

## IMPACTS FOR **D8 for Fred** (through next 5 days)

Winds – **Moderate**

Storm Surge – **Moderate**

Rainfall/Flash Flooding – **Moderate**

Tornadoes – **Low**

Waves - **Low**

## IMPACTS FOR **D8 for Grace** (through next 5 days)

Winds – **Moderate**

Storm Surge – **None**

Rainfall/Flash Flooding – **None**

Tornadoes – **None**

Waves - **Moderate**

# TROPICAL STORM FRED AND TROPICAL STORM GRACE BRIEFING



11:00 AM CDT  
Sunday, August 15, 2021

Prepared by:

**Andrew Hagen**

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*



NHC\_TAFB

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

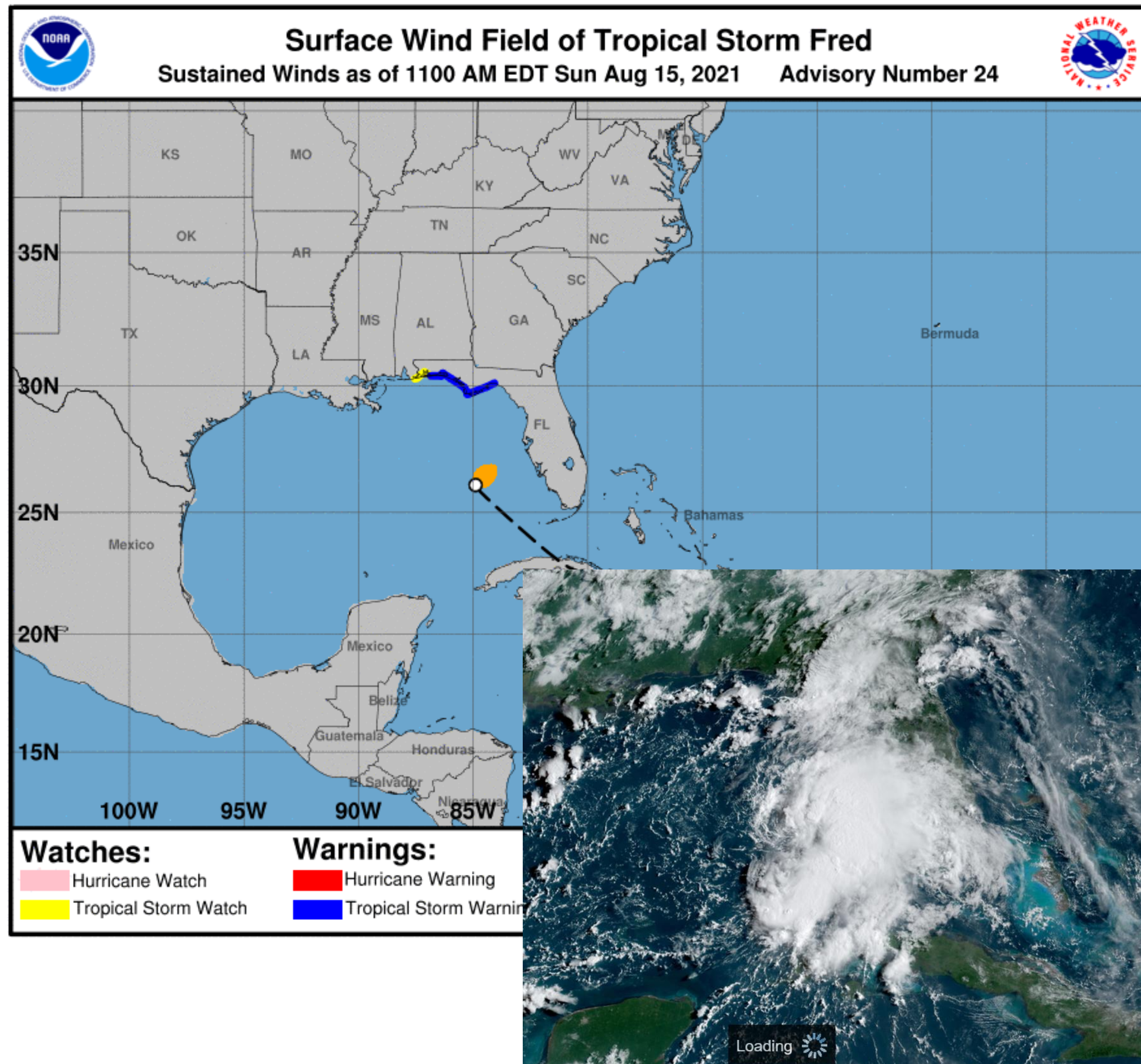


# Situation Overview

## Tropical Storm Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



...Fred again a tropical storm over the Gulf of Mexico...

Summary of 1000 AM CDT...1500 UTC...Information

Location... 26.1N 84.9W

About 290 nm...SSE of Pensacola, FL

About 170 nm... SW of Tampa, FL

Maximum Sustained Winds... 35 kt

Present Movement... NNW or 330 degrees at 10 kt

Peak Seas: 11 ft

Size 34 kt: 80NE, 60 SE, 0 SW, 0 NW

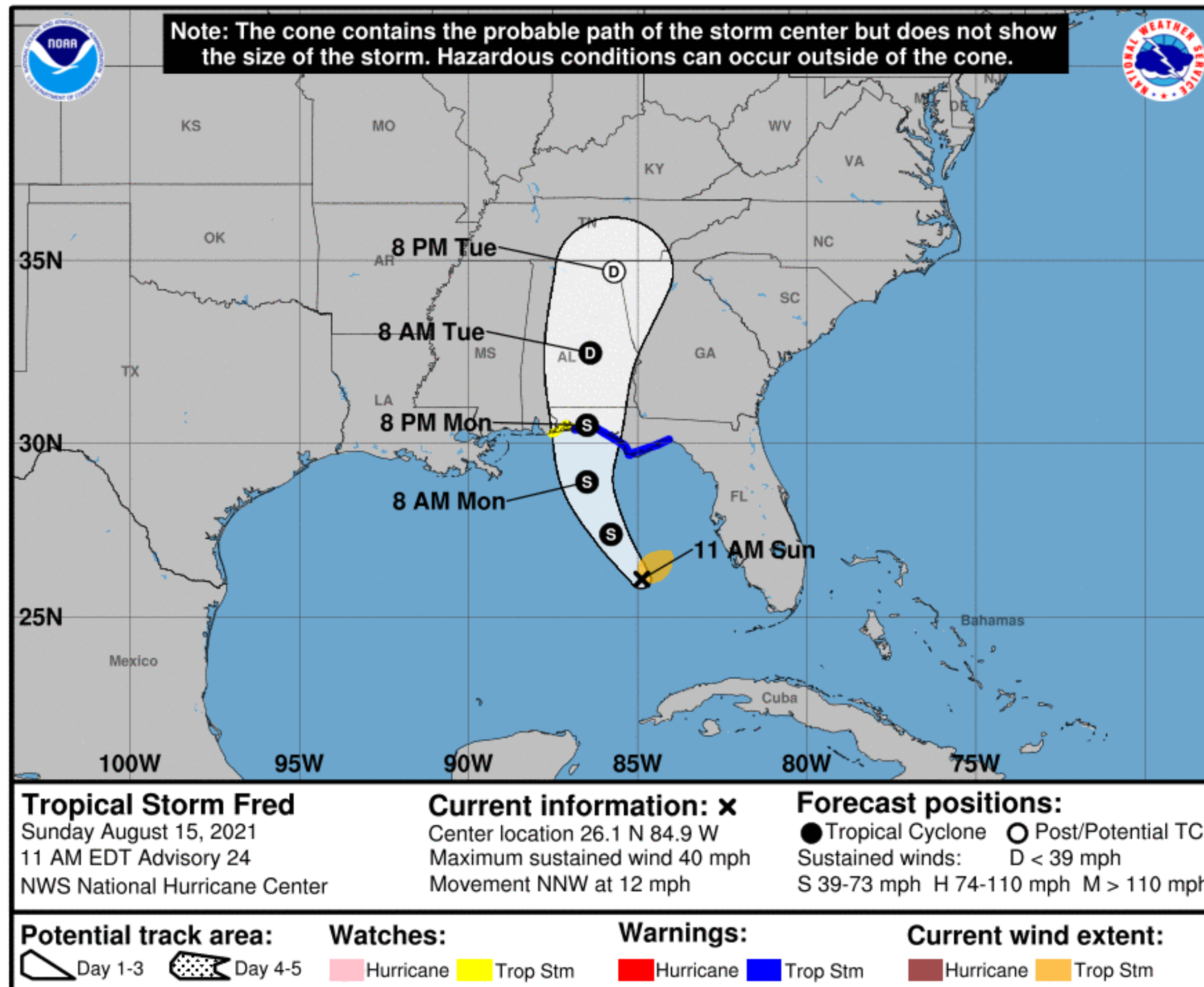


# Forecast Information

## Tropical Storm Fred



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.

- **Fred is forecast to accelerate toward the north by Monday**
- **Slight strengthening is forecast, but Fred is not expected to become a hurricane**
- **Tropical Storm Landfall along the Florida Panhandle/Alabama coast Monday evening.**
- 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



Tropical Analysis and Forecast Branch  
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- Tropical Storm Warning
- Tropical Storm Watch
- Gale Warning
- Small Craft Advisory
- Tropical Storm Warning
- Tropical Storm Watch
- Flash Flood Watch
- Coastal Flood Advisory

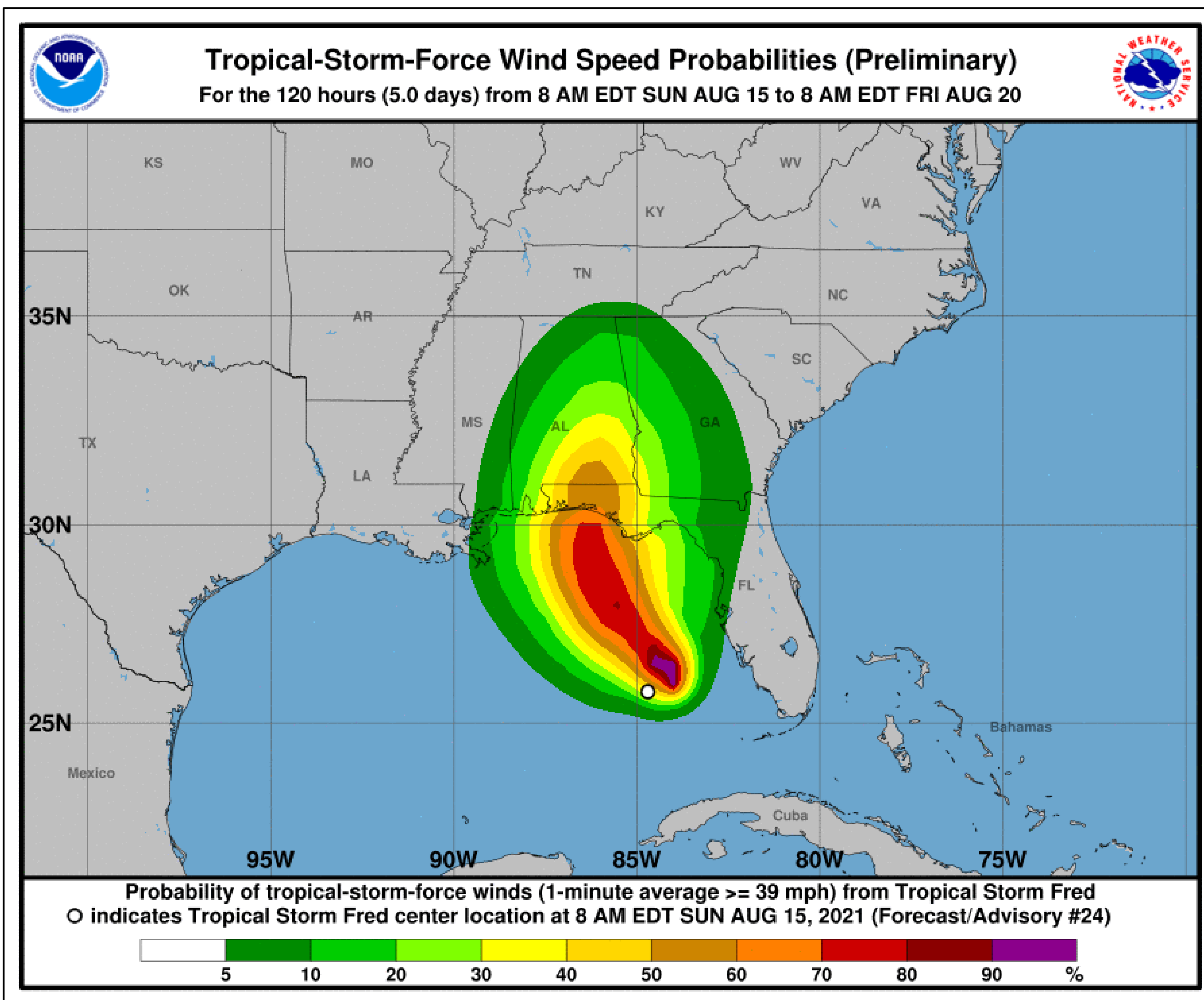


# T.S. Wind Speed Probabilities

Tropical Storm Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

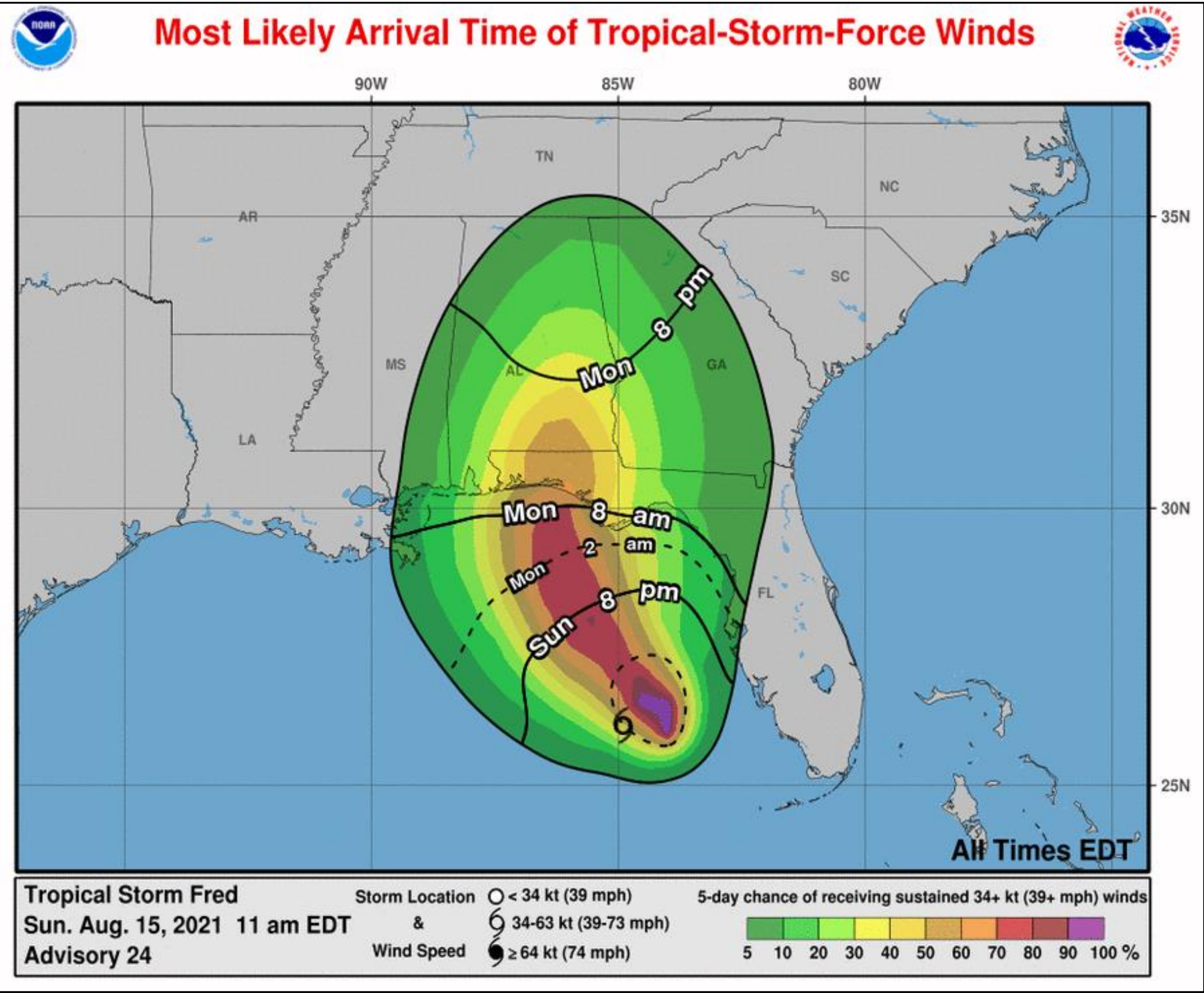


- **Apalachicola, FL: 45%**
- **Panama City, FL: 60%**
- **Destin, FL: 55%**
- **Pensacola, FL: 45%**
- **Mobile, AL: 15%**
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest 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.





Tropical Storm Fred



- **Florida Panhandle/AL: Monday morning**
- 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%
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# Time of Departure

Tropical Storm Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

- **Most Likely Time of Departure for Tropical Storm winds:**
  - Panama City: 8pm CDT Monday
  - Destin: 9pm CDT Monday
- Latest reasonable time of departure:  
early Tuesday morning

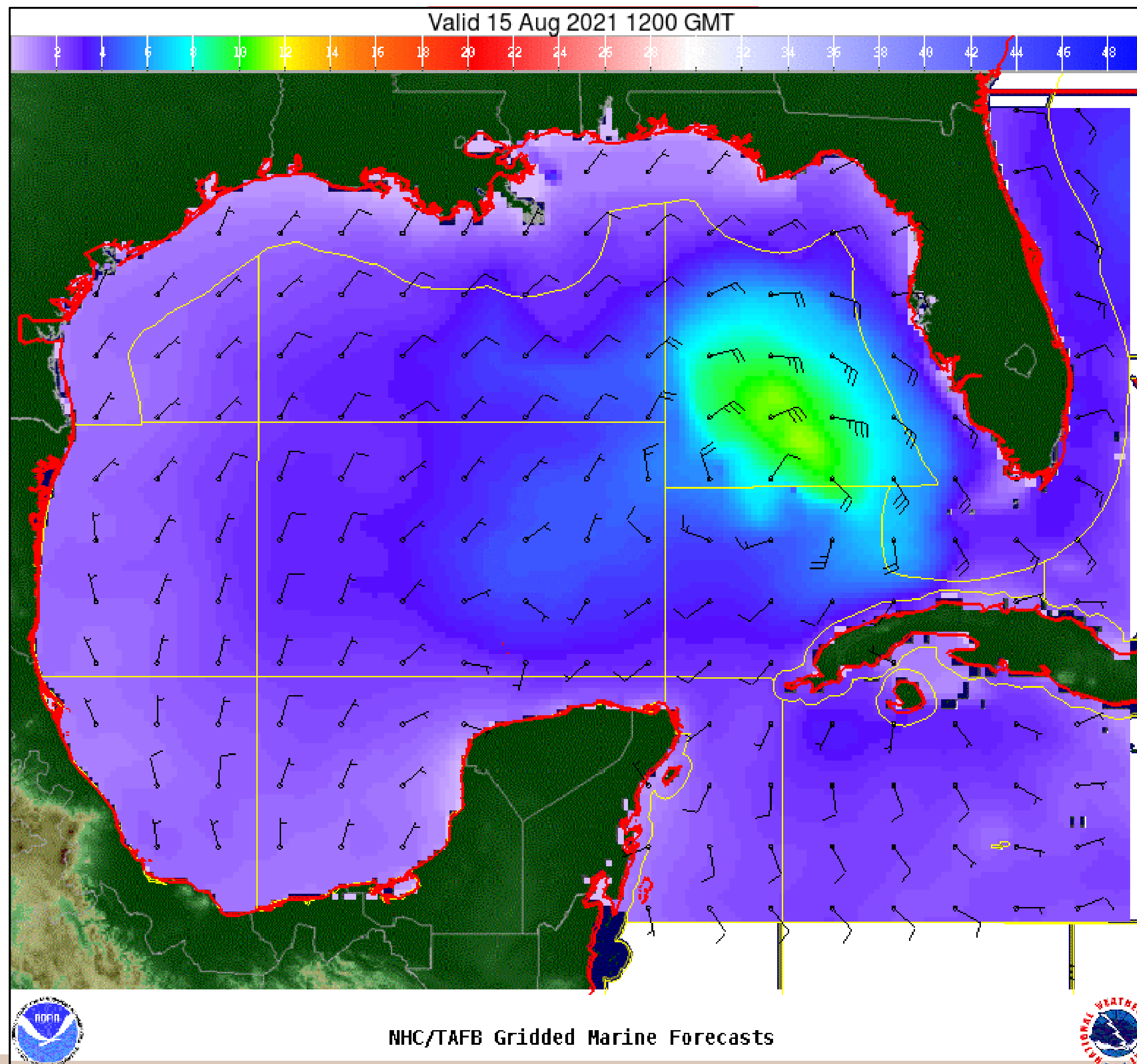


# Wind And Waves

Tropical Storm Fred



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NWS National Hurricane Center



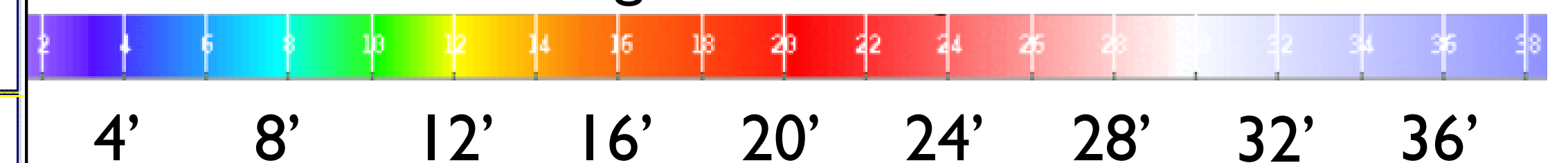
Current Conditions

7am CDT Sun 8/15

Peak Winds: 35 kt

Peak Seas: 11 ft

■ Wave heights are in feet



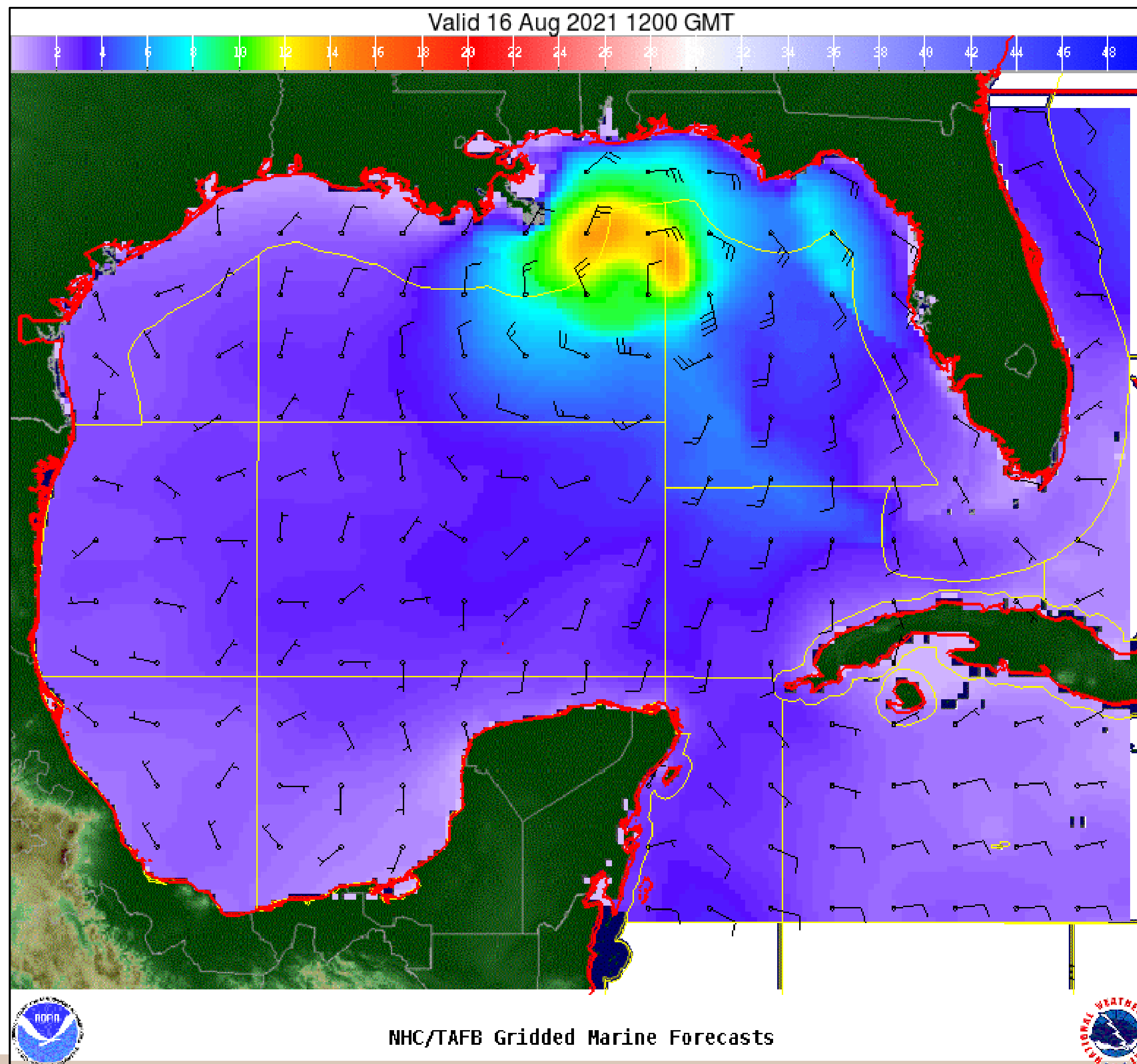


# Wind And Waves

Tropical Storm Fred



Tropical Analysis and Forecast Branch  
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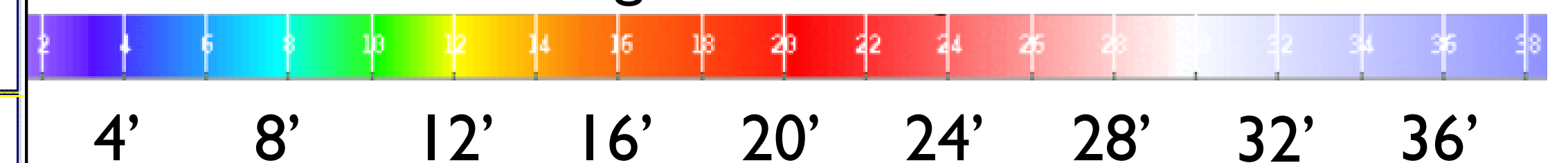
24 Hour Forecast

7am CDT Mon 8/16

Peak Winds: 45 kt

Peak Seas: 17 ft

■ Wave heights are in feet



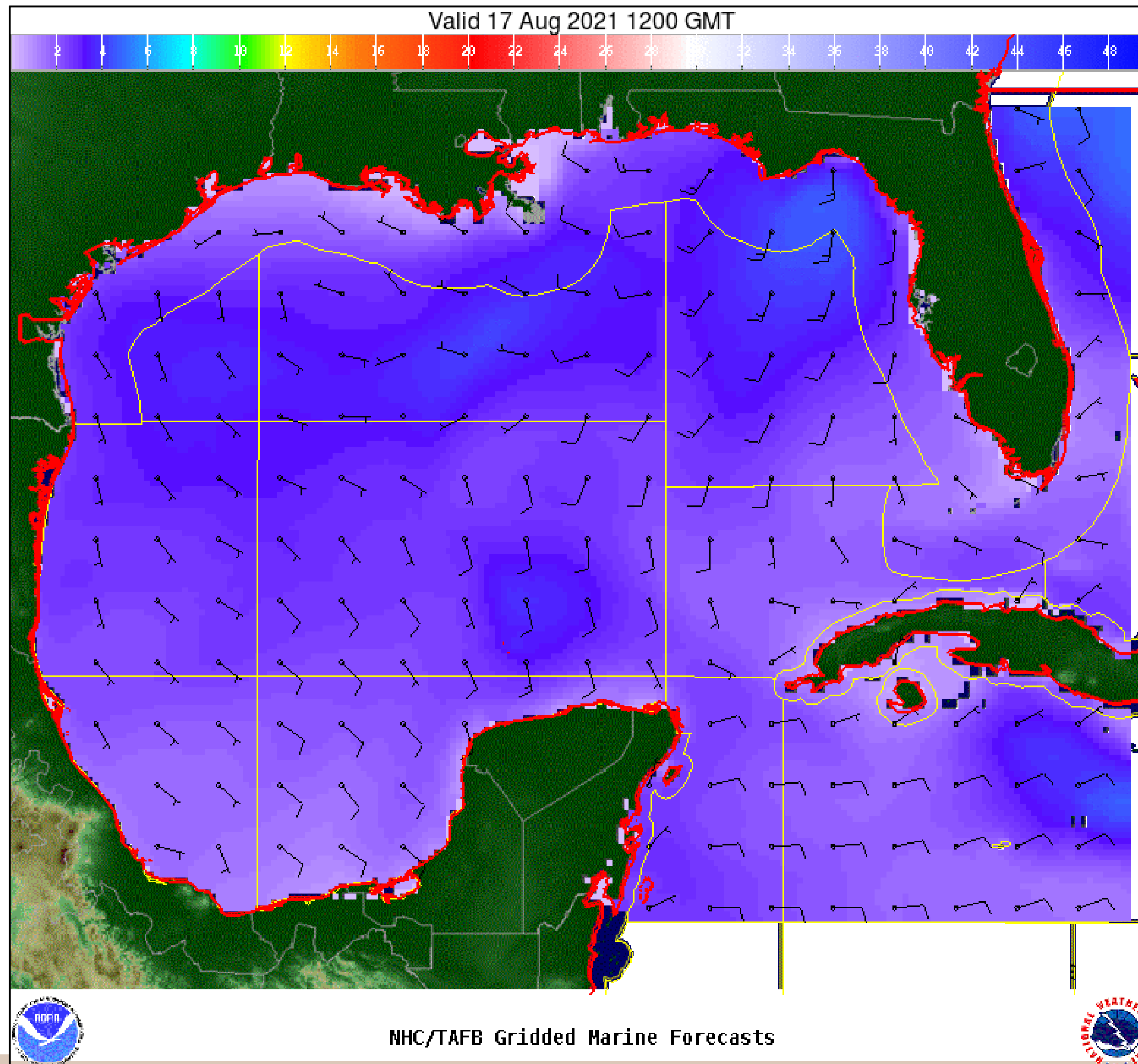


# Wind And Waves

Tropical Storm Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



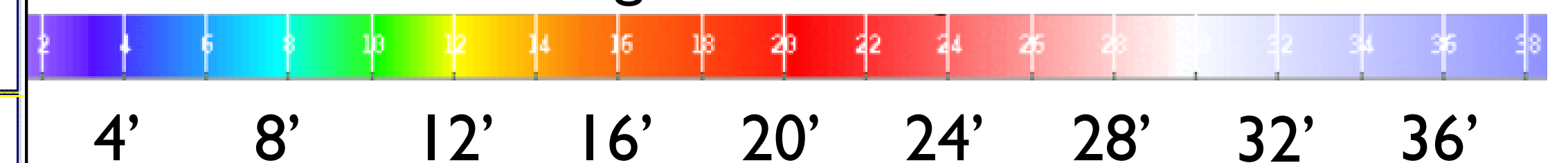
48 Hour Forecast

7am CDT Tue 8/17

Peak Winds: 30 kt (20 kt over water)

Peak Seas: 7 ft

■ Wave heights are in feet





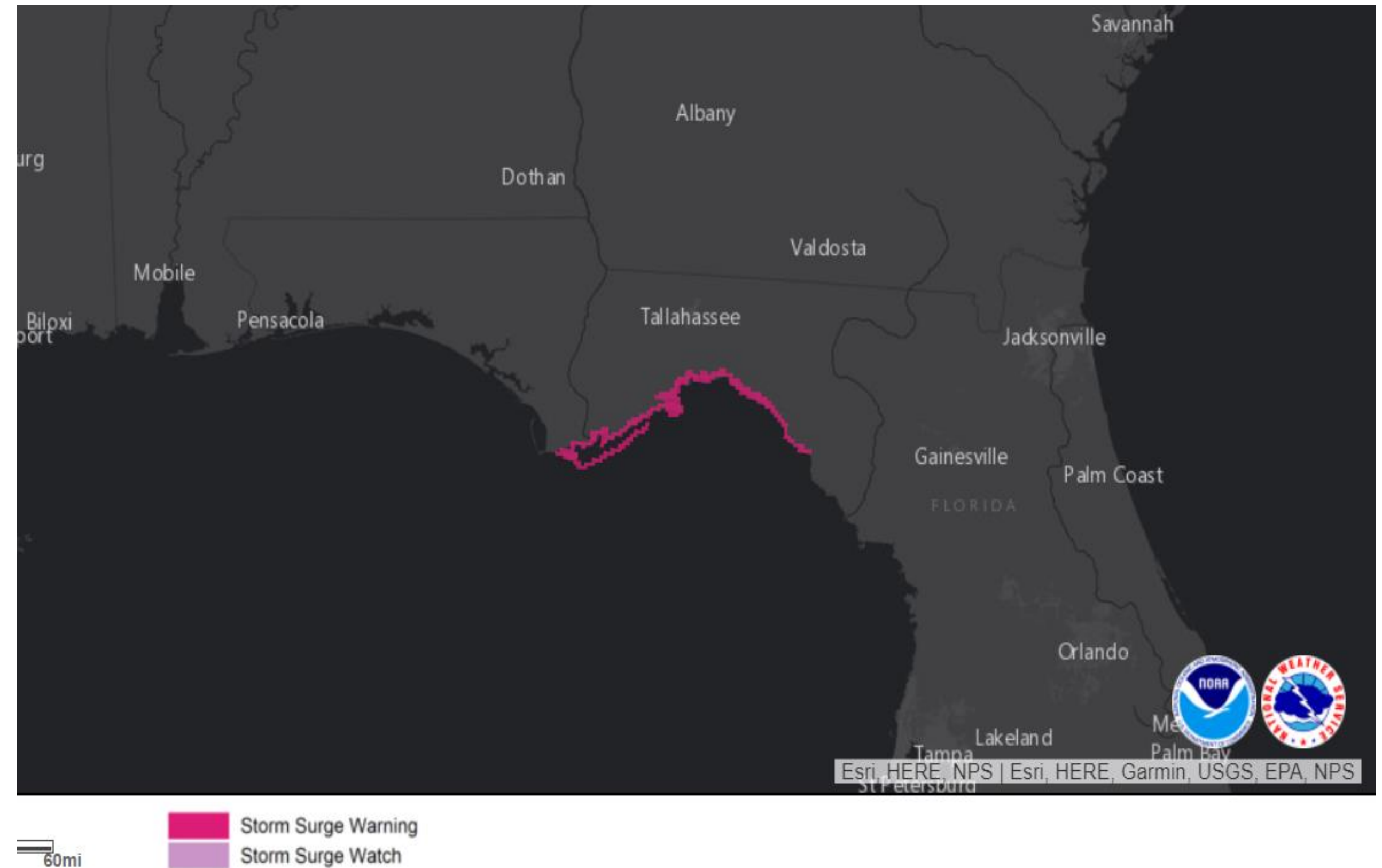
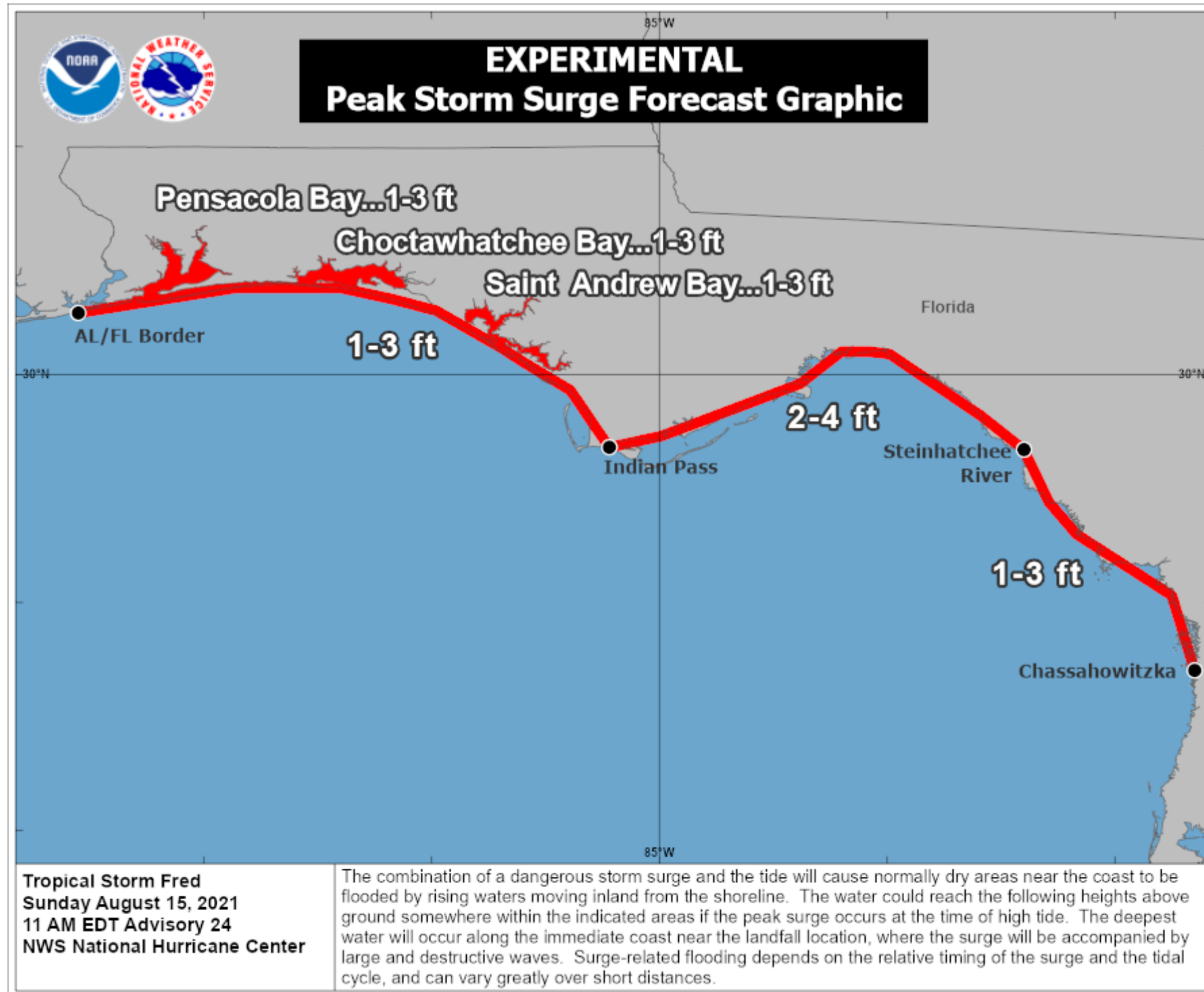
# Potential Peak Storm Surge / Watches and Warnings



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Tropical Storm Fred

## Storm Surge Warning from Indian Pass to Steinhatchee River



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



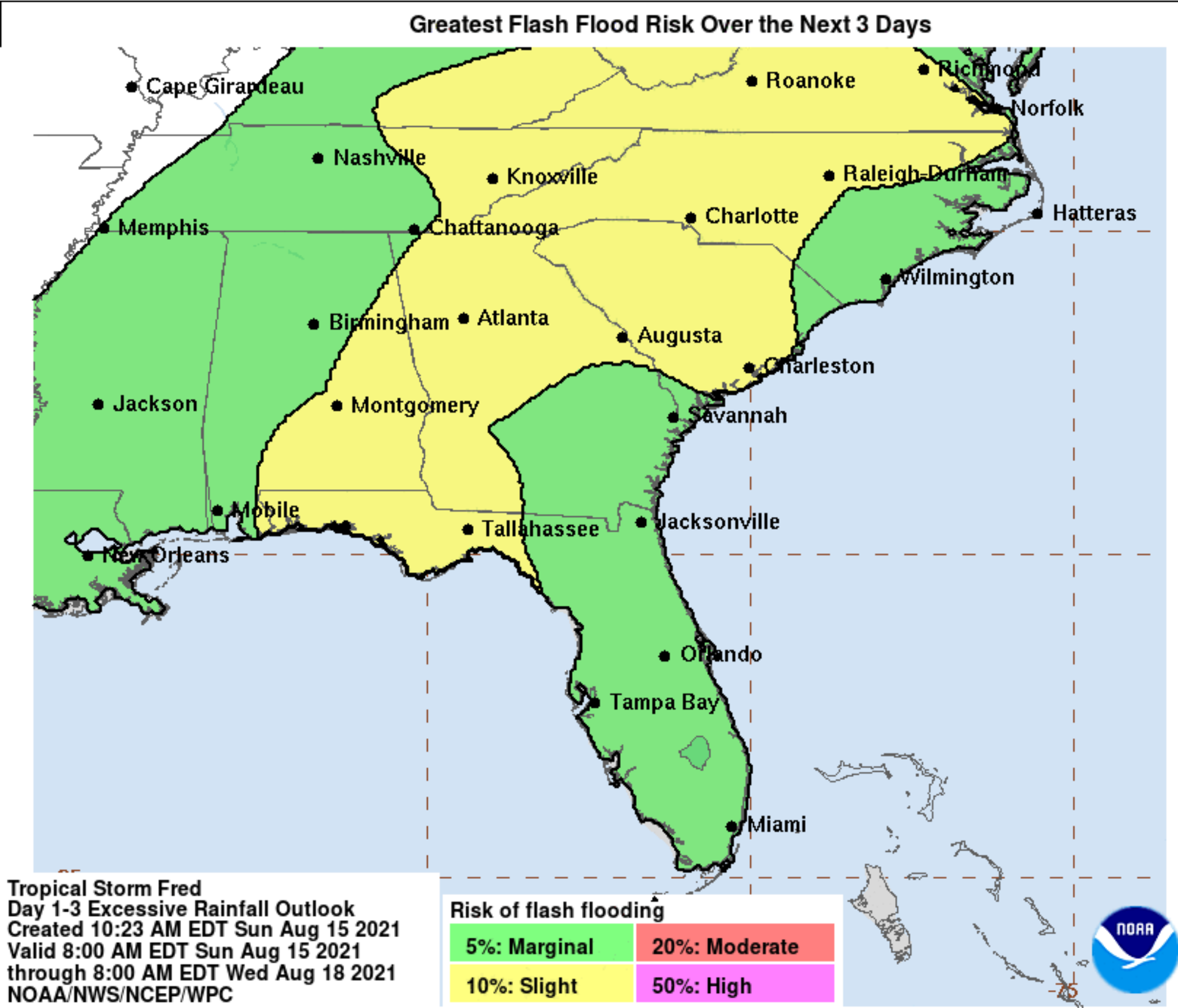
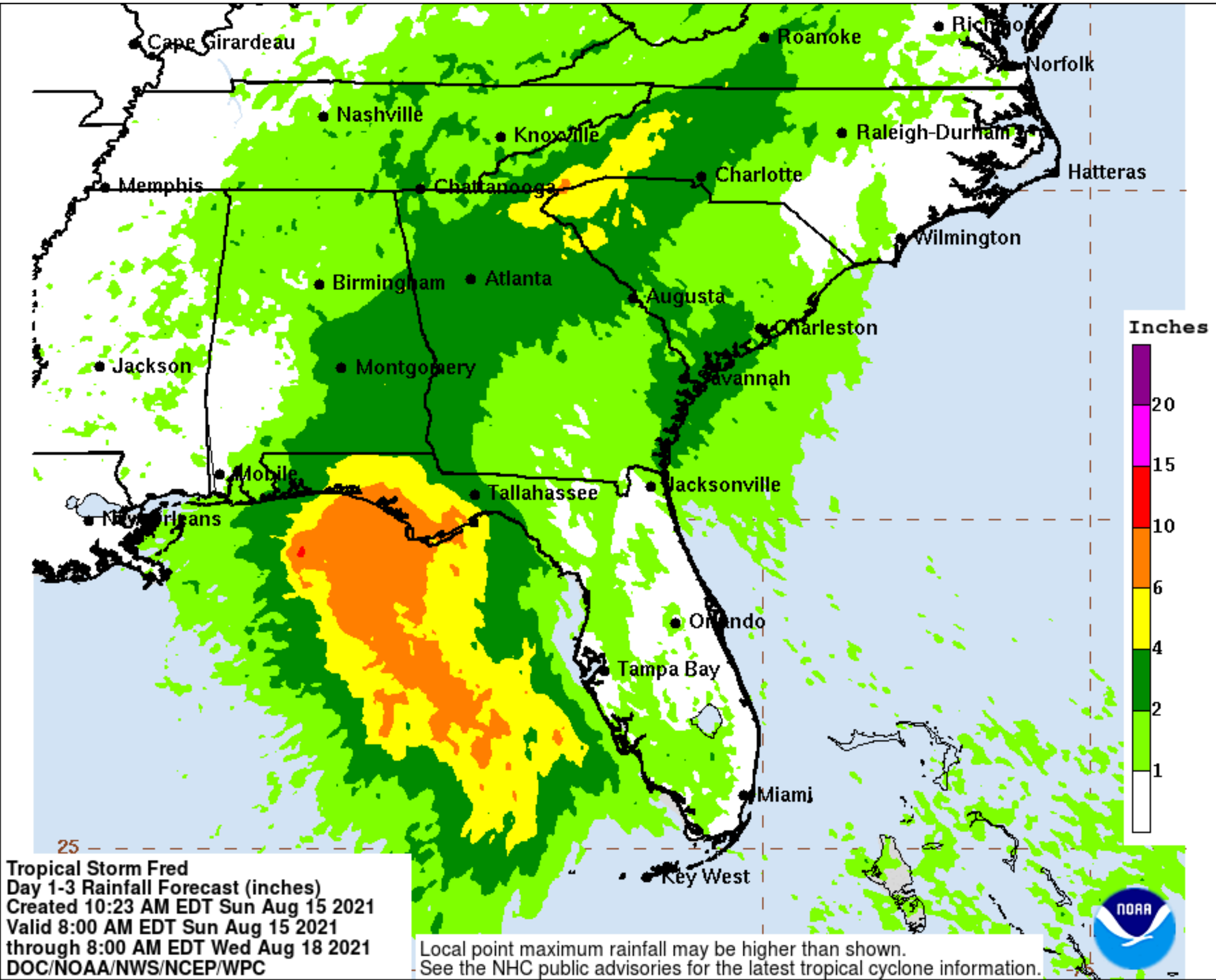
# Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Tropical Storm Fred

Images from NWS Weather Predication Center



- Total rainfall in inches through Wed 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 Wed morning



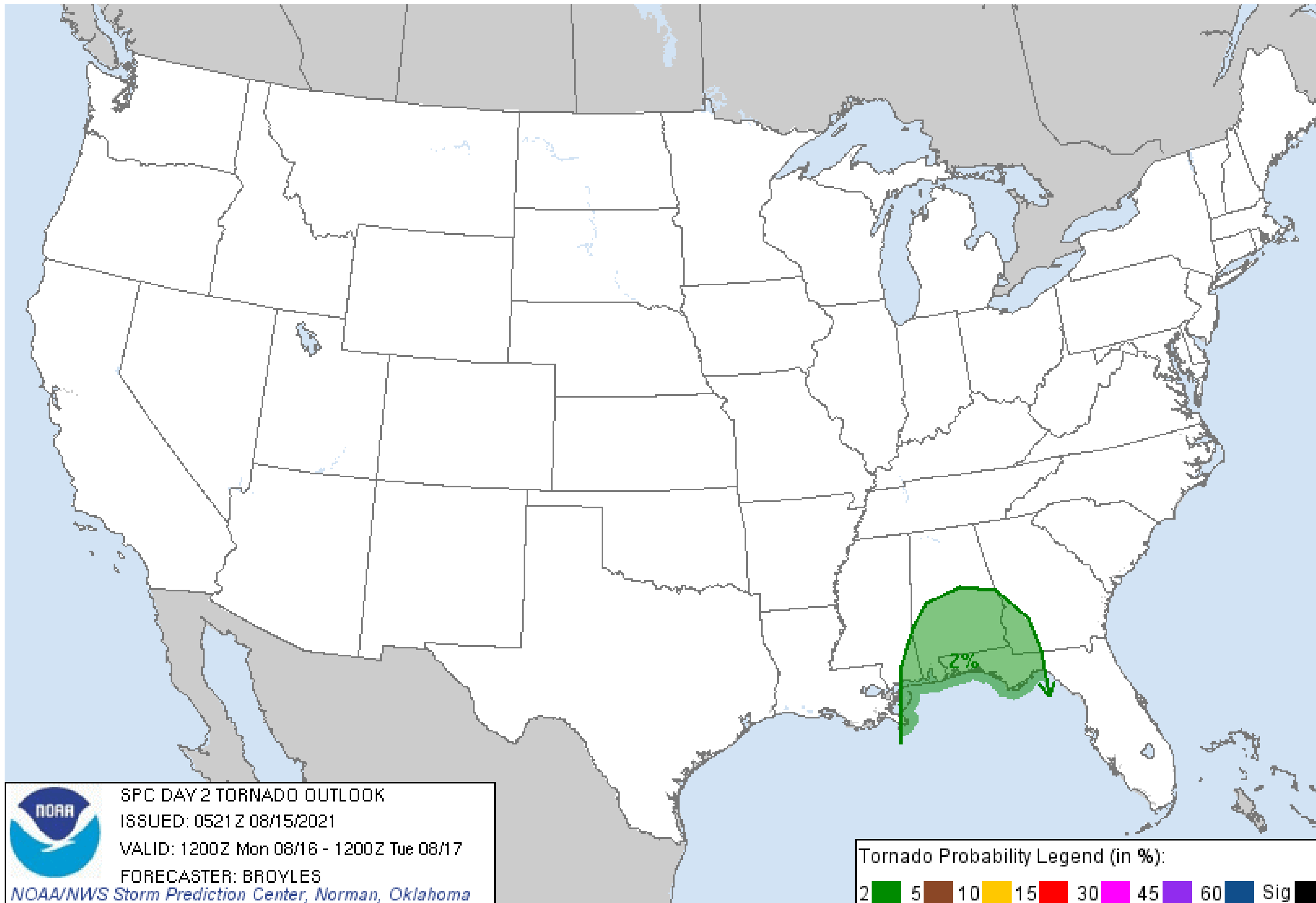
# Tornado Outlook – Day 2

Tropical Storm Fred

Image from NWS Storm Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- Isolated, weak tornadoes possible through Tue morning

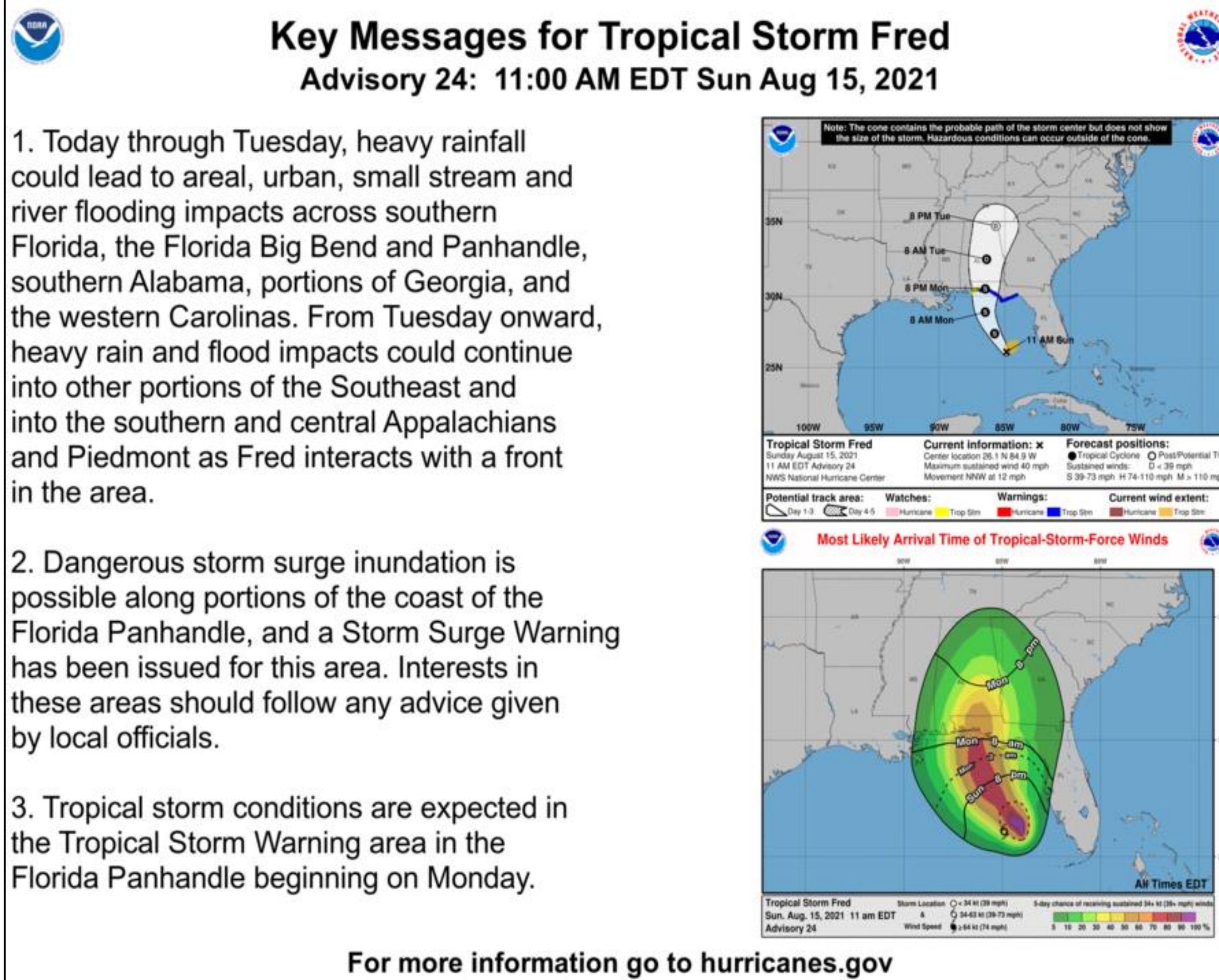


# Key Messages

## Tropical Storm Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



## IMPACTS FOR D8 for Fred (through next 5 days)

Winds – Moderate

Storm Surge – Moderate

Rainfall/Flash Flooding – Moderate

Tornadoes – Low

Waves - Low

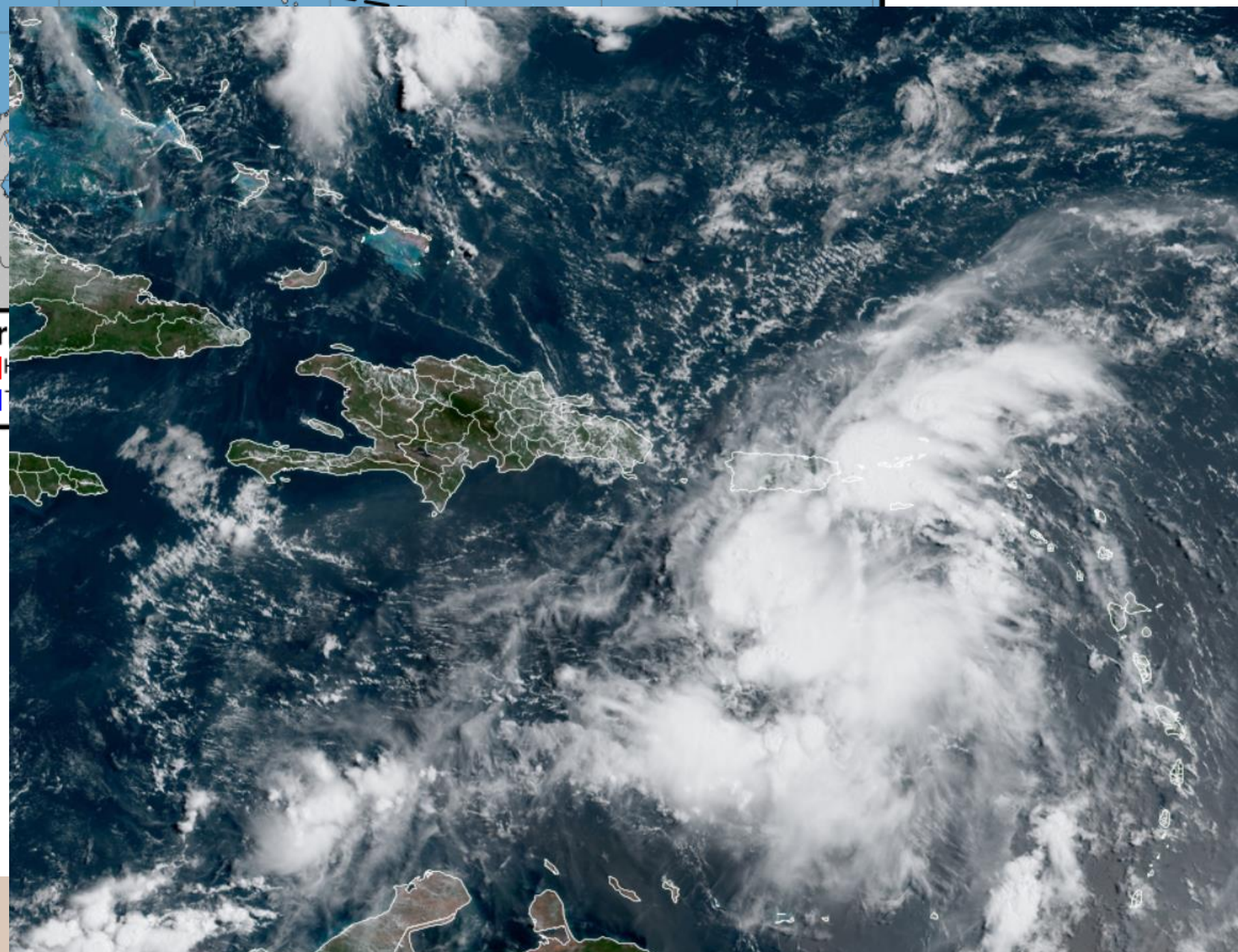
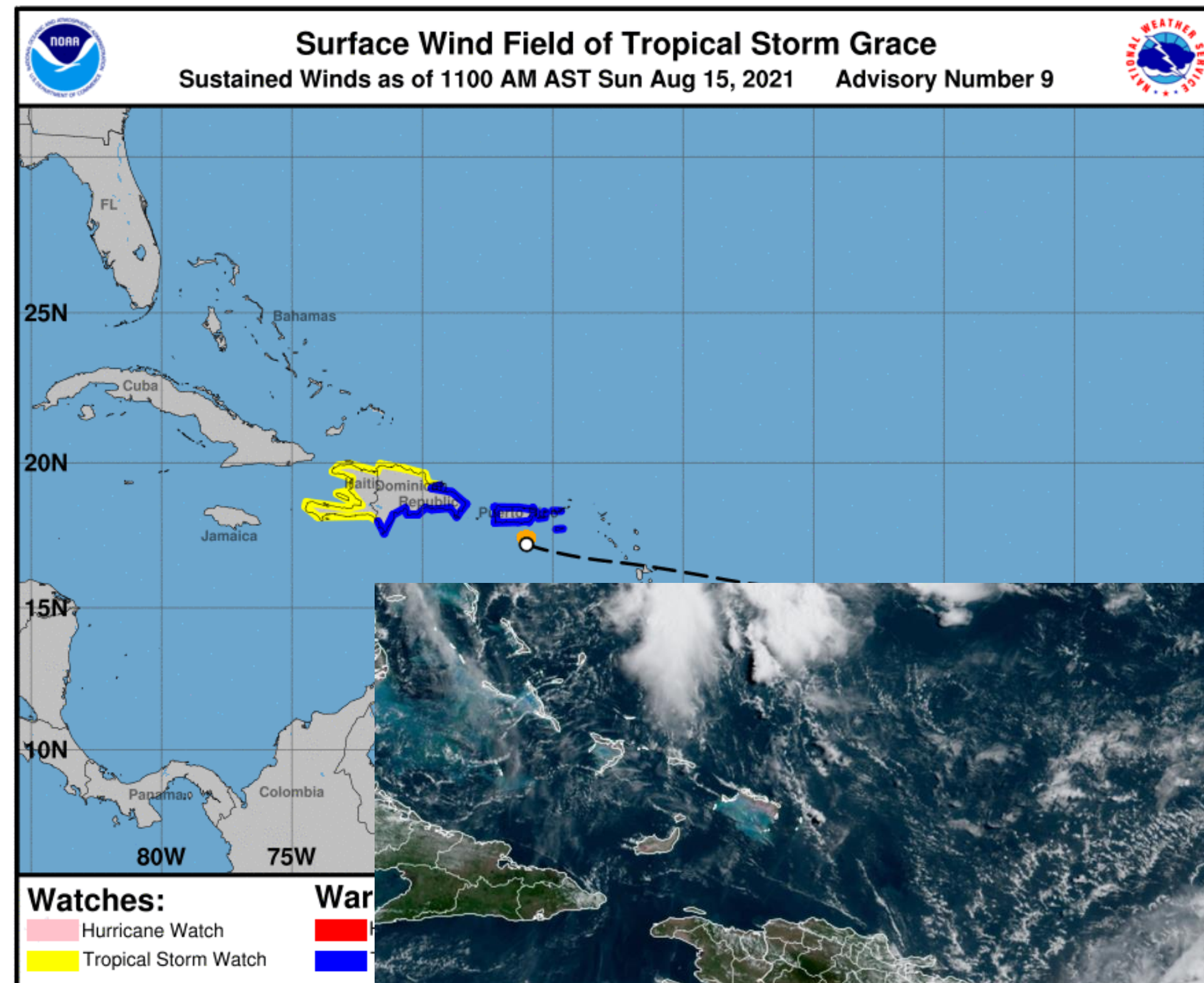


# Situation Overview

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



**...GRACE REMAINS DISORGANIZED  
WHILE MOVING JUST SOUTH OF  
PUERTO RICO...**

### SUMMARY OF 1000 CT INFORMATION

LOCATION...17.2N 66.0W  
ABOUT 70 NM S OF SAN JUAN PR  
MAXIMUM SUSTAINED WINDS...35 kt  
PRESENT MOVEMENT...WNW AT 14 KT  
PEAK SEAS 12 FT

### SIZE

34 KT..... 30NE 0SE 0SW 30NW.  
12 FT SEAS.. 30NE 0SE 0SW 0NW.

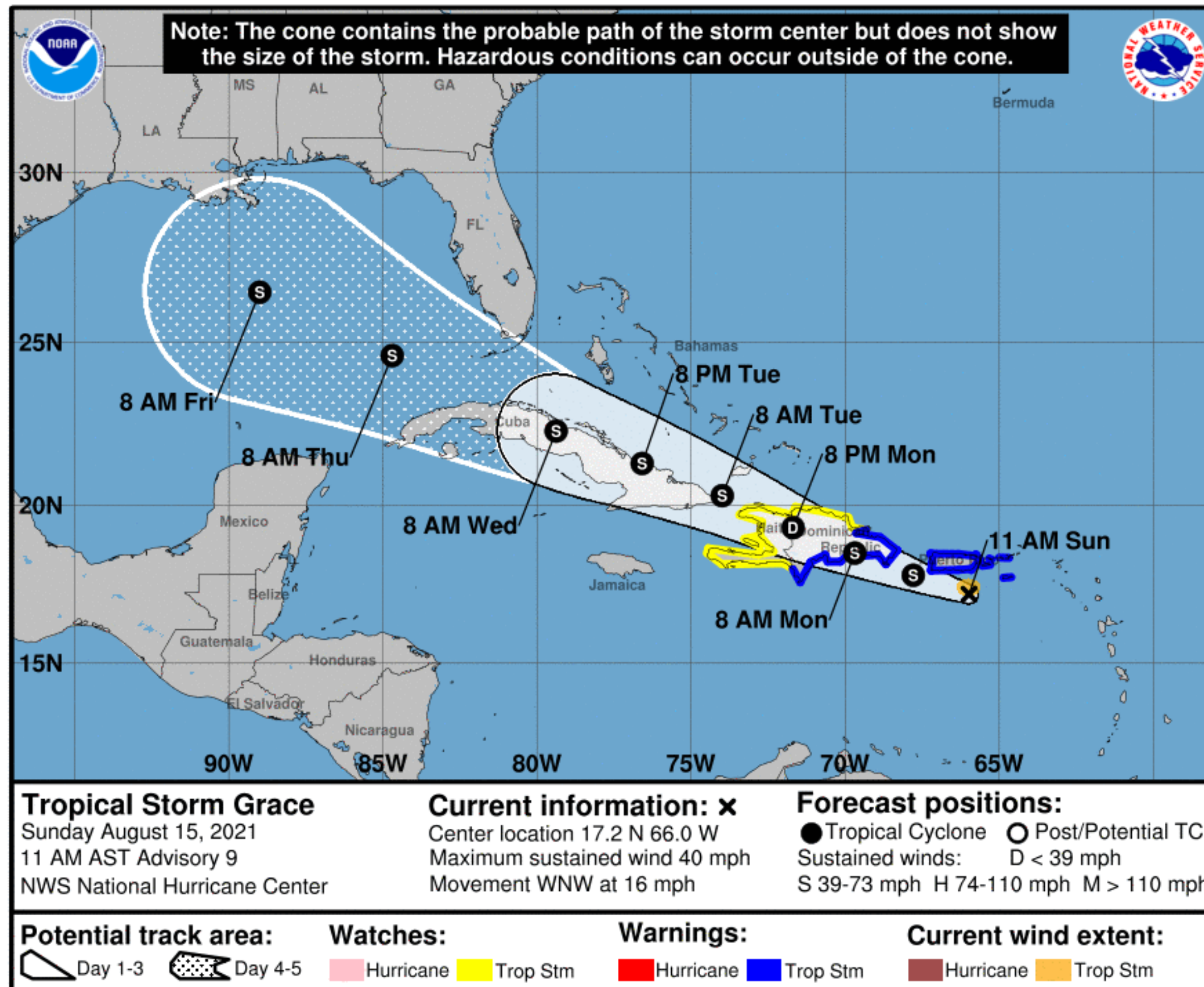


# Forecast Information

## Tropical Storm Grace



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.

- **Grace should track WNW at about the same forward speed for the next five days**
- **System expected to re-intensify after crossing the Greater Antilles and move over the Gulf of Mexico as at least a tropical storm**
- 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

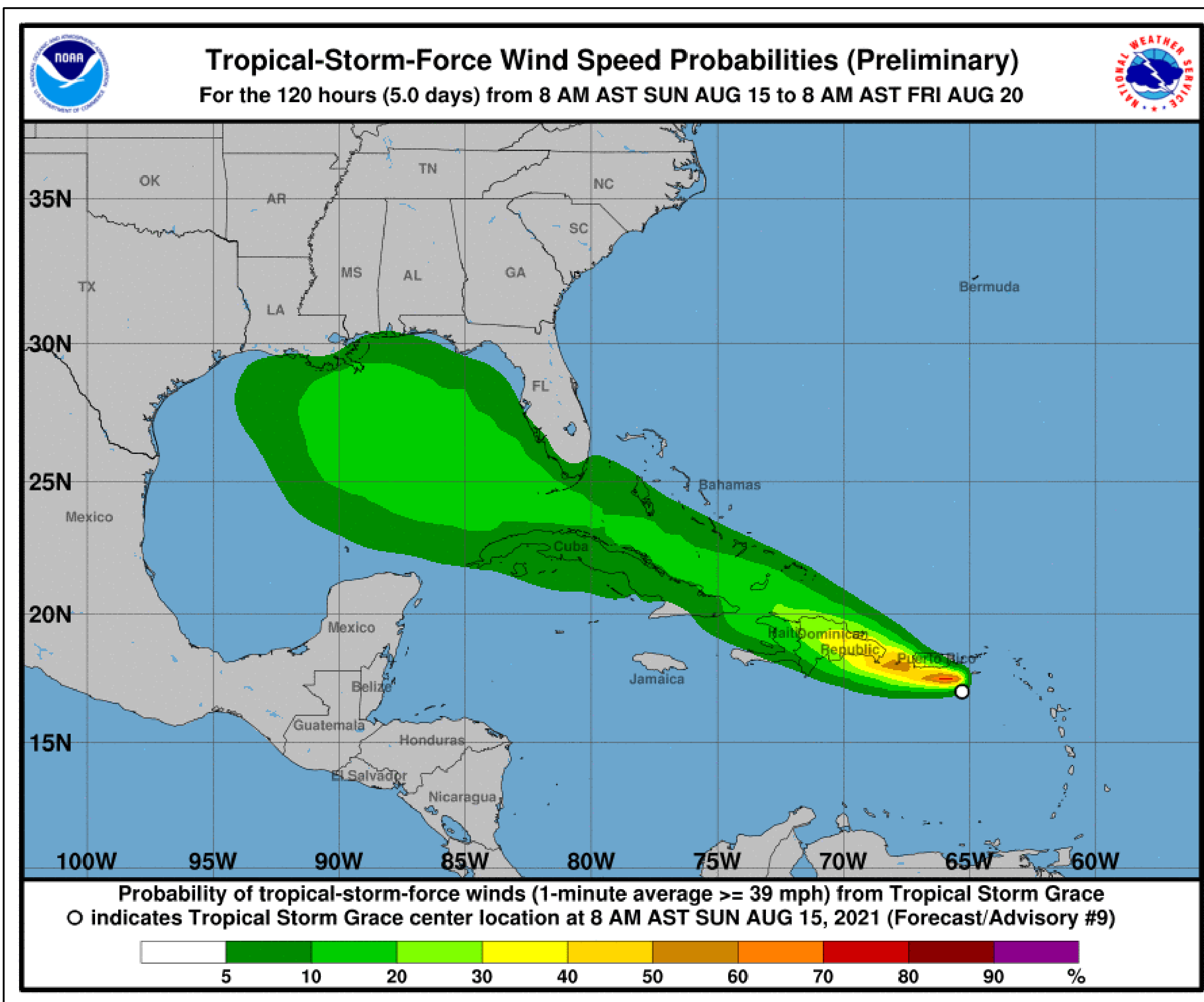
\*\* Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

# T.S. Wind Speed Probabilities

Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

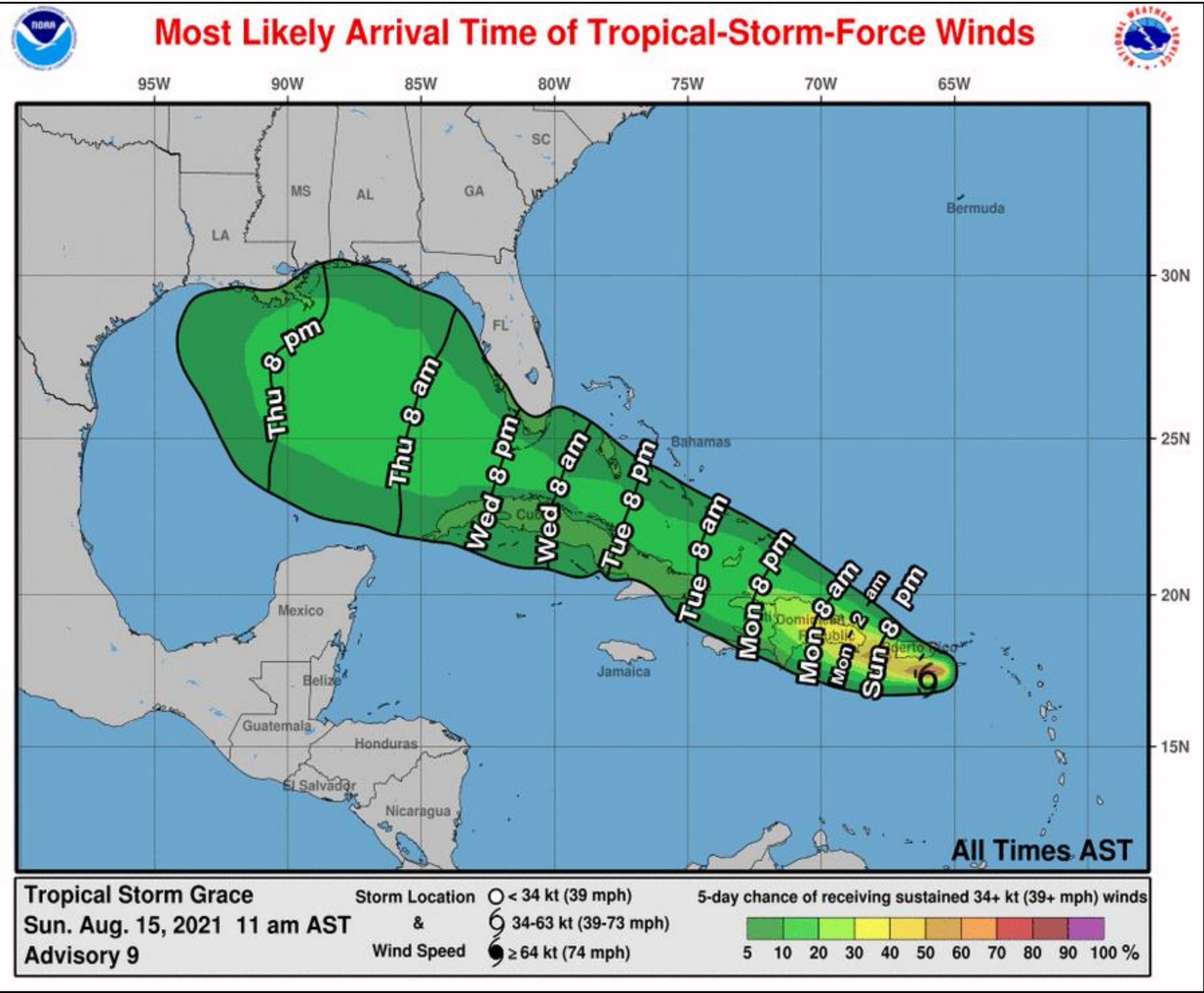


- **Marathon, FL – 10%**
- **Key West, FL – 10%**
- **Buras, LA – 10%**
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.





## Tropical Storm Grace



- **Florida Keys – Wednesday afternoon**
- **Louisiana – Thursday 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%
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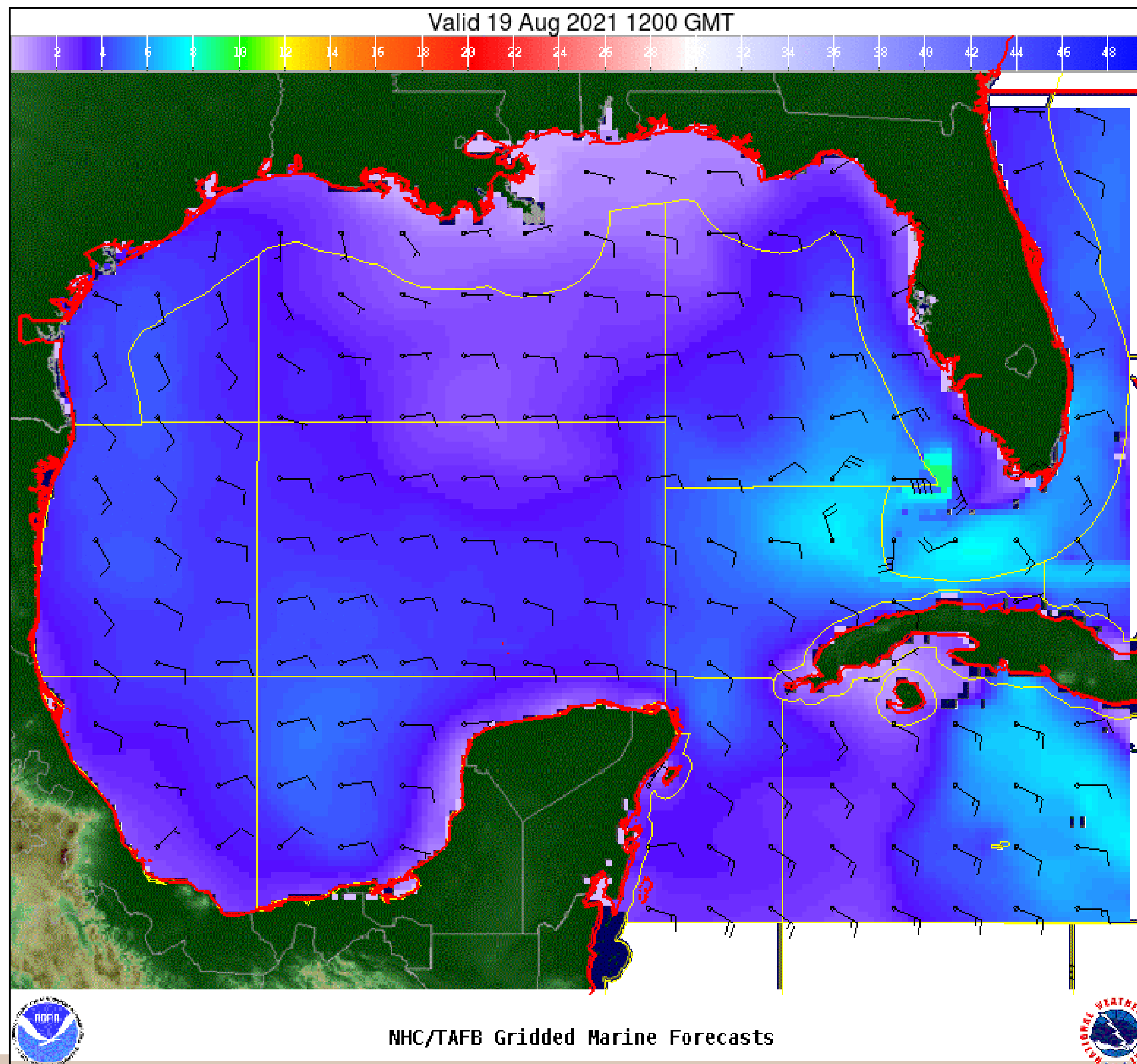


# Wind And Waves

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



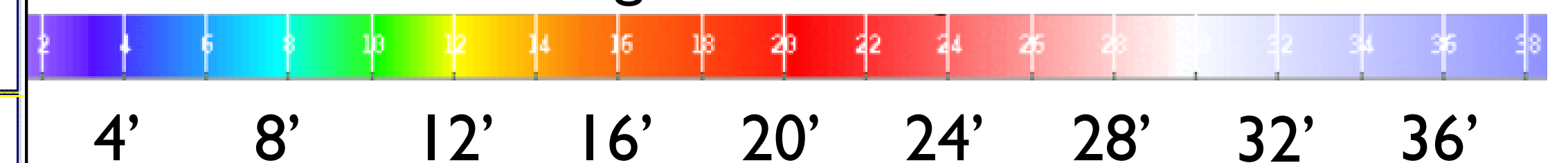
### 96 Hour Forecast

7am CDT, Thursday, August 19th

Peak Winds: 45 kt (D7 area)

Peak Seas: 10 ft (D7 area)

■ Wave heights are in feet



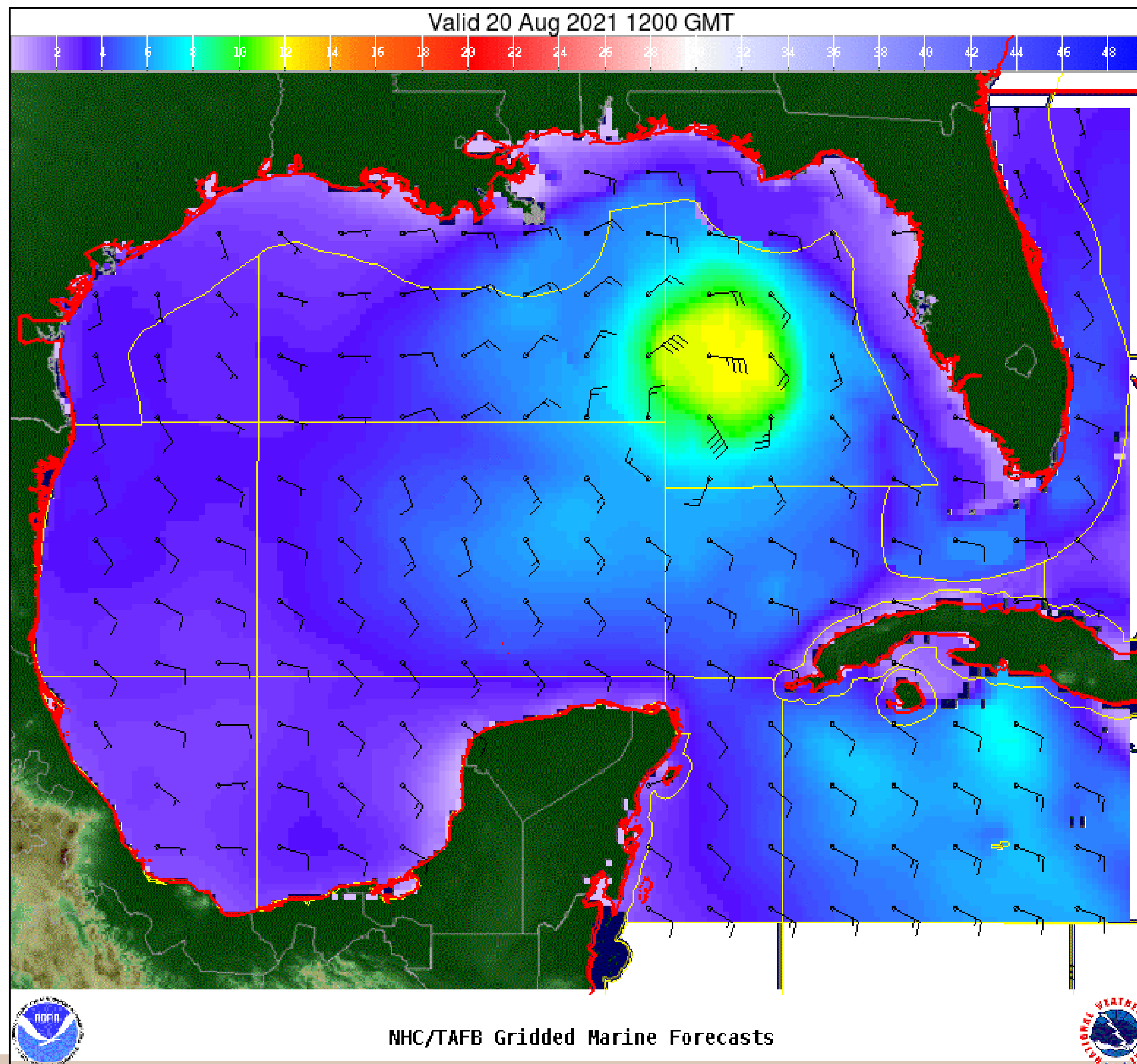


# Wind And Waves

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



120 Hour Forecast

7am CDT, Friday, August 20th

Peak Winds: 55 kt

Peak Seas: 18 ft



# Key Messages

## Tropical Storm Grace

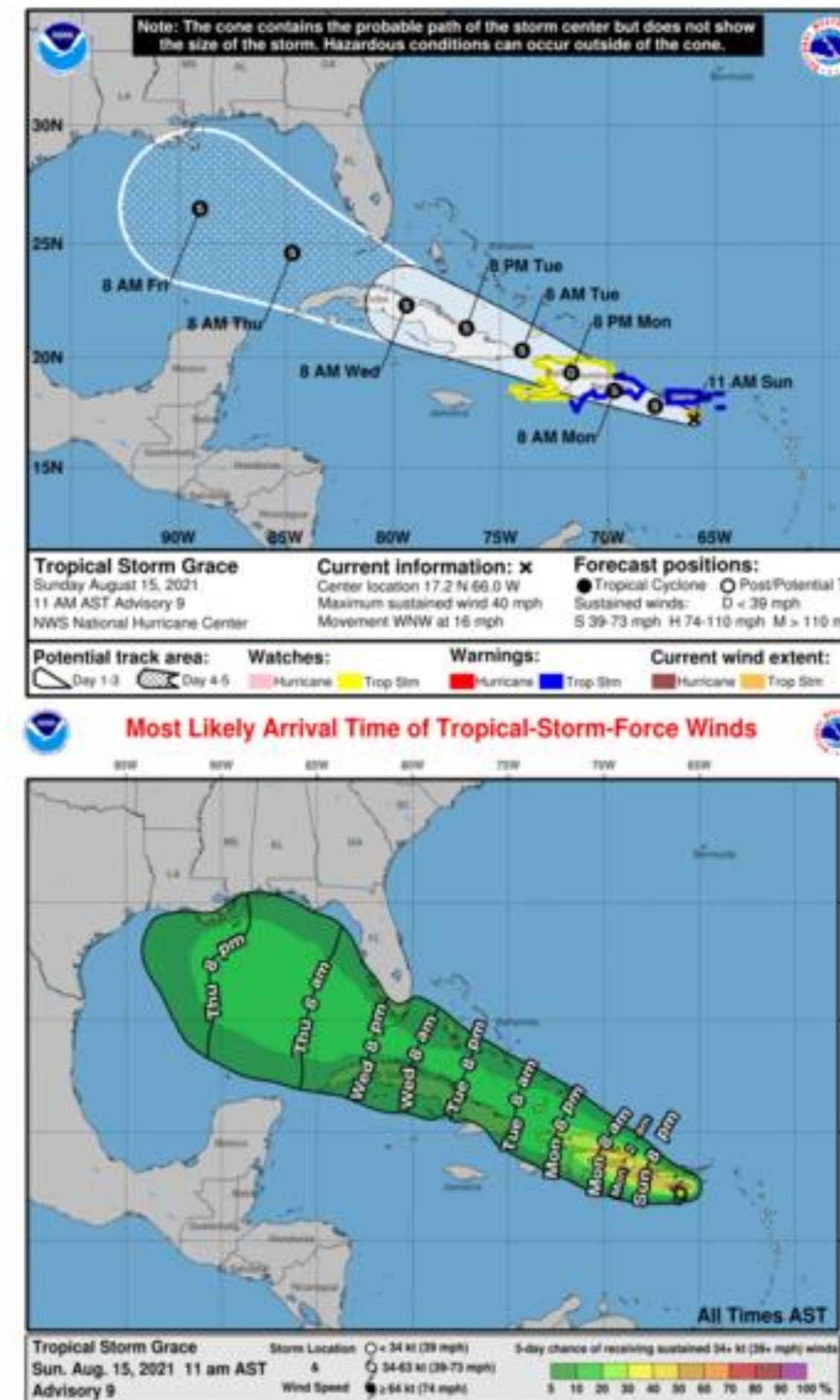


Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

### Key Messages for Tropical Storm Grace

Advisory 9: 11:00 AM AST Sun Aug 15, 2021

1. Heavy rainfall could lead to flash and urban flooding over the Virgin Islands. Across Puerto Rico, the Dominican Republic and Haiti, heavy rainfall may lead to flash, urban and small stream flooding, along with the potential for mudslides.
2. Tropical storm conditions are expected over portions of the Virgin Islands and Puerto Rico today. Tropical storm conditions are expected over parts of the Dominican Republic tonight and Monday. Tropical storm conditions are possible over northwestern portions of the Dominican Republic and Haiti Monday and Monday night.
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 D8 for Grace (through next 5 days)

**Winds – Moderate**

**Storm Surge – None**

**Rainfall/Flash Flooding – None**

**Tornadoes –None**

**Waves - Moderate**

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





# TROPICAL STORM FRED AND TROPICAL STORM GRACE BRIEFING

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

*The Next Briefing Will Be:  
Monday / 1:00 AM CDT*

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



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