

## IMPACTS FOR **D7** FROM TROPICAL STORM GRACE

Winds – **Low (Haiti)**

Storm Surge – None

Rainfall/Flash Flooding – **Moderate (Haiti)**

Tornadoes – None

Waves - **Low**

# TROPICAL STORM GRACE, TROPICAL STORM HENRI, TROPICAL DEPRESSION FRED BRIEFING



9:00 AM EDT  
Tuesday, August 17, 2021

Prepared by:  
**Andrew Hagen**

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*



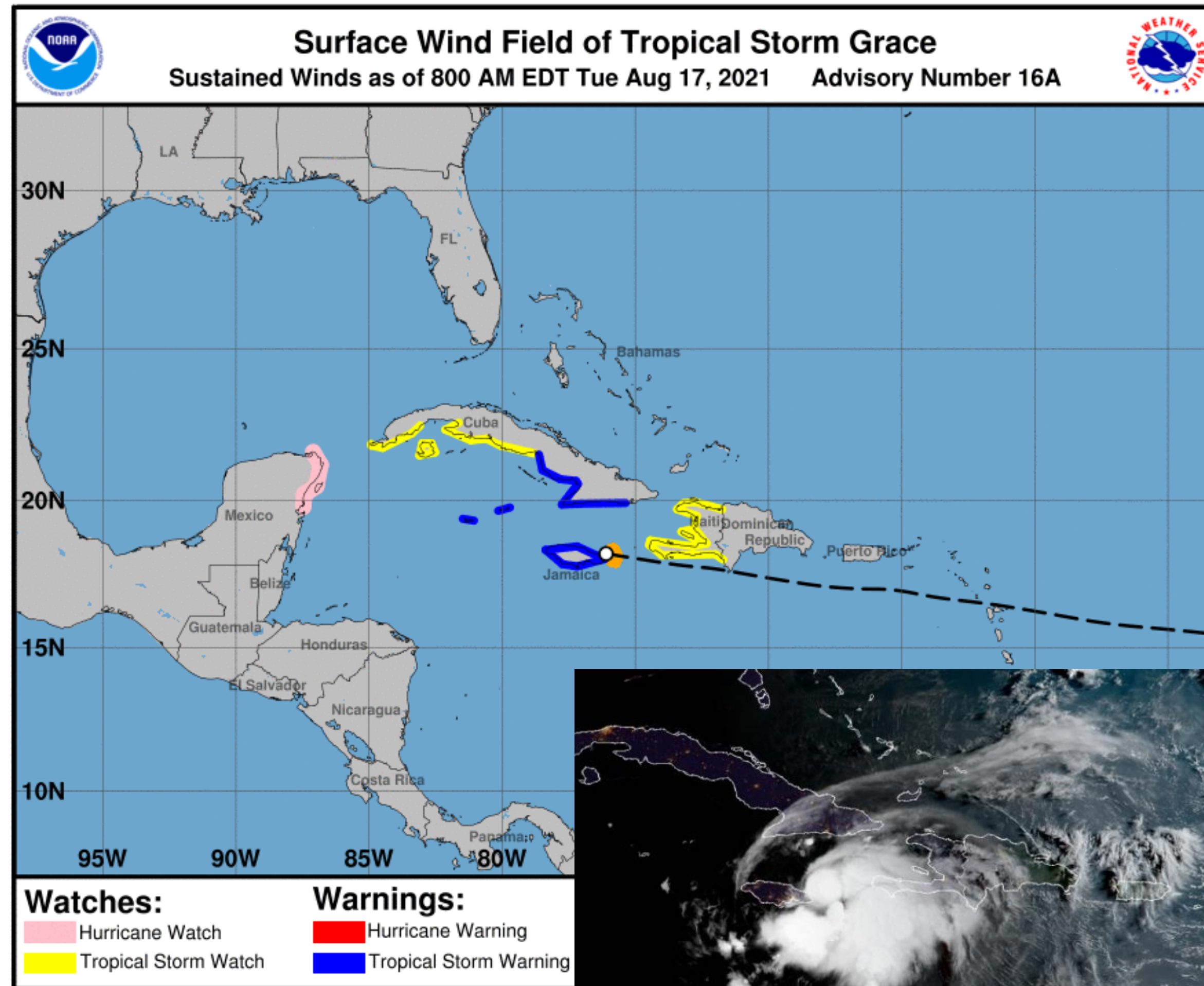


# Situation Overview

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



**...GRACE NEARING JAMAICA...  
...HEAVY RAINS CAUSING FLOODING  
ACROSS PORTIONS OF HISPANIOLA...**

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

Location... 18.2N 76.1W

About 105 nm E of Montego Bay, Jamaica About  
Maximum Sustained Winds... 40 kt

Present Movement... W or 280 degrees at 14 kt

PEAK SEAS: 11 FT

SIZE 34 KT: 30 NE, 40 SE, 0 SW, 0 NW

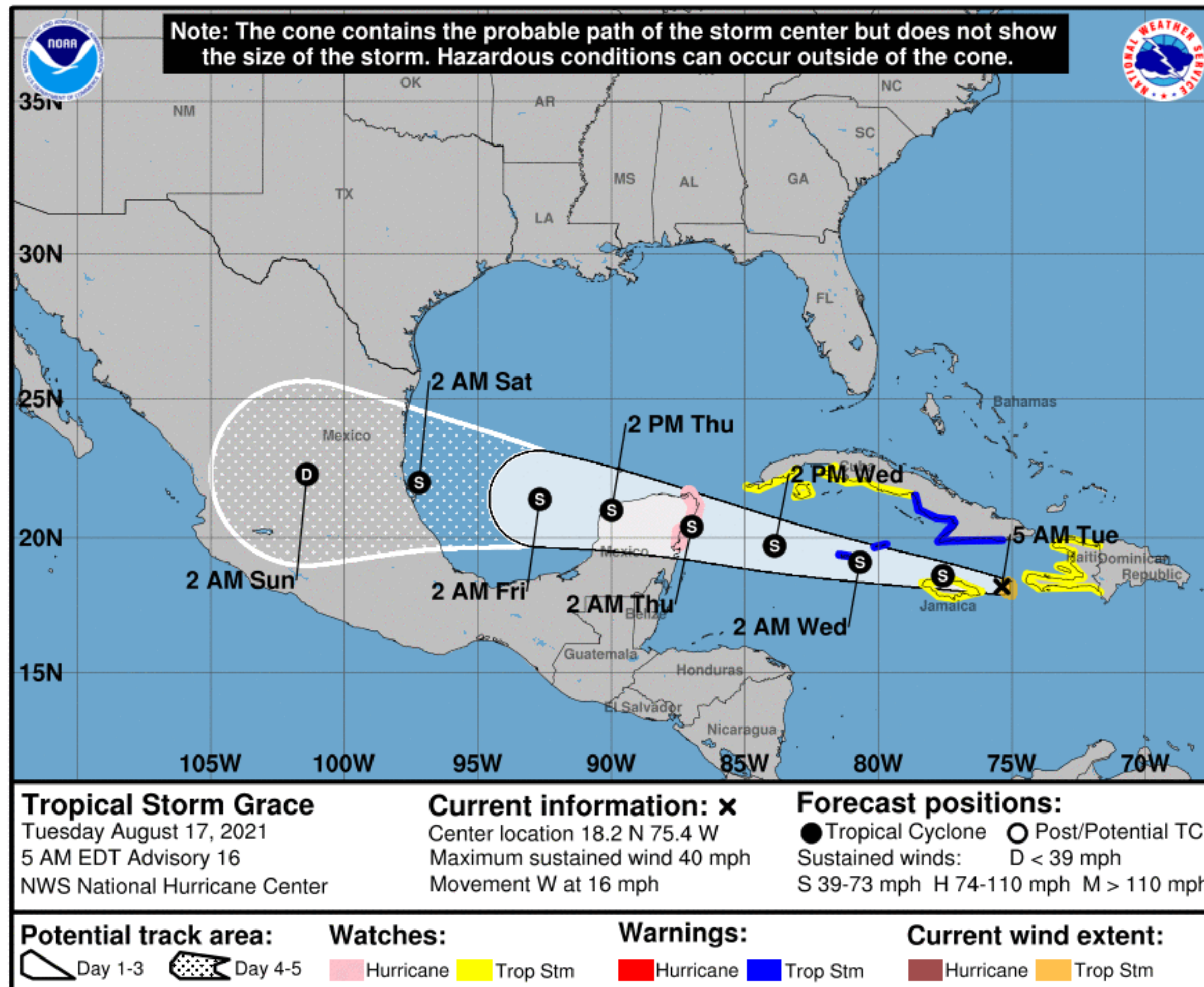


# Forecast Information

## 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 will pull away from Haiti late today. Winds will diminish from the SW peninsula of Haiti during the afternoon, but seas near the coast may not subside until this evening. Rainfall may not end until late afternoon or evening.**
  - **Grace expected to strengthen and move westward**
  - 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



- **Grand Cayman: 60%**
- **Montego Bay, Jamaica: 45%**
- 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.

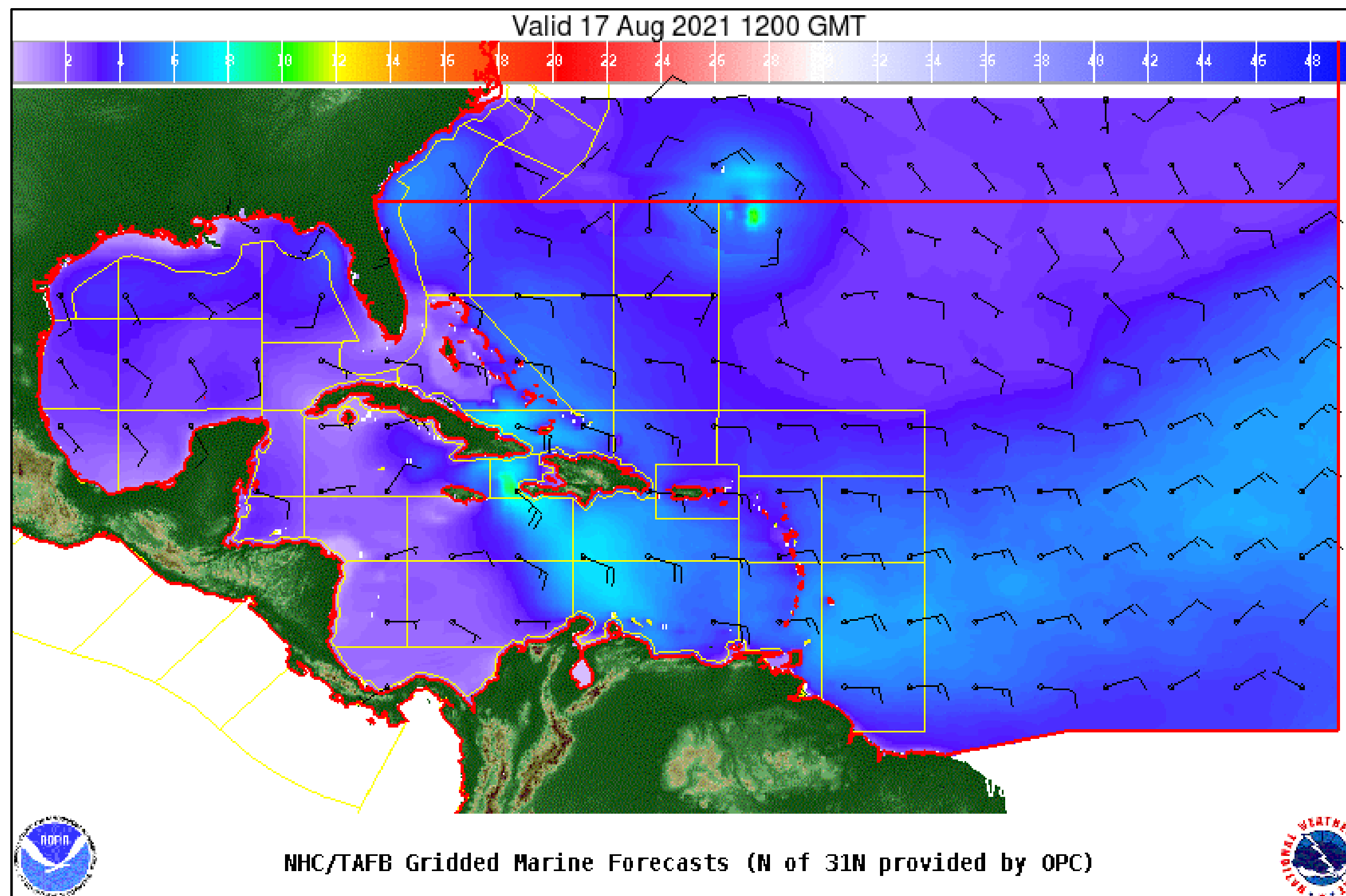


# Wind And Waves

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



### Current Conditions

**Tue 8/17 8am EDT**

Peak Winds: 40 kt

Peak Seas: 11 ft

■ Wave heights are in feet



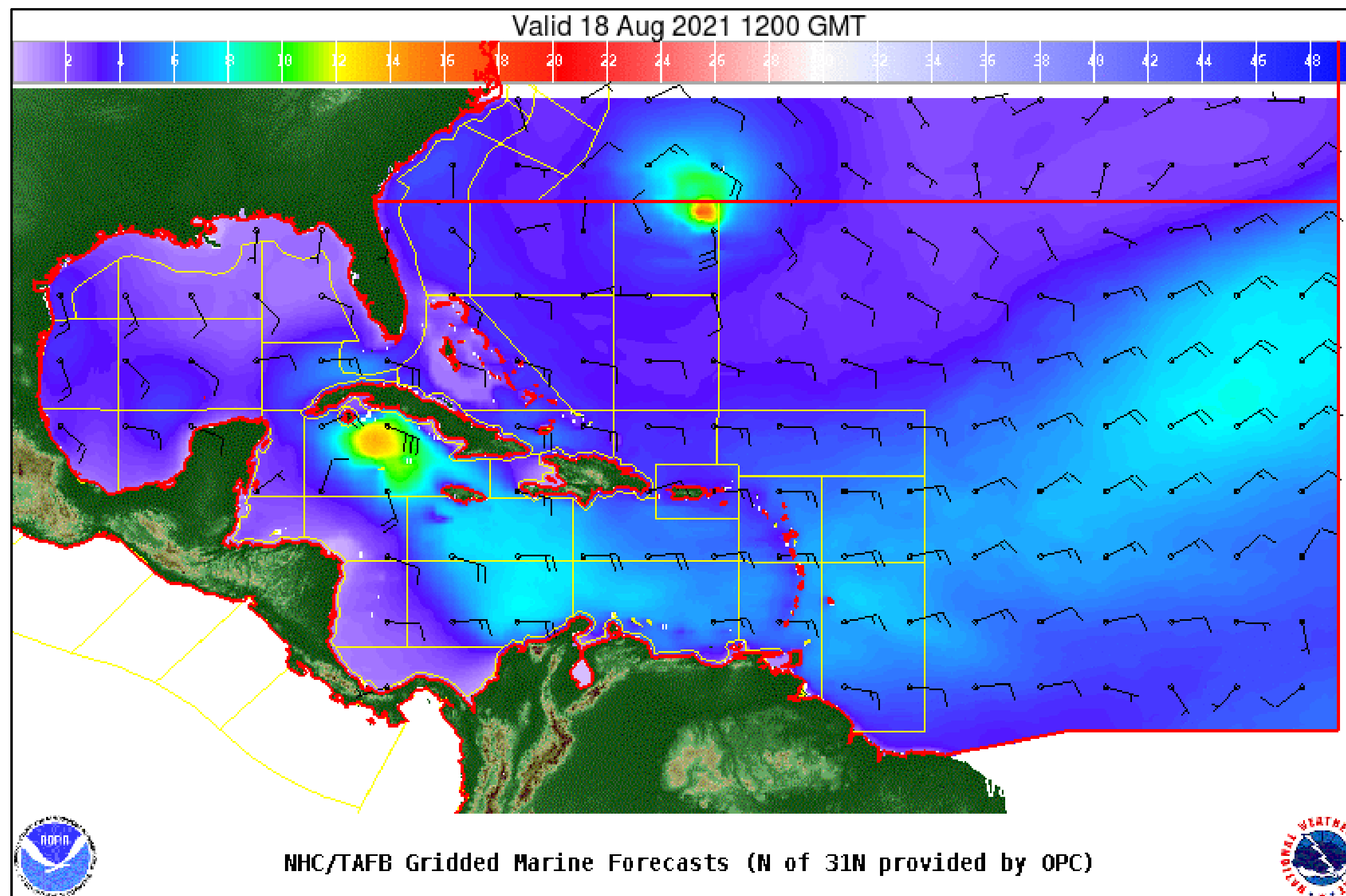
4' 8' 12' 16' 20' 24' 28' 32' 36'

# Wind And Waves

## Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



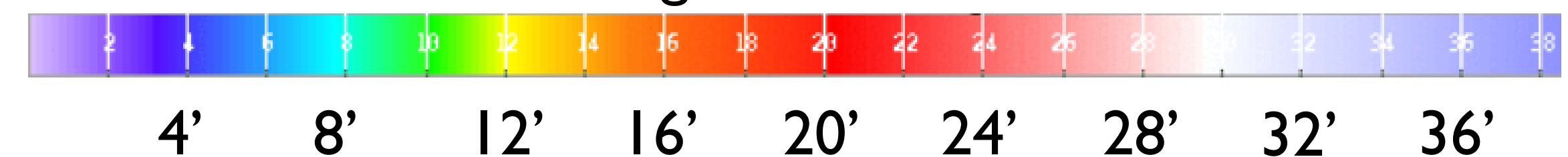
## 24 Hour Forecast

**Wed 8/18 8am EDT**

Peak Winds: 45 kt

Peak Seas: 14 ft

■ Wave heights are in feet

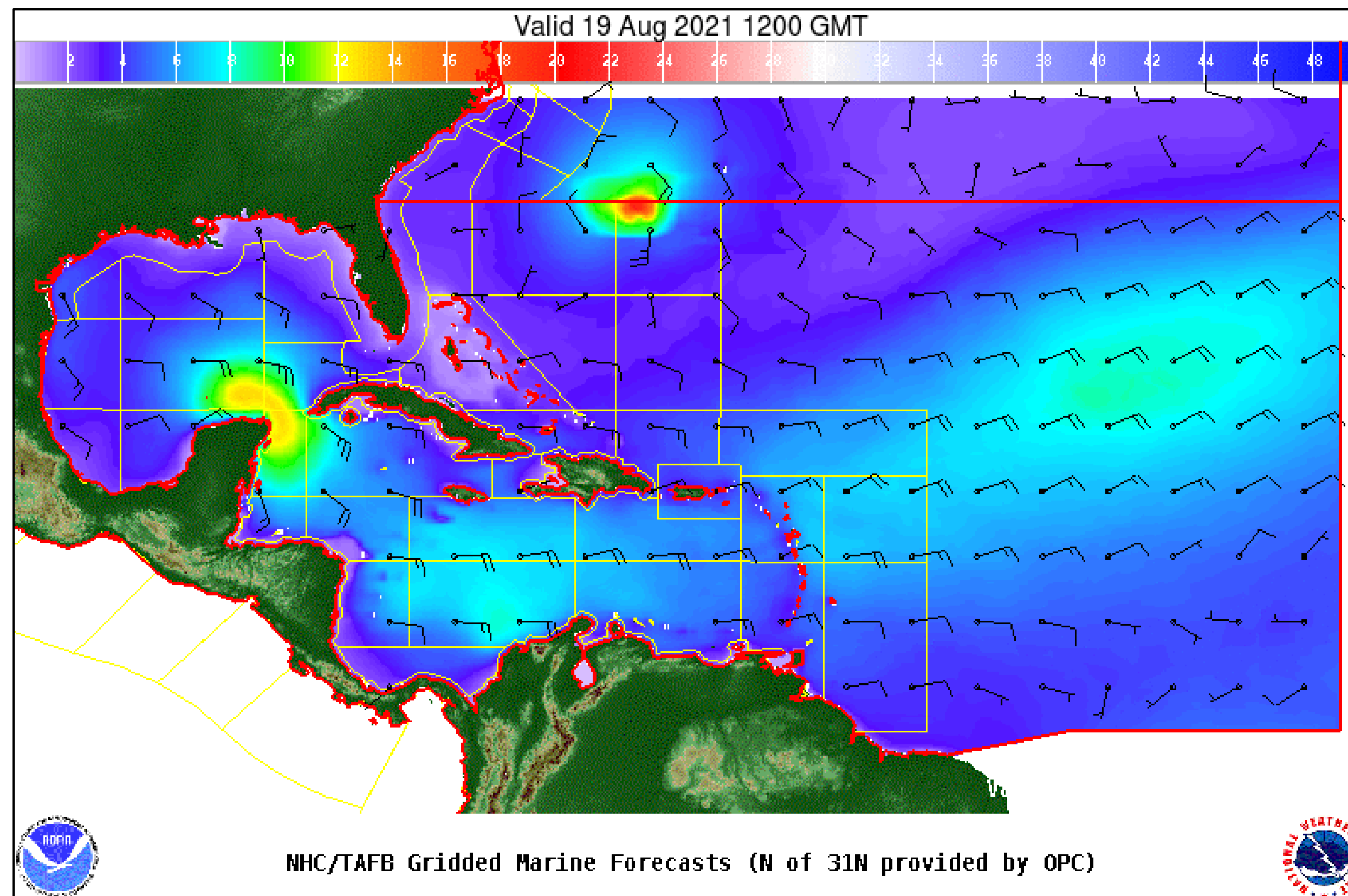


# Wind And Waves

## Tropical Storm Grace



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NWS National Hurricane Center



### 48 Hour Forecast

**Thu 8/19 8am EDT**

(Center Inland over Yucatan Peninsula)

Peak Winds (over water): 50 kt

Peak Seas: 13 ft (in Yucatan Channel)

■ Wave heights are in feet



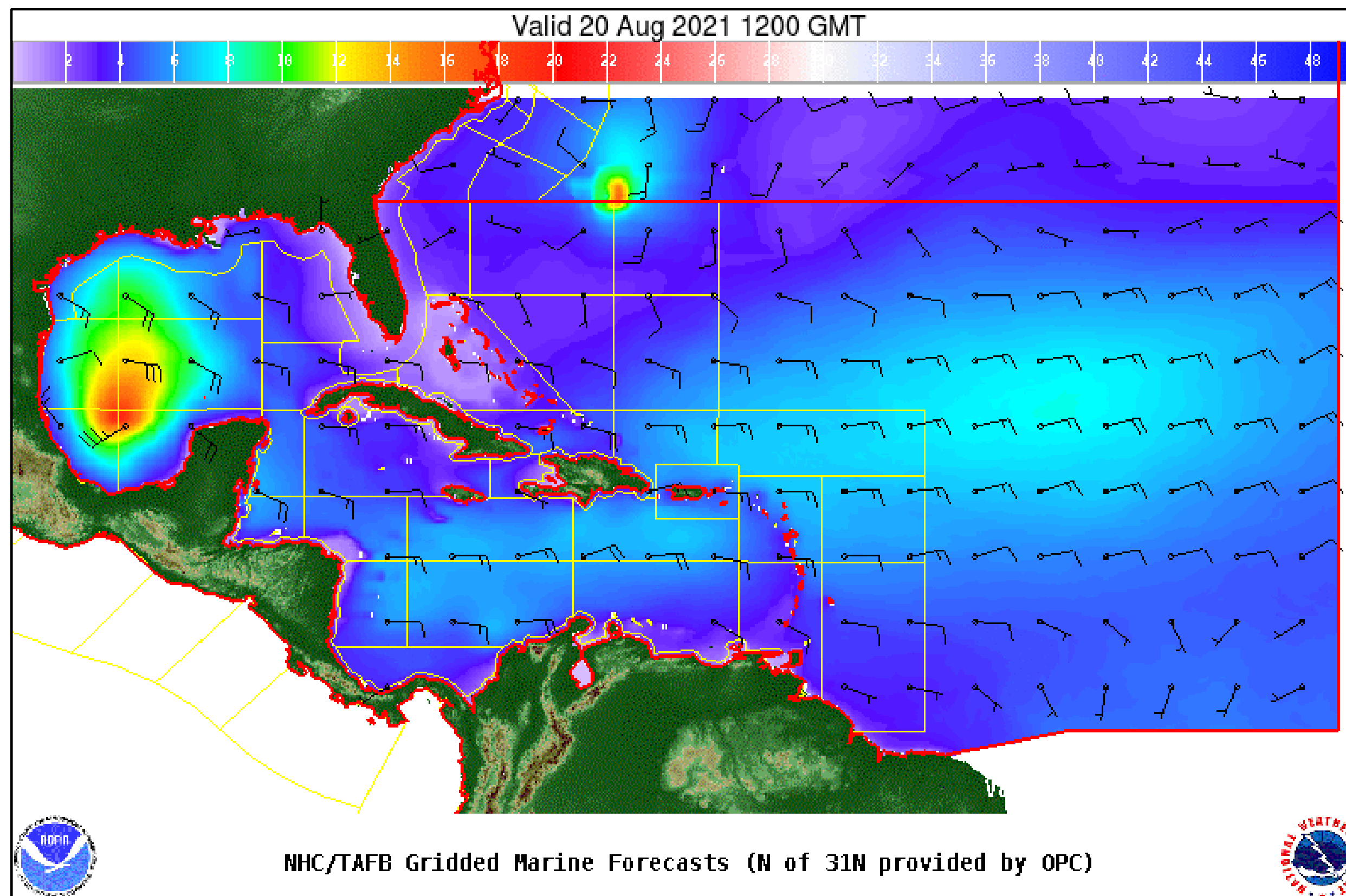
4' 8' 12' 16' 20' 24' 28' 32' 36'

# Wind And Waves

## Tropical Storm Grace



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NWS National Hurricane Center



72 Hour Forecast

Fri 8/20 8am EDT

Grace over the SW Gulf of Mexico

■ Wave heights are in feet



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



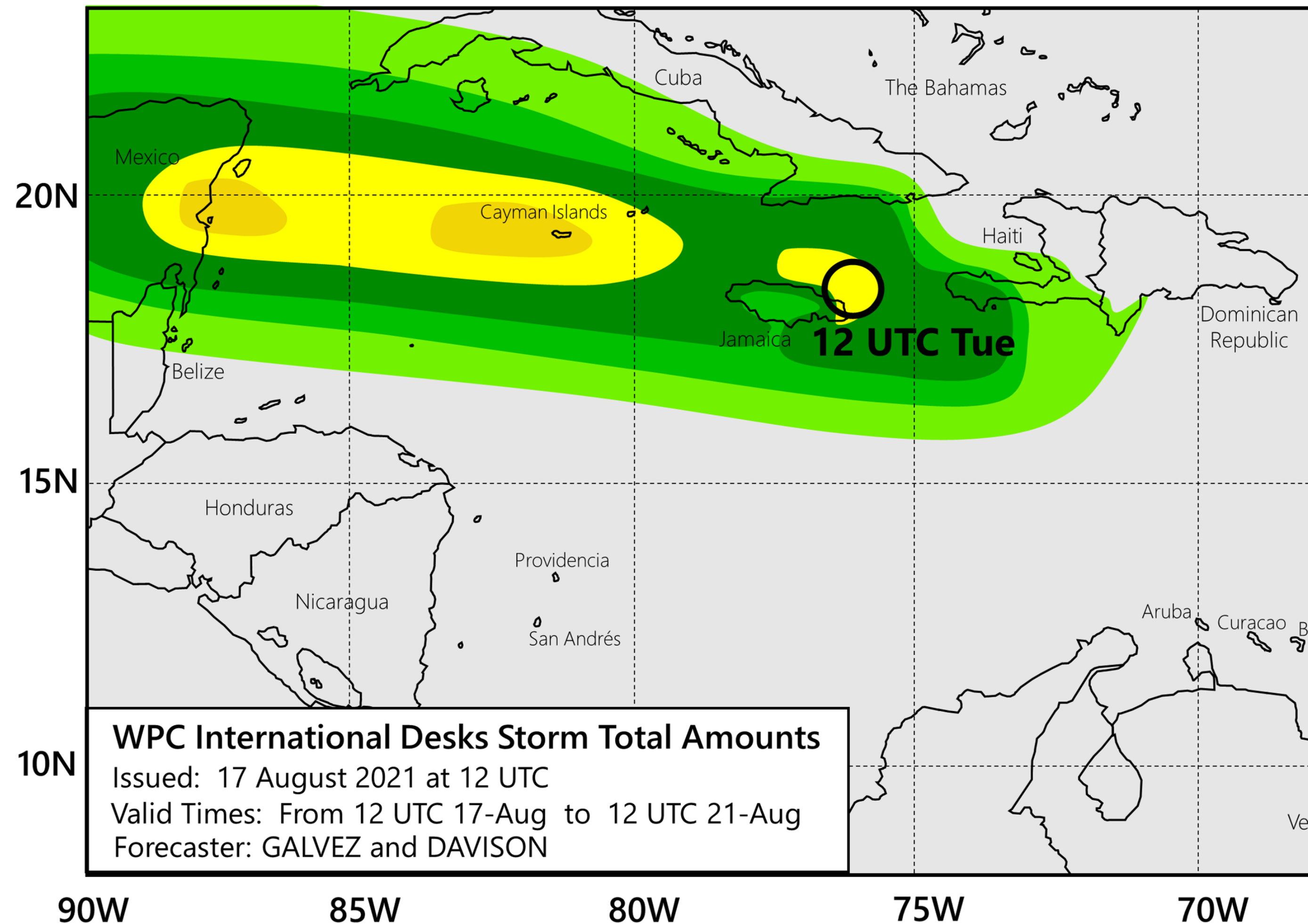
# Rainfall Over the Caribbean

Tropical Storm Grace



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## Tropical Storm 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.

**These are additional rainfall amounts from Tropical Storm Grace, beginning at 8am EDT Tue 8/17**



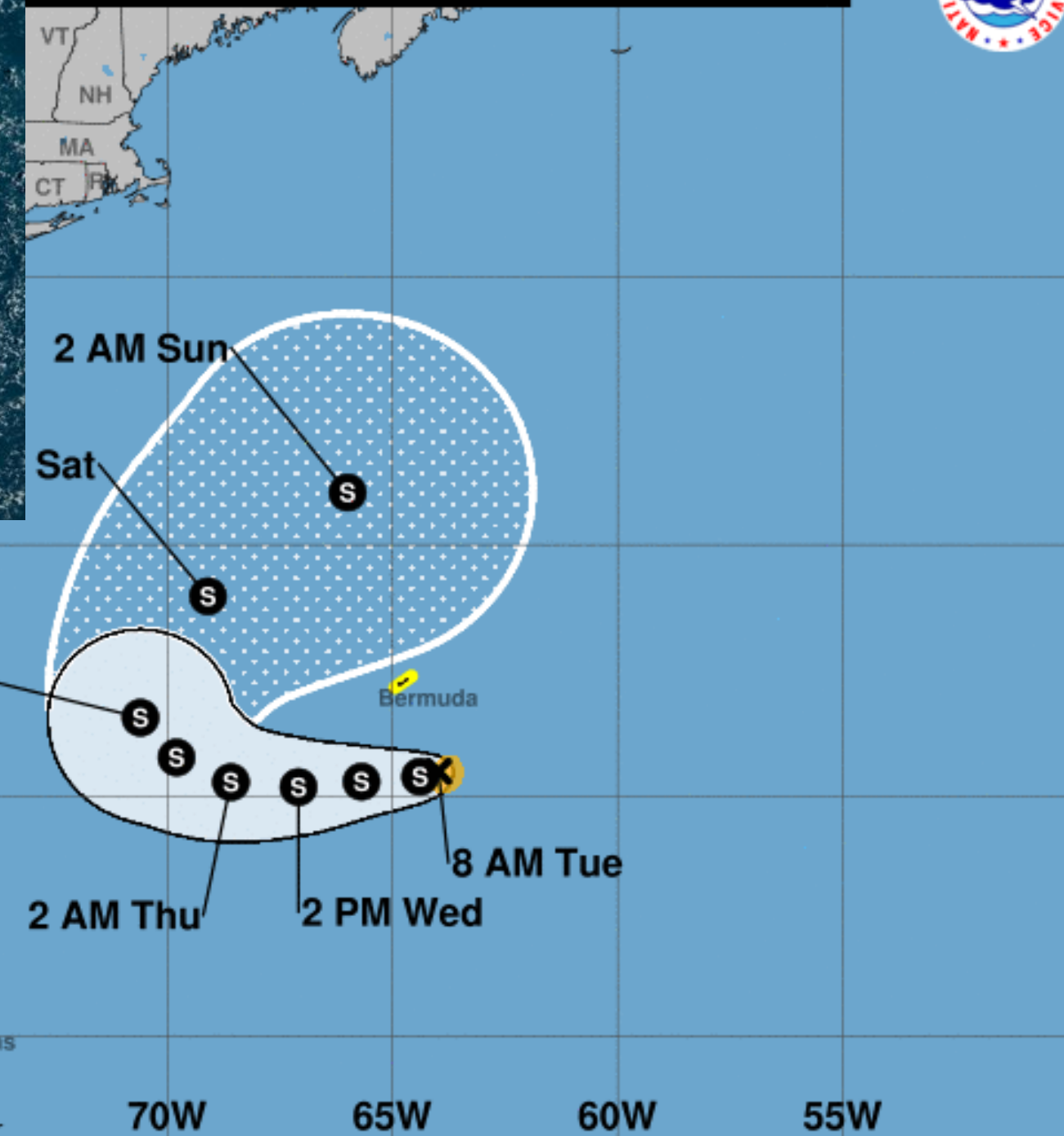
# Forecast Information

## Tropical Storm Henri



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

...le path of the storm center but does not show  
conditions can occur outside of the cone.



<b>Tropical Storm Henri</b> Tuesday August 17, 2021 8 AM AST Intermediate Advisory 6A NWS National Hurricane Center		<b>Current information: x</b> Center location 30.5 N 64.0 W Maximum sustained wind 50 mph Movement WSW at 5 mph	<b>Forecast positions:</b> ● Tropical Cyclone    ○ Post/Potential TC Sustained winds:    D < 39 mph S 39-73 mph    H 74-110 mph    M > 110 mph
<b>Potential track area:</b> Day 1-3    Day 4-5	<b>Watches:</b> Hurricane    Trop Stm	<b>Warnings:</b> Hurricane    Trop Stm	<b>Current wind extent:</b> Hurricane    Trop Stm

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

- **Tropical Storm Henri forecast to remain well east of the U.S. east coast**
- **Some slight strengthening is forecast during the next 24 hr, with little change in strength thereafter**
- 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
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\*\* Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

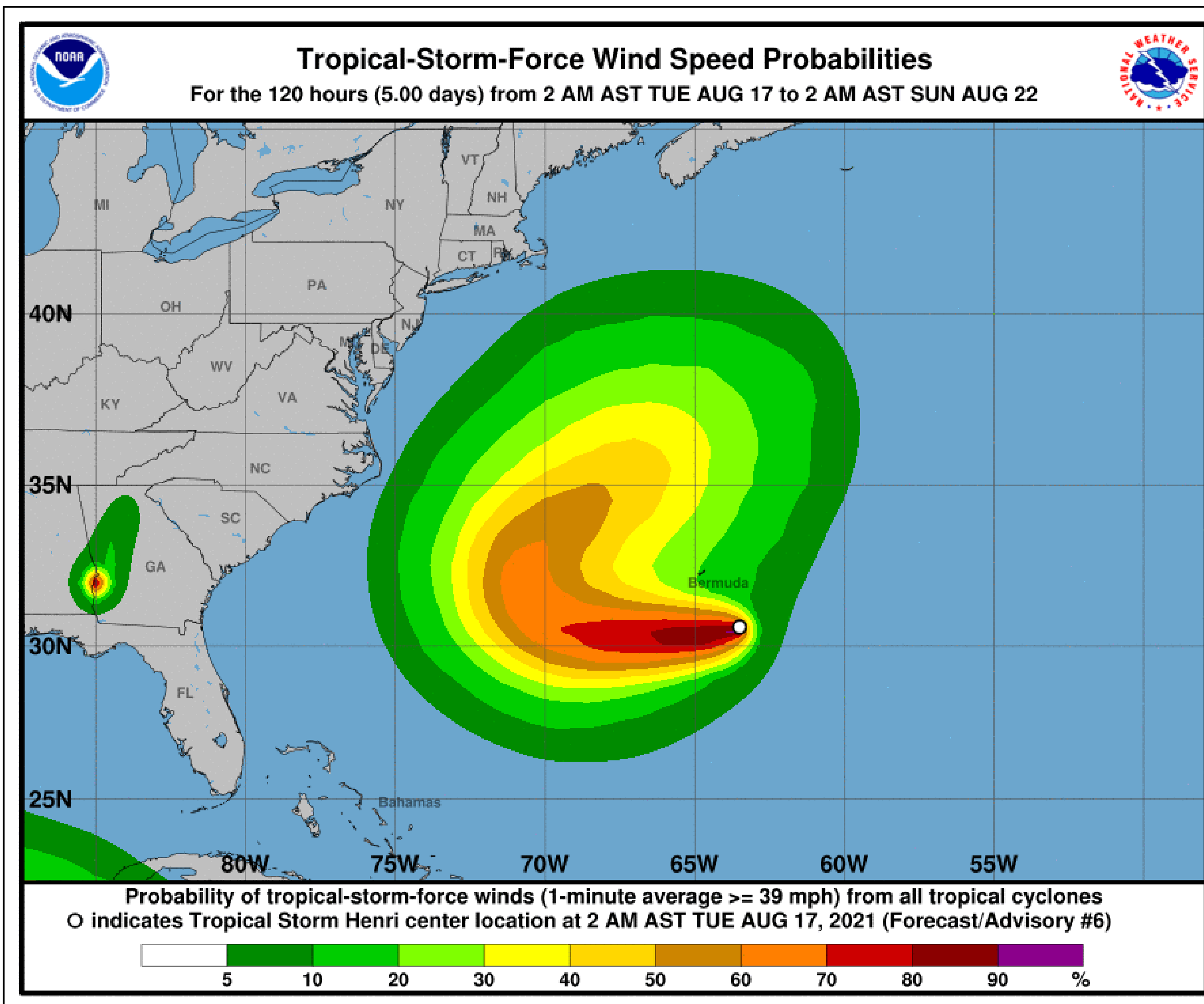


# T.S. Wind Speed Probabilities

Tropical Storm Henri



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NWS National Hurricane Center



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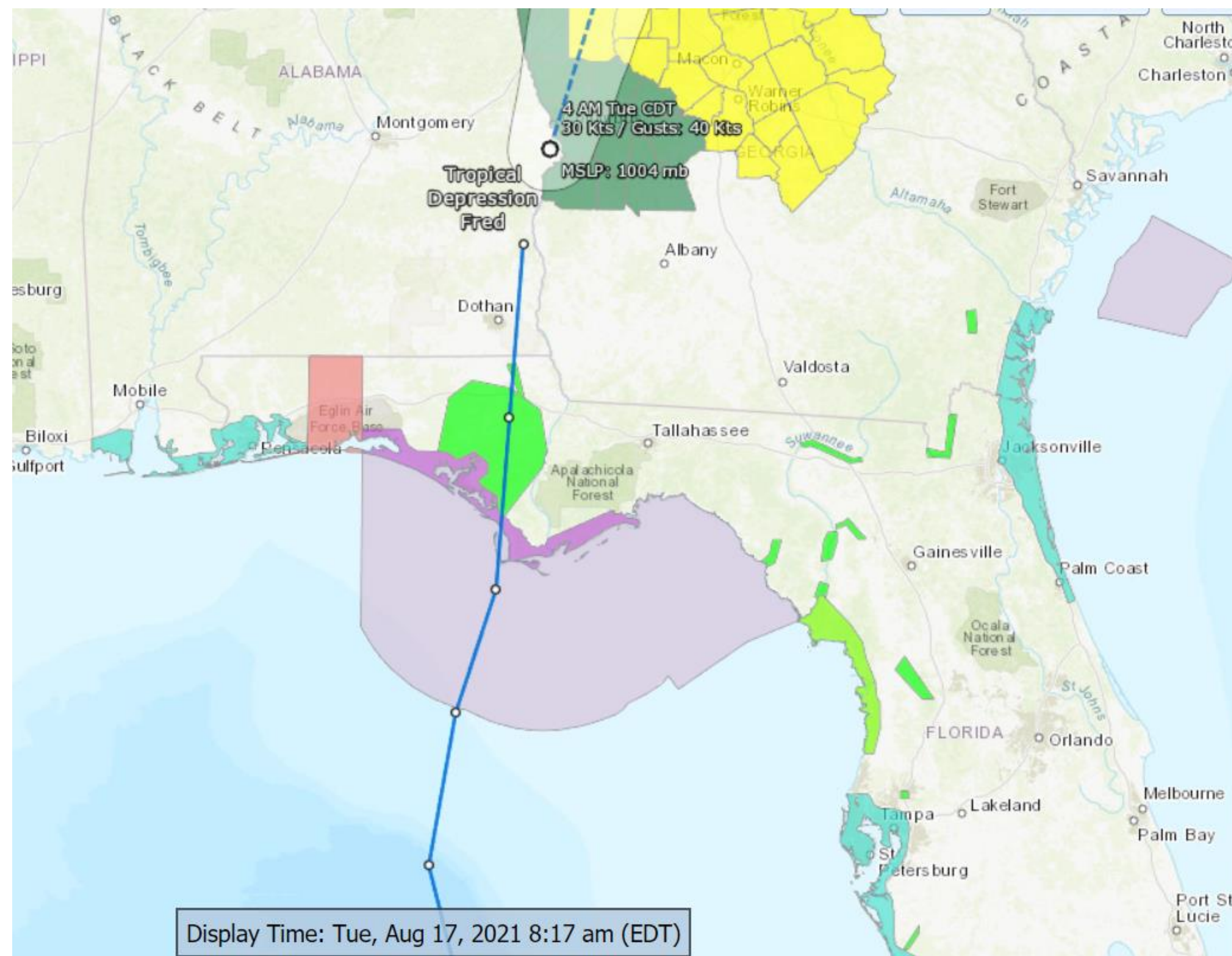


# Hazards Map

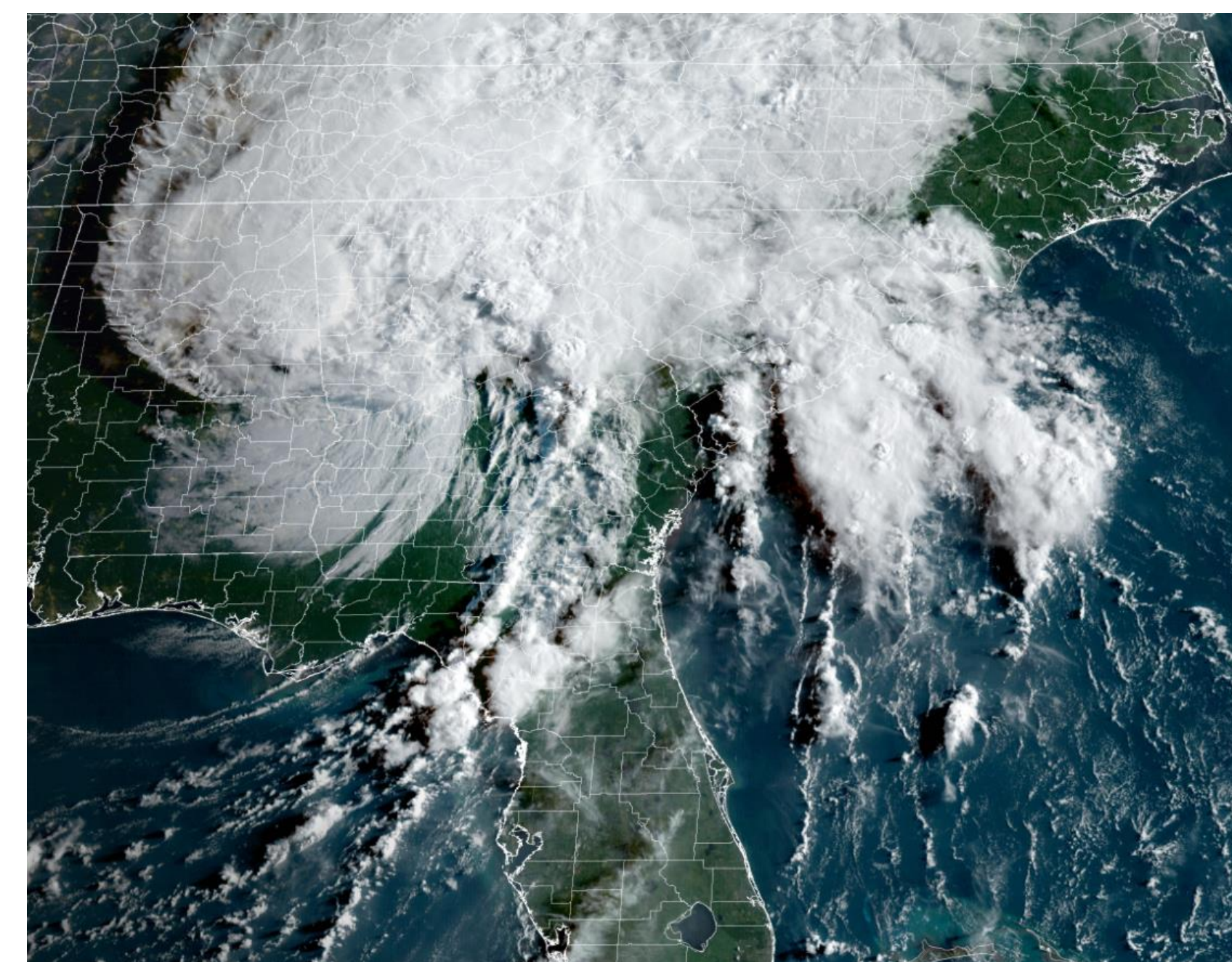
## Tropical Depression Fred



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- Coastal Flood Advisory
- Flood Warning (Areal)
- Tornado Watch
- Flash Flood Watch
- High Surf Advisory





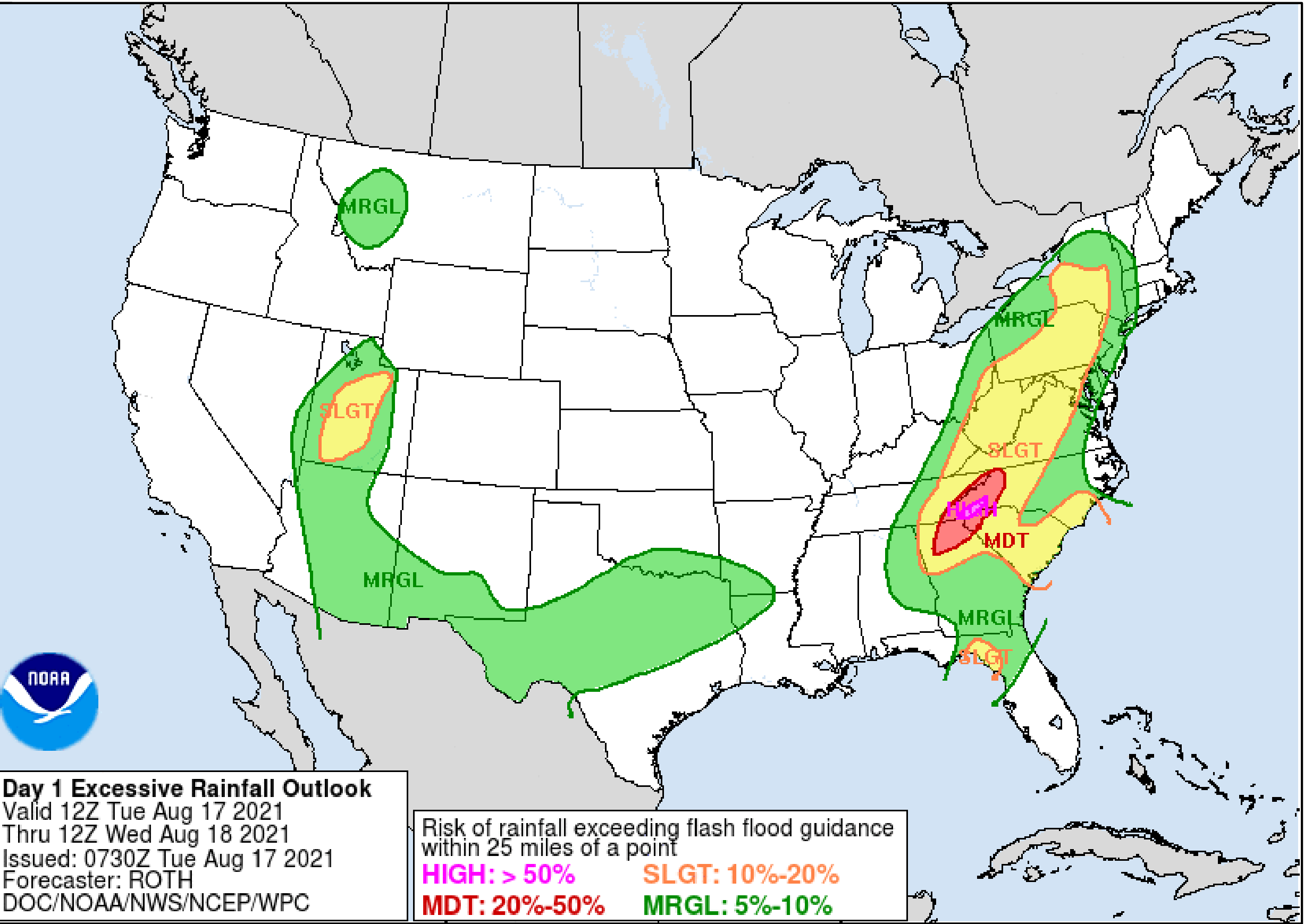
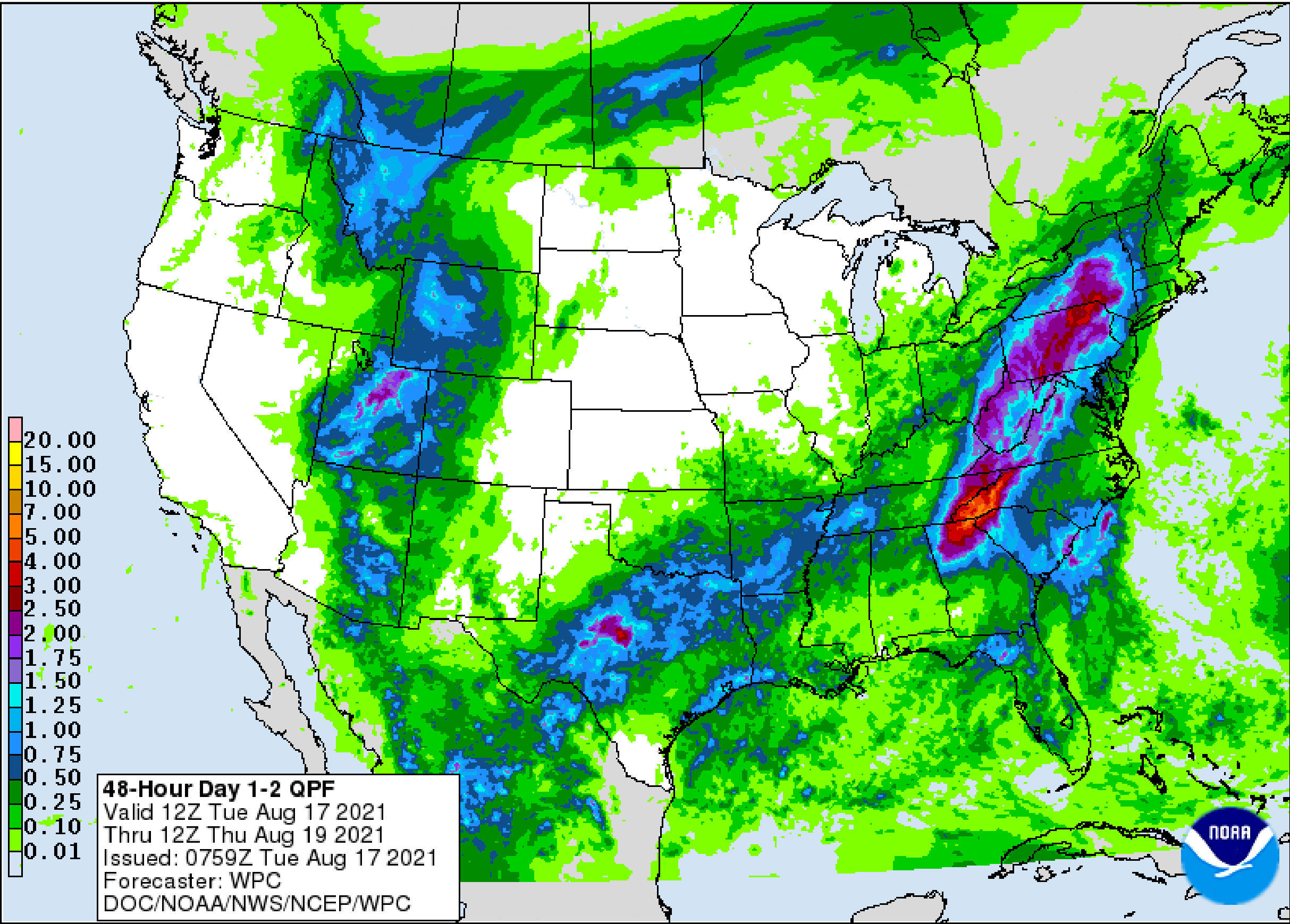
# Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Tropical Depression Fred

Images from NWS Weather Prediction Center



■ 48-hr rainfall forecast:  
8/17 8am EDT – 8/19 8am EDT

Risk of rainfall exceeding flash flood guidance within 25 miles of a point  
**HIGH: > 50%**      **SLGT: 10%-20%**  
**MDT: 20%-50%**      **MRGL: 5%-10%**  
Flood Risk (through Wednesday morning)



# TROPICAL STORM GRACE, TROPICAL STORM HENRI, TROPICAL DEPRESSION FRED BRIEFING

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

*The Next Briefing Will Be:  
Wednesday 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)