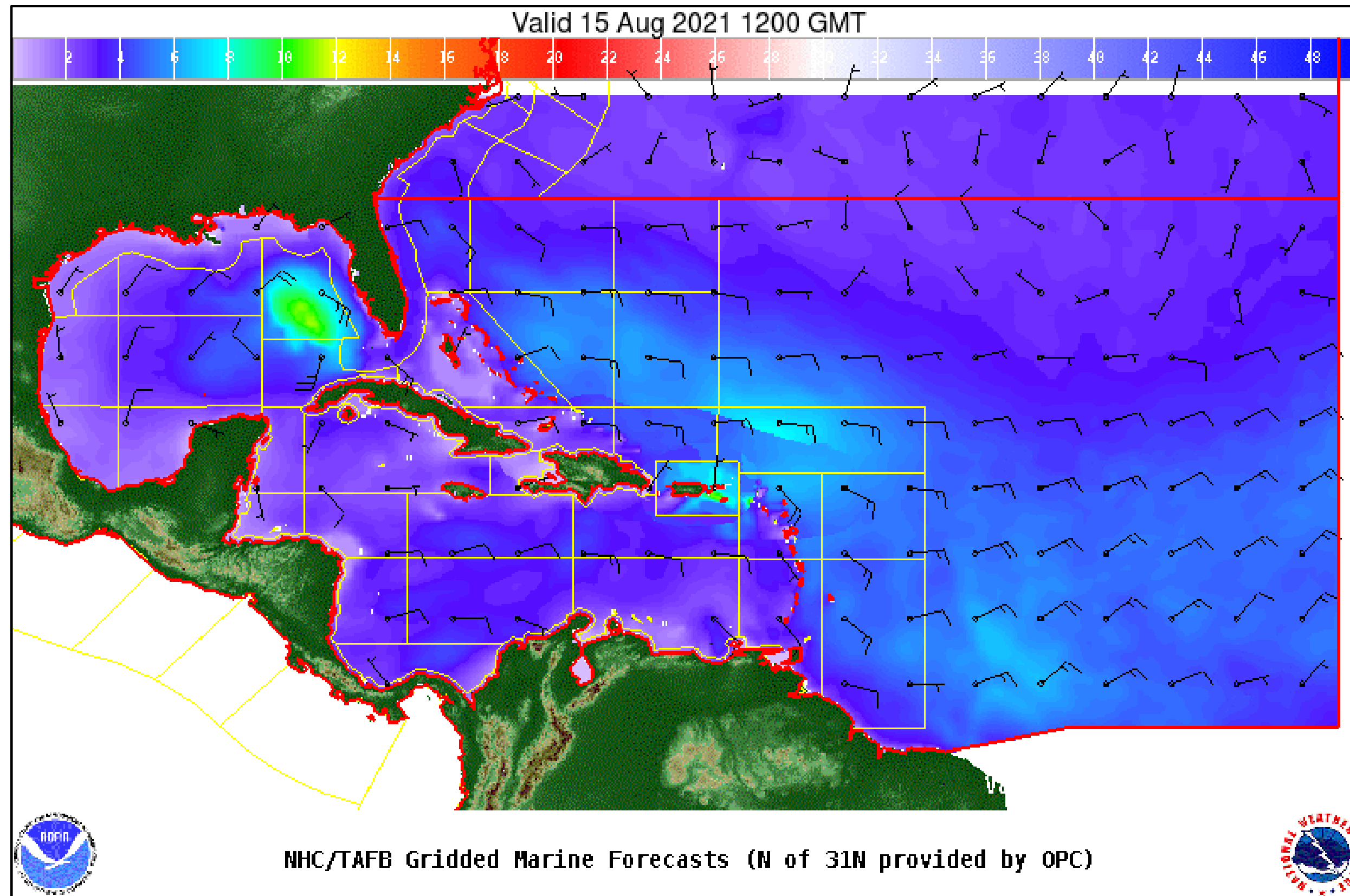


# Wind And Waves

Tropical Storm Grace



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NWS National Hurricane Center



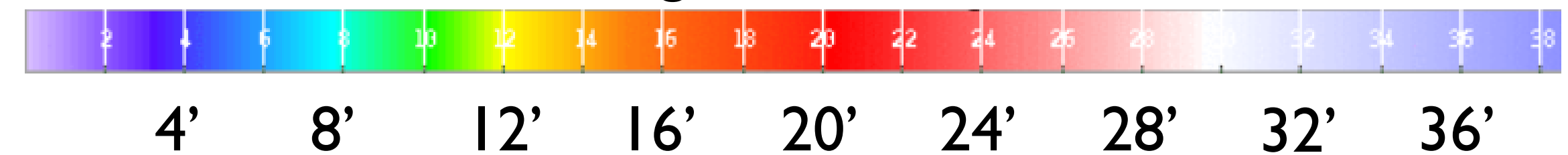
## Current Conditions

8am EDT, Sunday, August 15

Peak Winds: 35 kt

Peak Seas: 11 ft

■ Wave heights are in feet



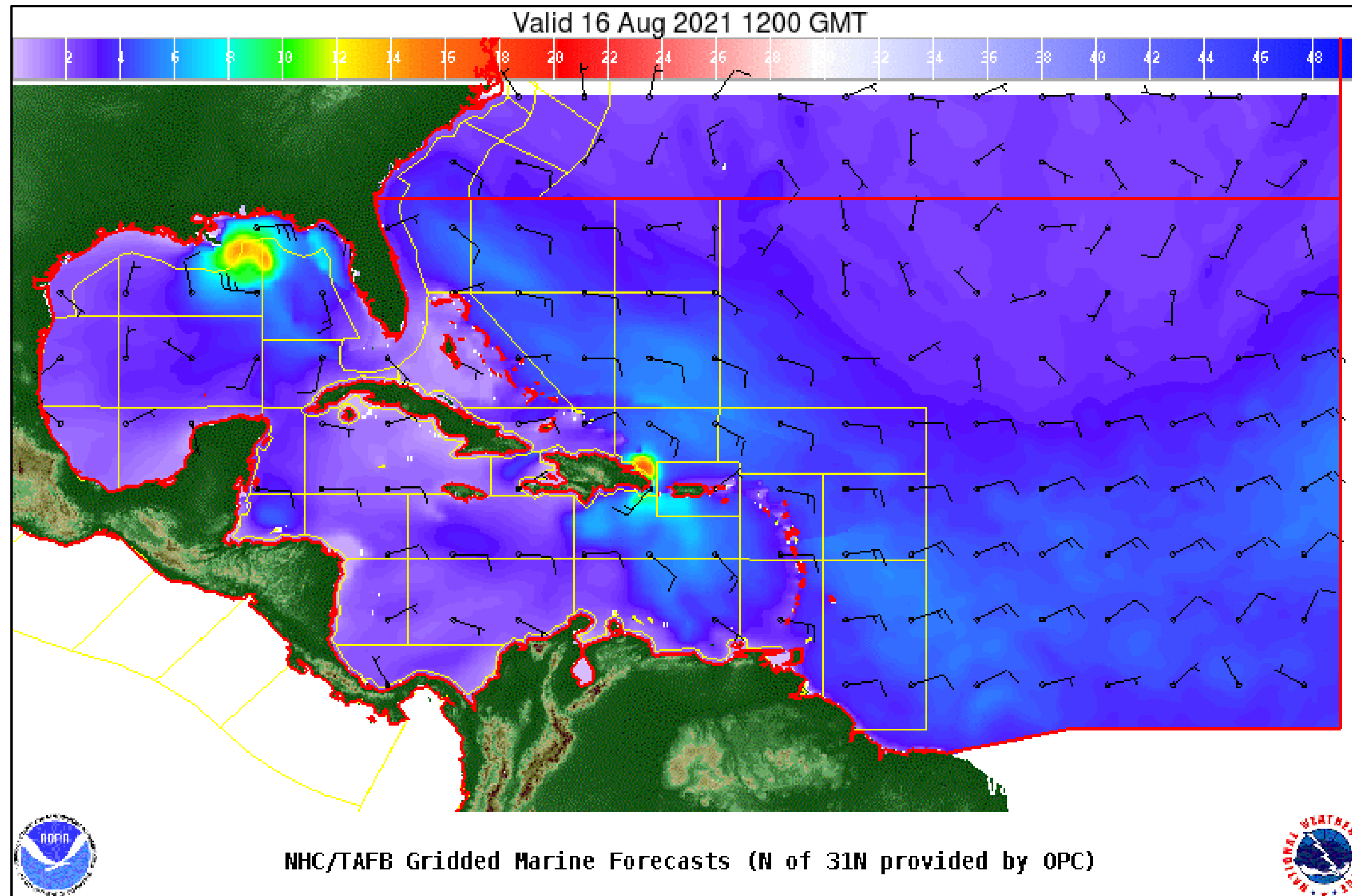


# Wind And Waves

Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



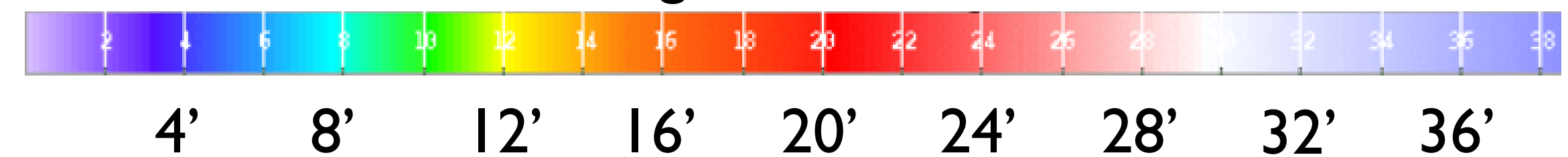
24 Hour Forecast

8am EDT, Monday, August 16th

Peak Winds: 45 kt

Peak Seas: 17 ft

■ Wave heights are in feet

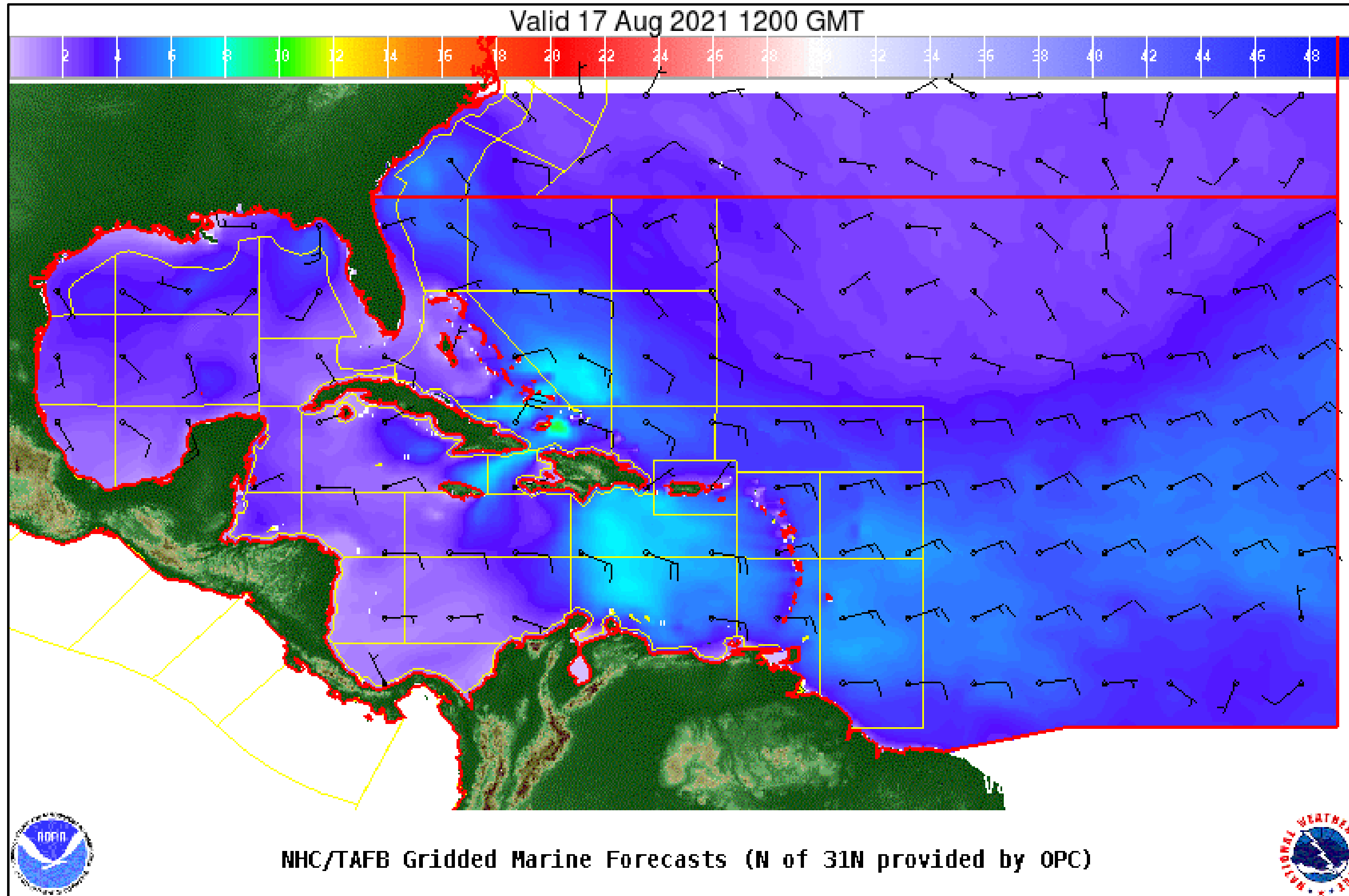


# Wind And Waves

Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



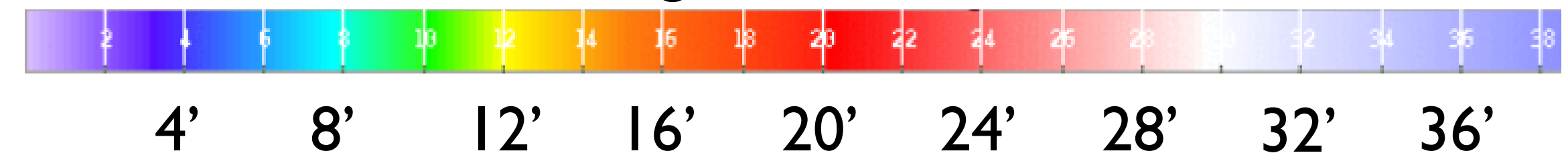
48 Hour Forecast

8am EDT, Tuesday, August 17th

Peak Winds: 35 kt

Peak Seas: 10 ft

■ Wave heights are in feet



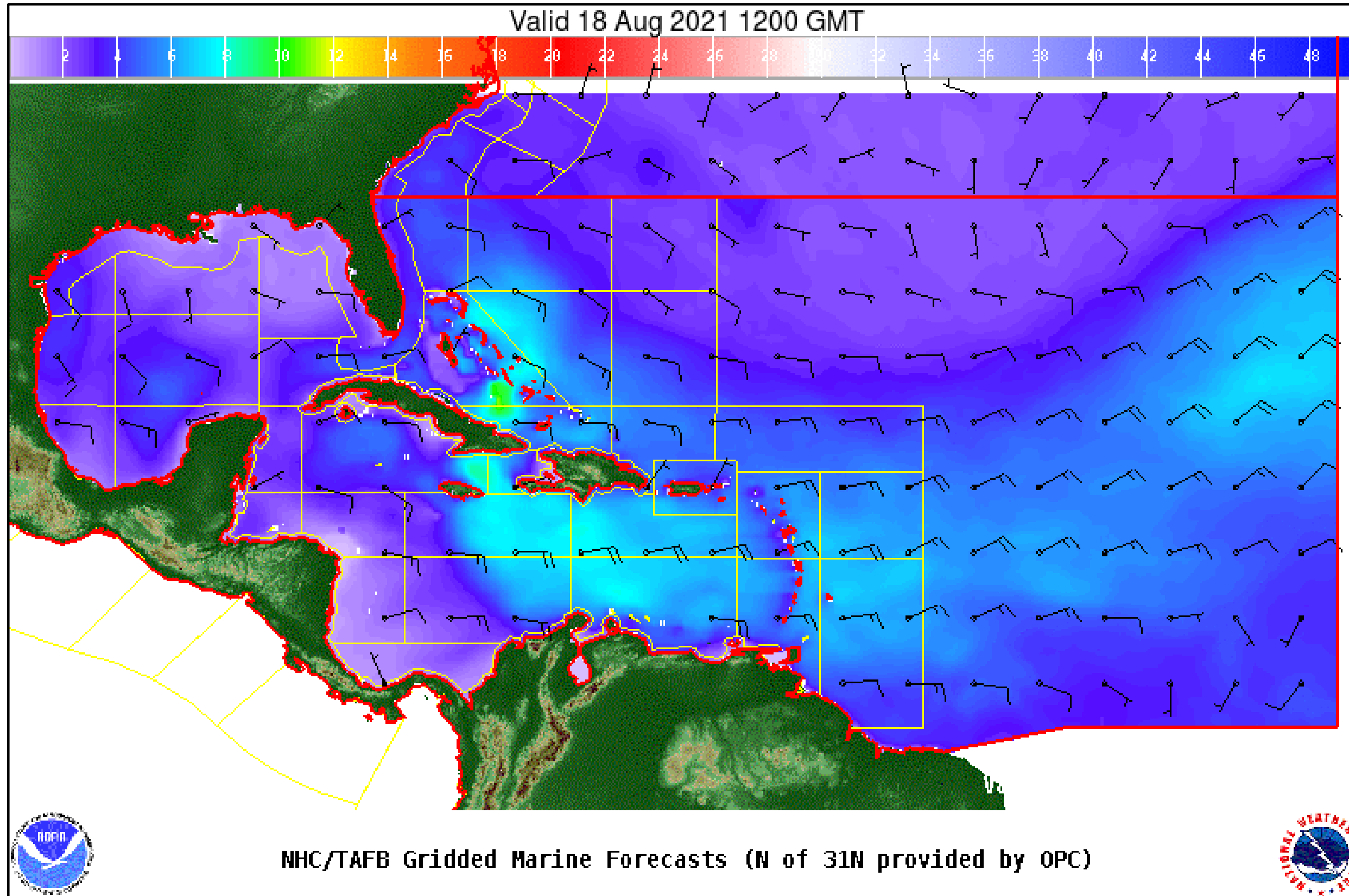


# Wind And Waves

Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



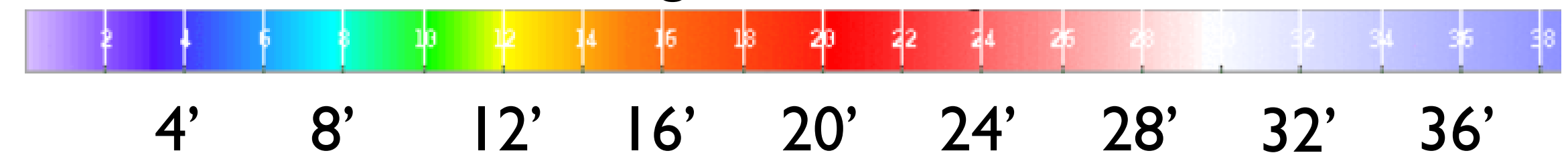
72 Hour Forecast

8am EDT, Wednesday, August 18<sup>th</sup>

Peak Winds: 35 kt

Peak Seas: 11 ft

■ Wave heights are in feet

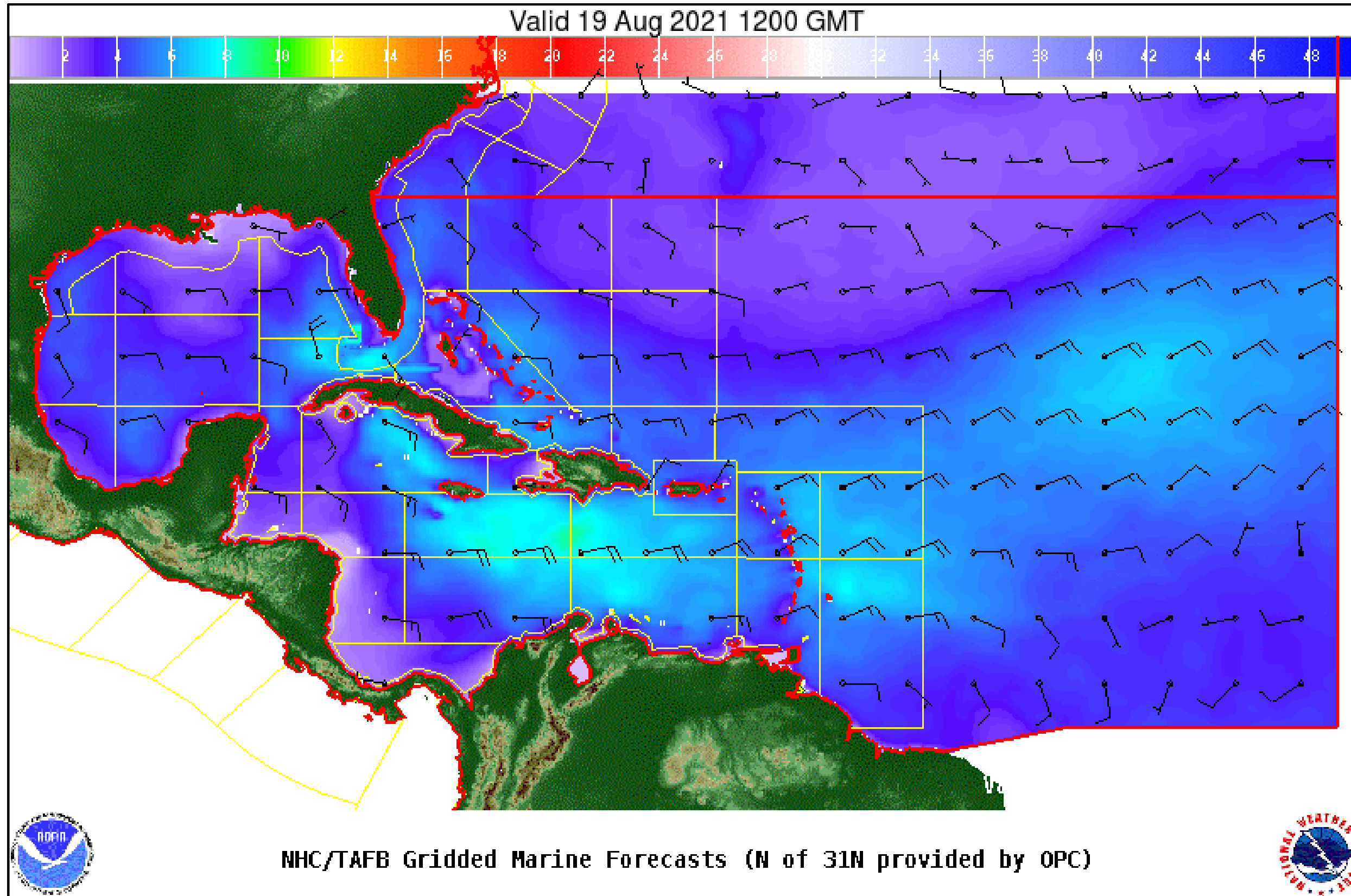


# Wind And Waves

Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



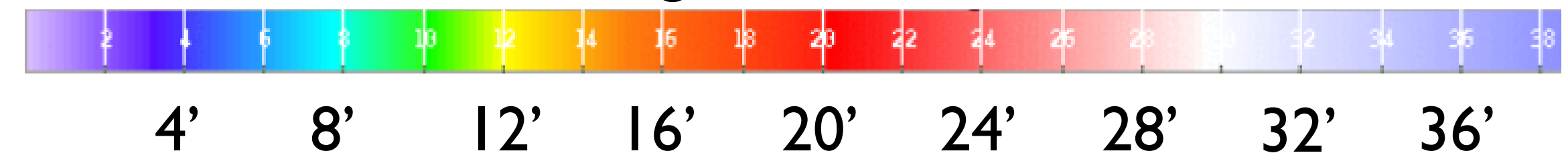
96 Hour Forecast

8am EDT, Thursday, August 19th

Peak Winds: 40 kt

Peak Seas: 9 ft

■ Wave heights are in feet





# Expected Storm Total Rainfall

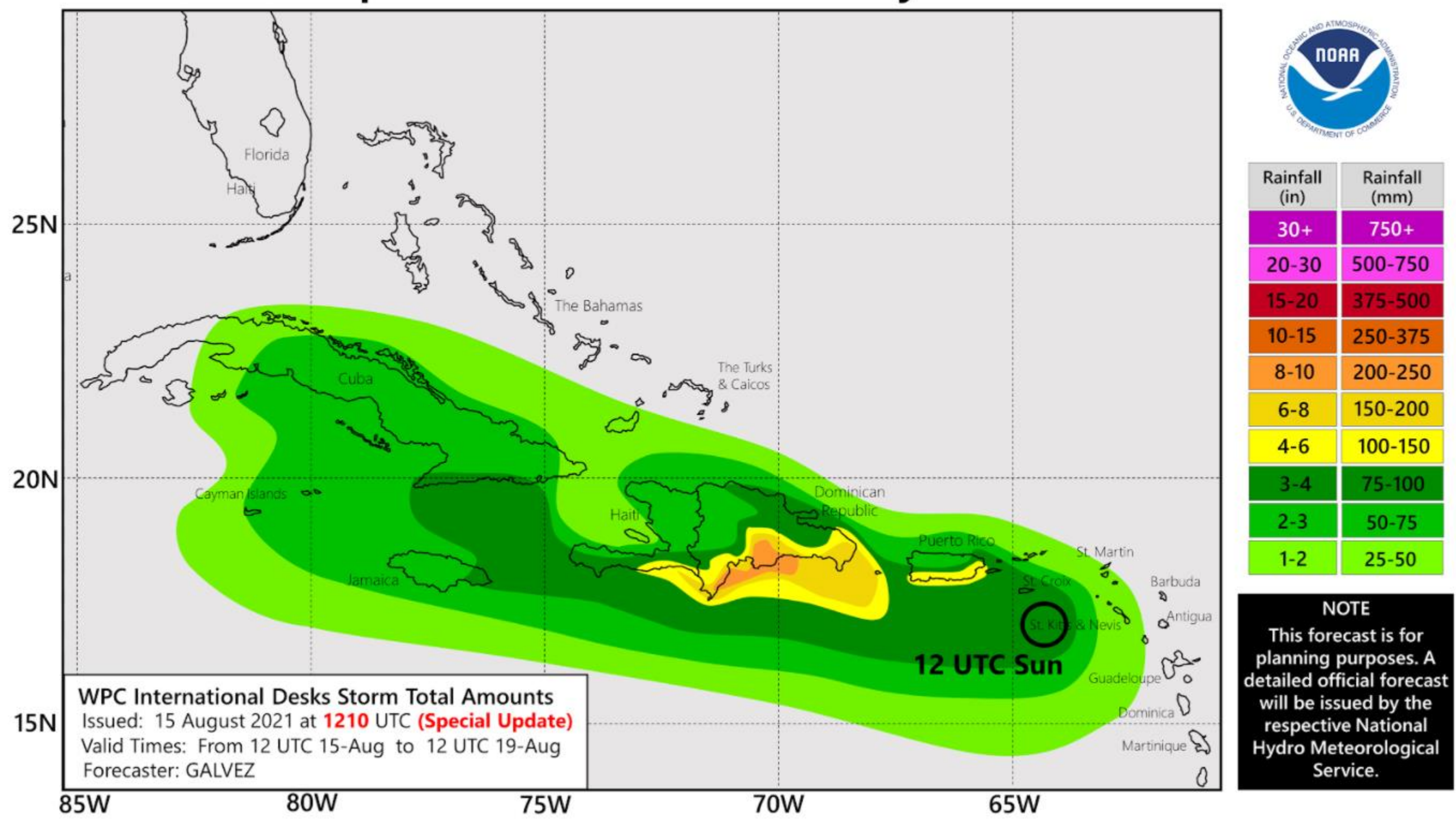


Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Tropical Storm Grace

Images from NWS Weather Prediction Center

## Tropical Storm Grace 4-Day Rainfall



- Total rainfall in inches through Thursday morning.



# Key Messages

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

### Key Messages for Tropical Storm Grace Advisory 8: 5:00 AM AST Sun Aug 15, 2021

1. Tropical storm conditions are expected over portions of the Leewards Islands this morning and the Virgin Islands and Puerto Rico today. Tropical storm conditions are expected over eastern parts of the Dominican Republic tonight and Monday. Tropical storm conditions are possible over western portions of the Dominican Republic and Haiti Monday and Monday night.

2. Heavy rainfall could lead to flash and urban flooding over the Leeward and Virgin Islands, Haiti and the Dominican Republic. Across Puerto Rico, heavy rainfall may lead to flash, urban and small stream flooding, along with the potential for mudslides.

3. There is a risk of wind and rainfall impacts across the rest of the Dominican Republic, Haiti, the Turks and Caicos Islands, the Bahamas, Cuba, and Florida, but forecast uncertainty remains higher than usual. Interests in those areas should monitor the progress of Grace and updates to the forecast.



### IMPACTS FOR D7 for Grace (through next 5 days)

Winds – Moderate

Storm Surge – None

Rainfall/Flash Flooding – Low

Tornadoes – None

Waves - Moderate

For more information go to [hurricanes.gov](https://hurricanes.gov)





# REMNANTS OF FRED/ TROPICAL STORM GRACE BRIEFING

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

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

*You can always find get the latest graphics and information for this storm at [www.hurricanes.gov](http://www.hurricanes.gov)*



NHC\_TAFB

[www.nhc.noaa.gov](http://www.nhc.noaa.gov)