

IMPACTS FOR D7 (through next 5 days)

Winds – Moderate

Storm Surge – Low

Rainfall/Flash Flooding – Moderate

Tornadoes – None

Waves - Low

TROPICAL DEPRESSION FRED BRIEFING



9:00 AM EDT
Friday, August 13, 2021

Prepared by:
Chris Landsea

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*

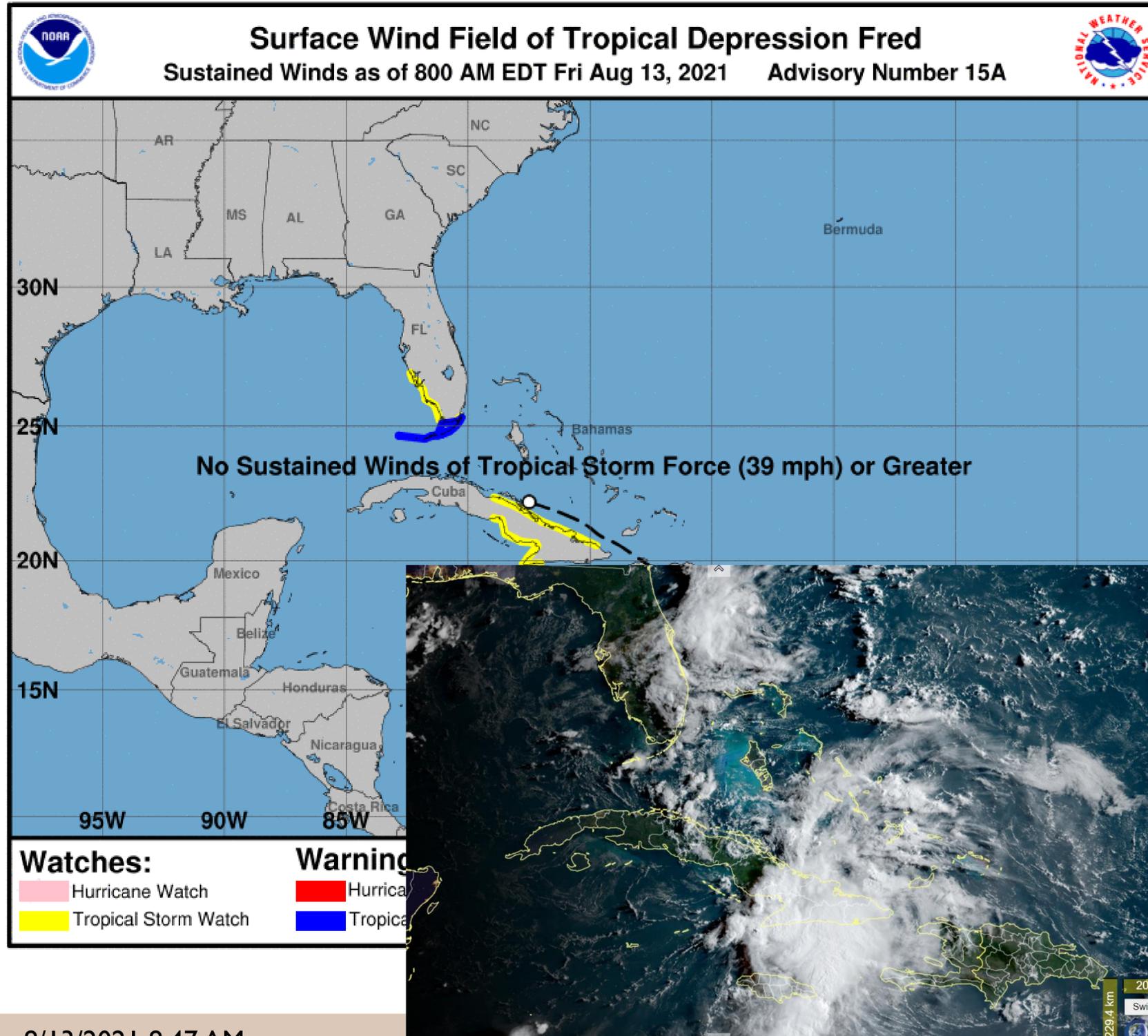


Situation Overview



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

Tropical Depression Fred



**...CENTER OF FRED NEAR THE
NORTH COAST OF CUBA...**

SUMMARY OF 800 AM EDT INFORMATION

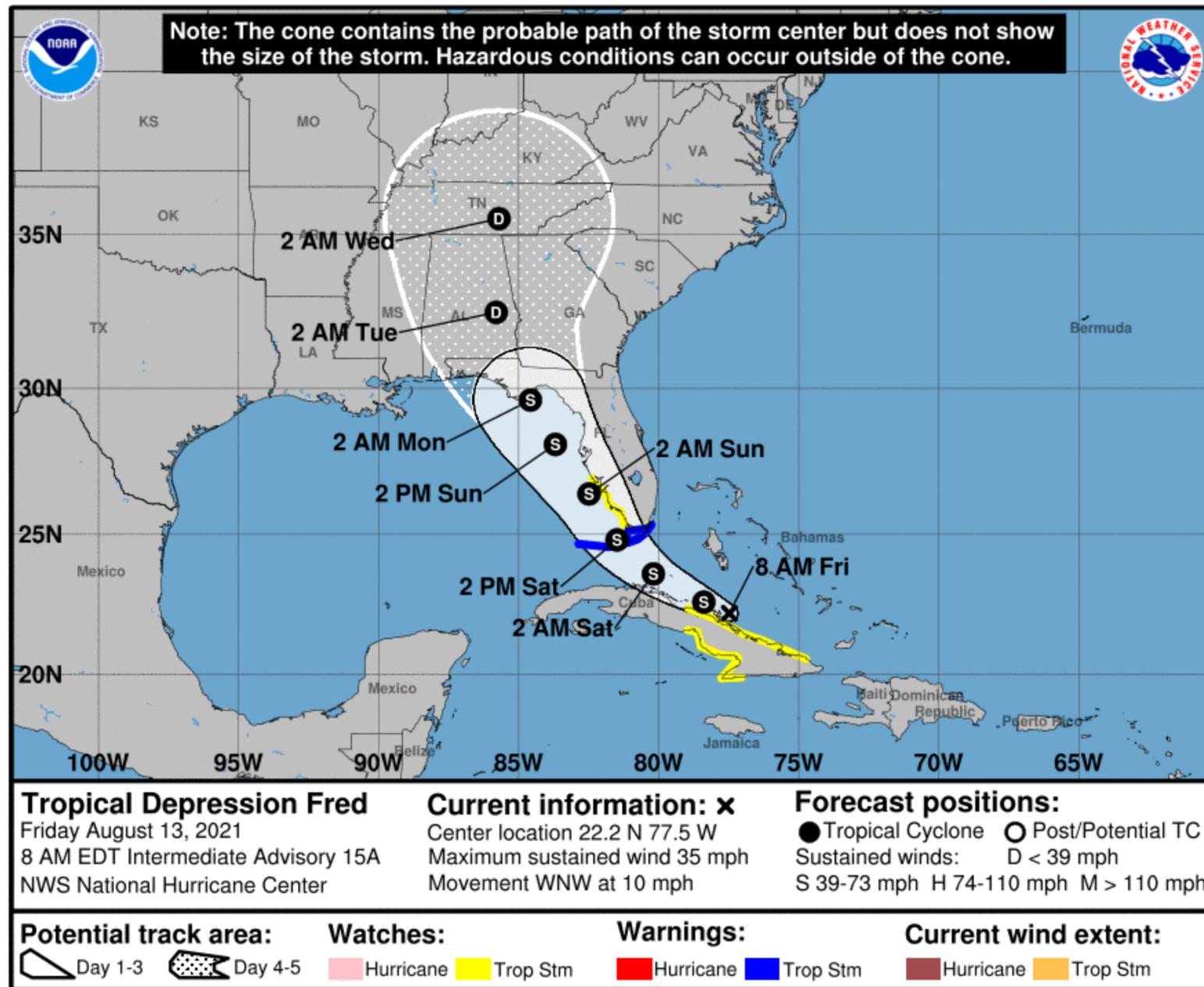
LOCATION...22.2N 77.5W
ABOUT 50 NM NNE OF CAMAGUEY CUBA
ABOUT 270 NM ESE OF KEY WEST FL
MAXIMUM SUSTAINED WINDS...30 KT
PRESENT MOVEMENT...WNW AT 15 KT
PEAK SEAS 10 FT

Forecast Information

Tropical Depression Fred



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NWS National Hurricane Center



- **Fred is forecast to move WNW then turn towards the NW on Saturday**
- **Fred is expected to be a low end tropical storm for South Florida on Saturday**
- **Tropical Storm force winds are also expected for the NE Gulf and Florida Panhandle on Sunday night or Monday morning (hurricane can be ruled out at this point)**
- Current center forecast positions through the next 5 days 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.

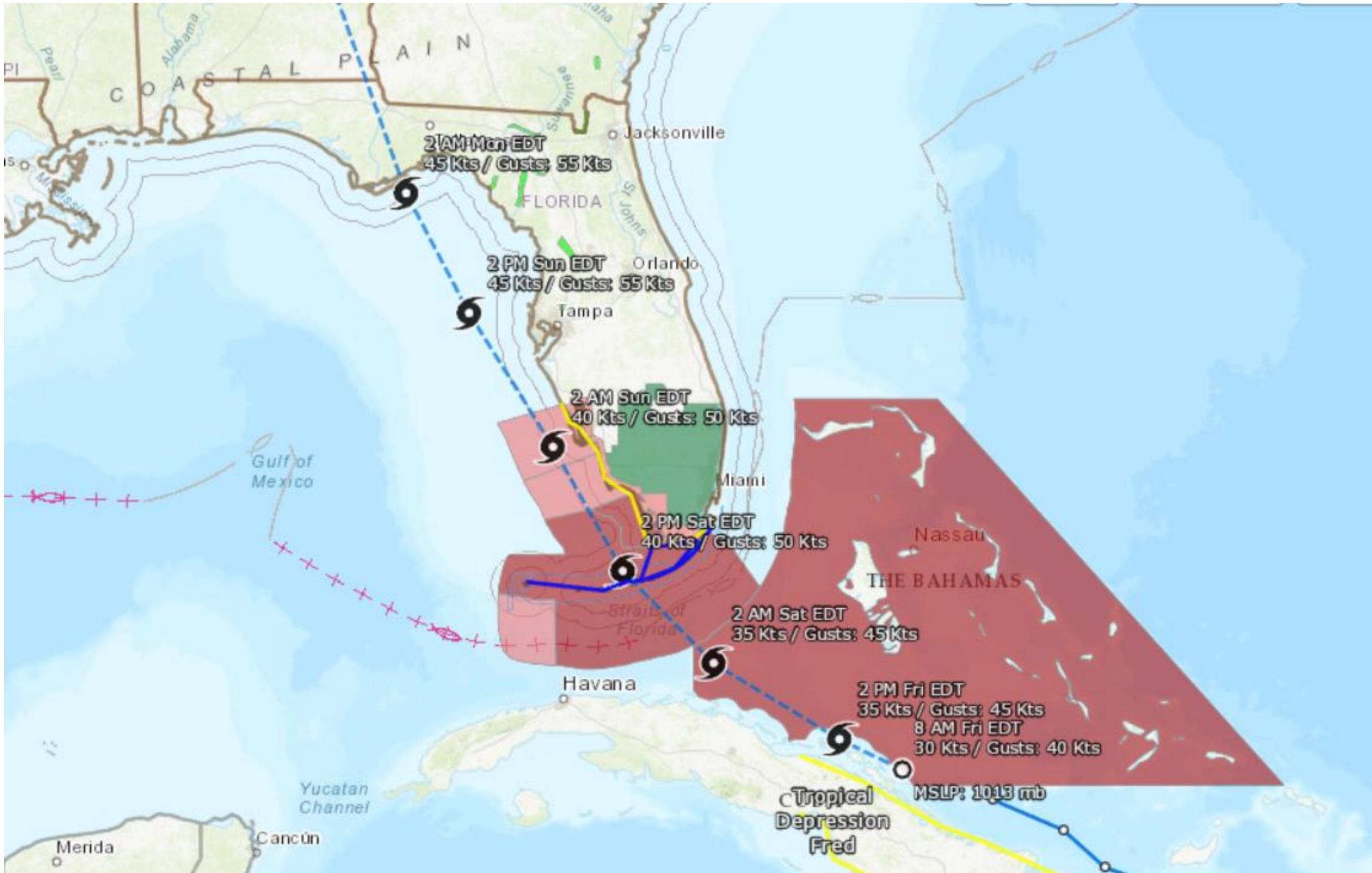
NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

Hazards Map

Tropical Depression Fred



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NWS National Hurricane Center



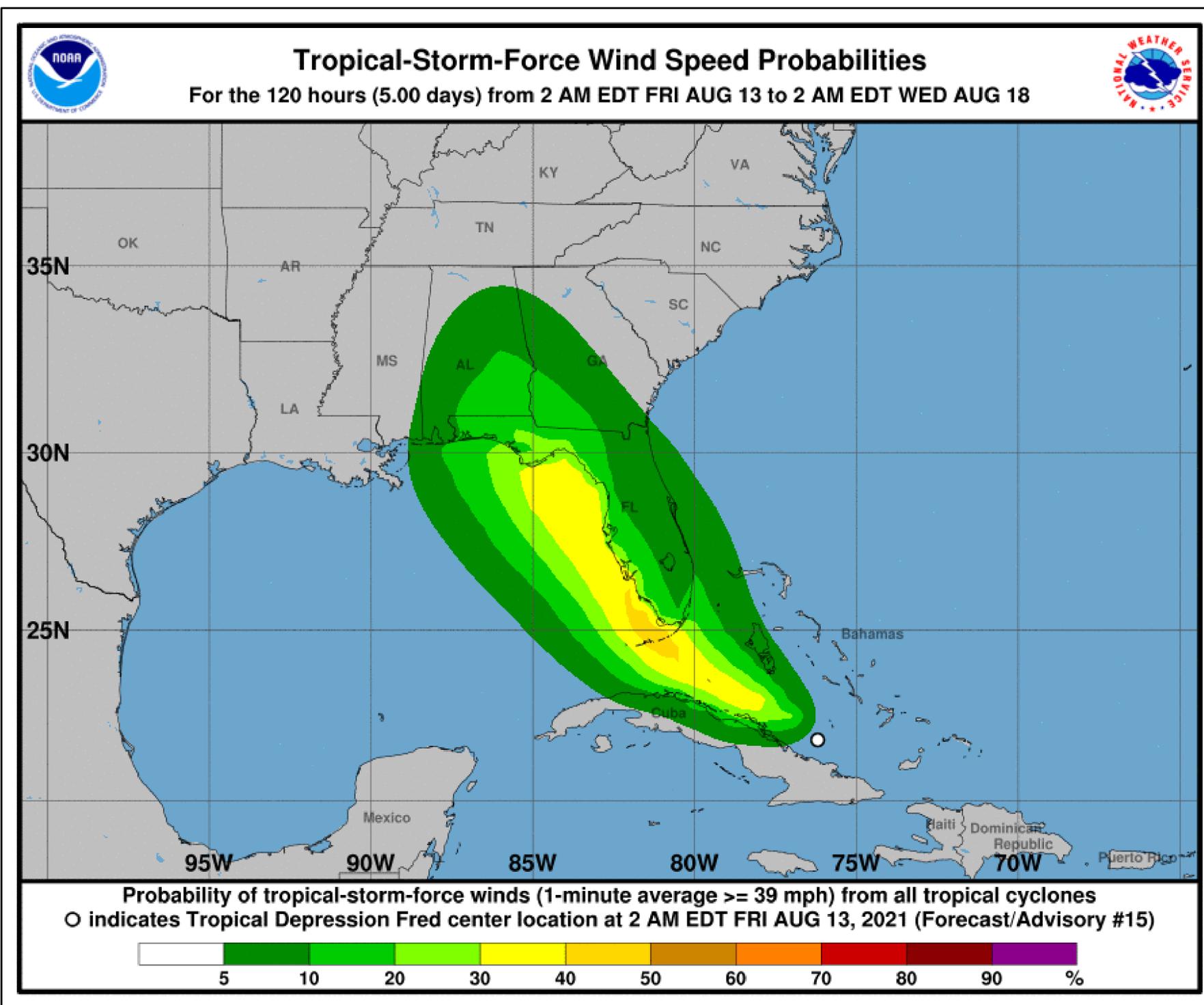
■ <https://nowcoast.noaa.gov/>

T.S. Wind Speed Probabilities

Tropical Depression Fred



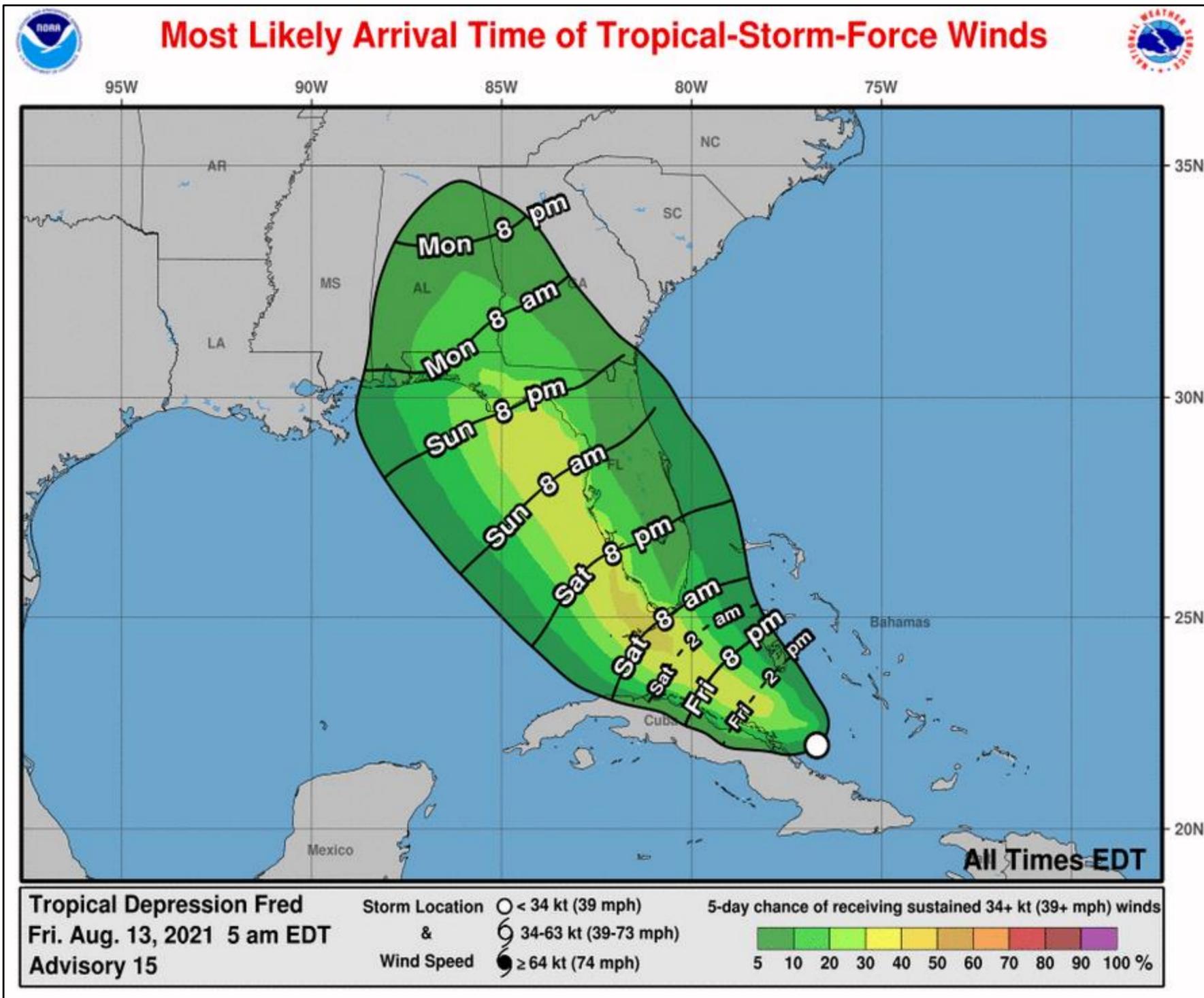
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- **Palm Beach, FL – 10%**
 - **Fort Lauderdale, FL – 15%**
 - **Miami, FL – 10%**
 - **Marathon, FL – 45%**
 - **Key West, FL – 35%**
 - **Naples, FL – 40%**
 - **Fort Myers, FL – 20%**
 - **Venice, FL – 35%**
 - **Tampa, FL – 30%**
 - **Cedar Key, FL – 25%**
 - **Apalachicola, FL – 25%**
 - **Panama City, FL – 20%**
- 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%
 - See the color bar below the image for more details.



Tropical Depression Fred



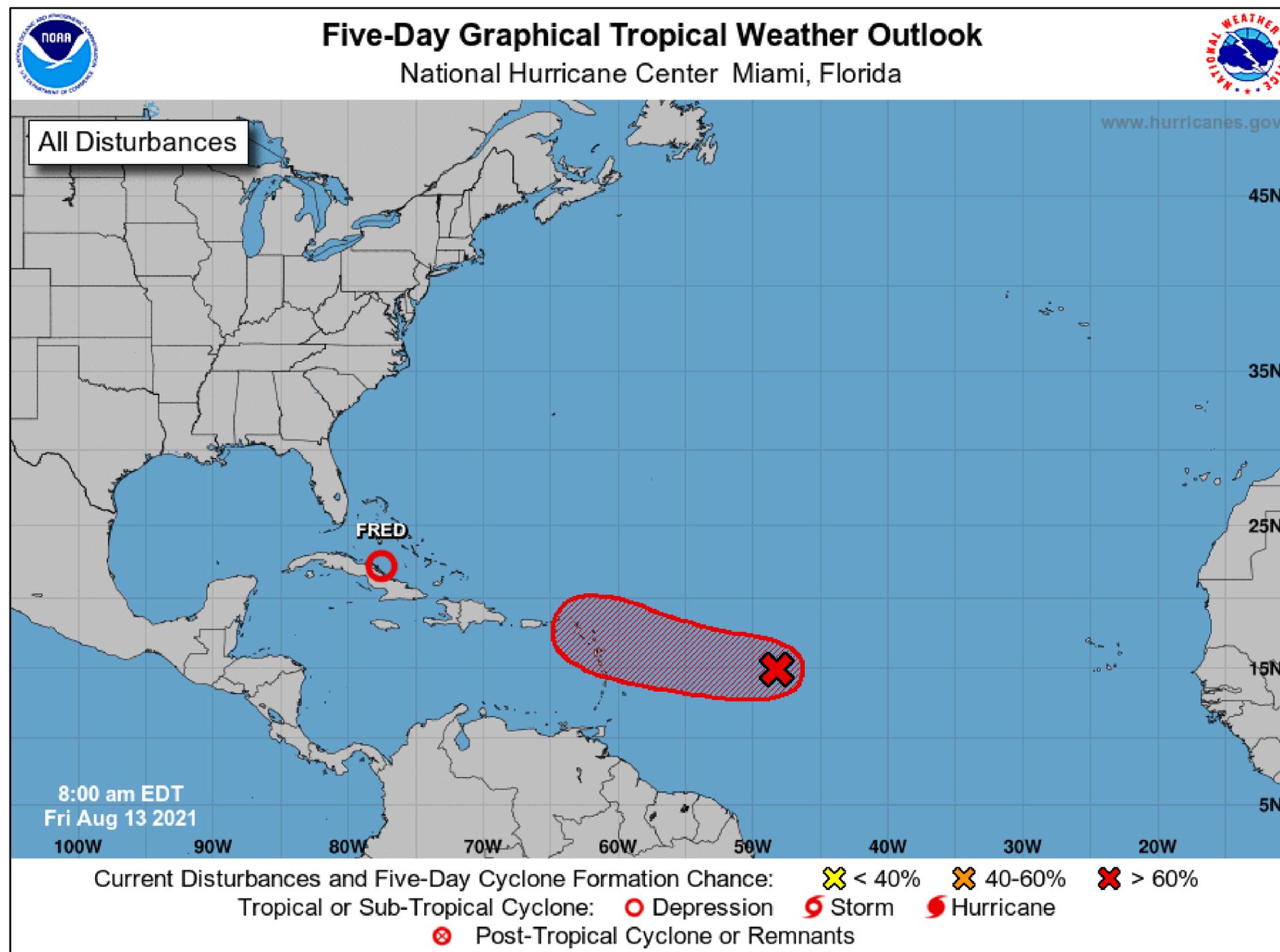
- **SE Florida and Keys – Sat morning**
- **SW Florida – Sat night**
- **Florida Panhandle – Sun night**
- The most likely time of arrival of Tropical Storm Force Winds (34kt to 63 kt) for this cyclone based off the current track and wind radii.
- Clear or dark green are the lowest chances of 0-30%.
- 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.

Tropical Weather Outlook

Tropical Depression Fred



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NWS National Hurricane Center



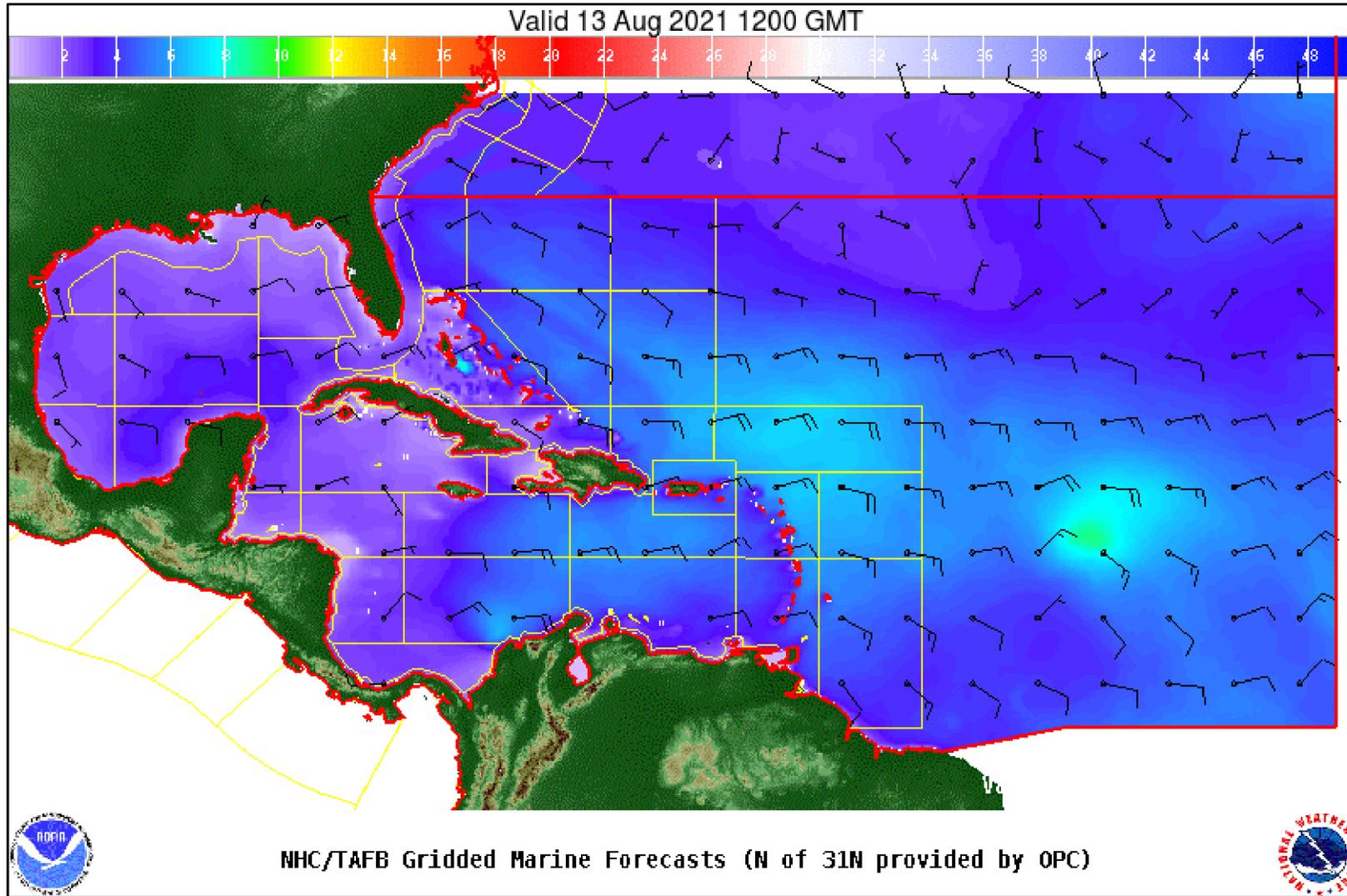
- Showers and thunderstorms have become a little better organized since yesterday near an area of low pressure located about 725 NM east of the Lesser Antilles.
- Environmental conditions are becoming more conducive for additional development, and a tropical depression is likely to form over the next day or two while moving toward the west or west-northwest at 15-20 kt.
- This system is expected to reach portions of the Leeward Islands Saturday night and then the Virgin Islands and Puerto Rico Sunday and Sunday night.
- Tropical storm watches or warnings could be required later today or tonight for portions of the Leeward Islands, the Virgin Islands, and Puerto Rico, since strong winds and heavy rainfall are likely to spread across those areas over the weekend, regardless of the system's development.
- Interests in these areas should continue to monitor the progress of this disturbance.
- * Formation chance through 48 hours and 5 days...high...80 percent.
- **Reminder:** The hatched area represents a possible development area, not the system's path after development occurs.

Wind And Waves

Tropical Depression Fred



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Current Conditions

8am EDT, Friday, August 13th

Peak Winds: 30 kt

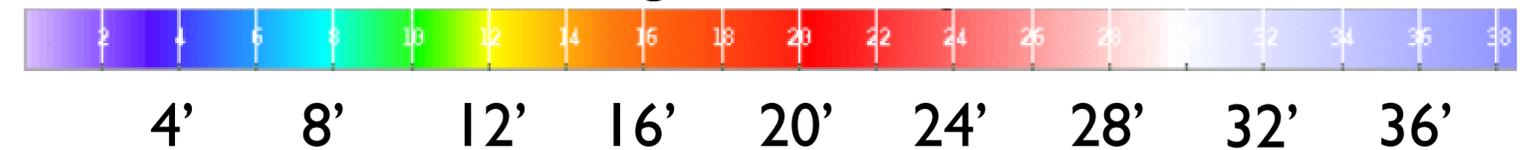
Peak Seas: 10 ft

Invest 95L

Peak Winds: 25 kt

Peak Seas: 10 ft

■ Wave heights are in feet

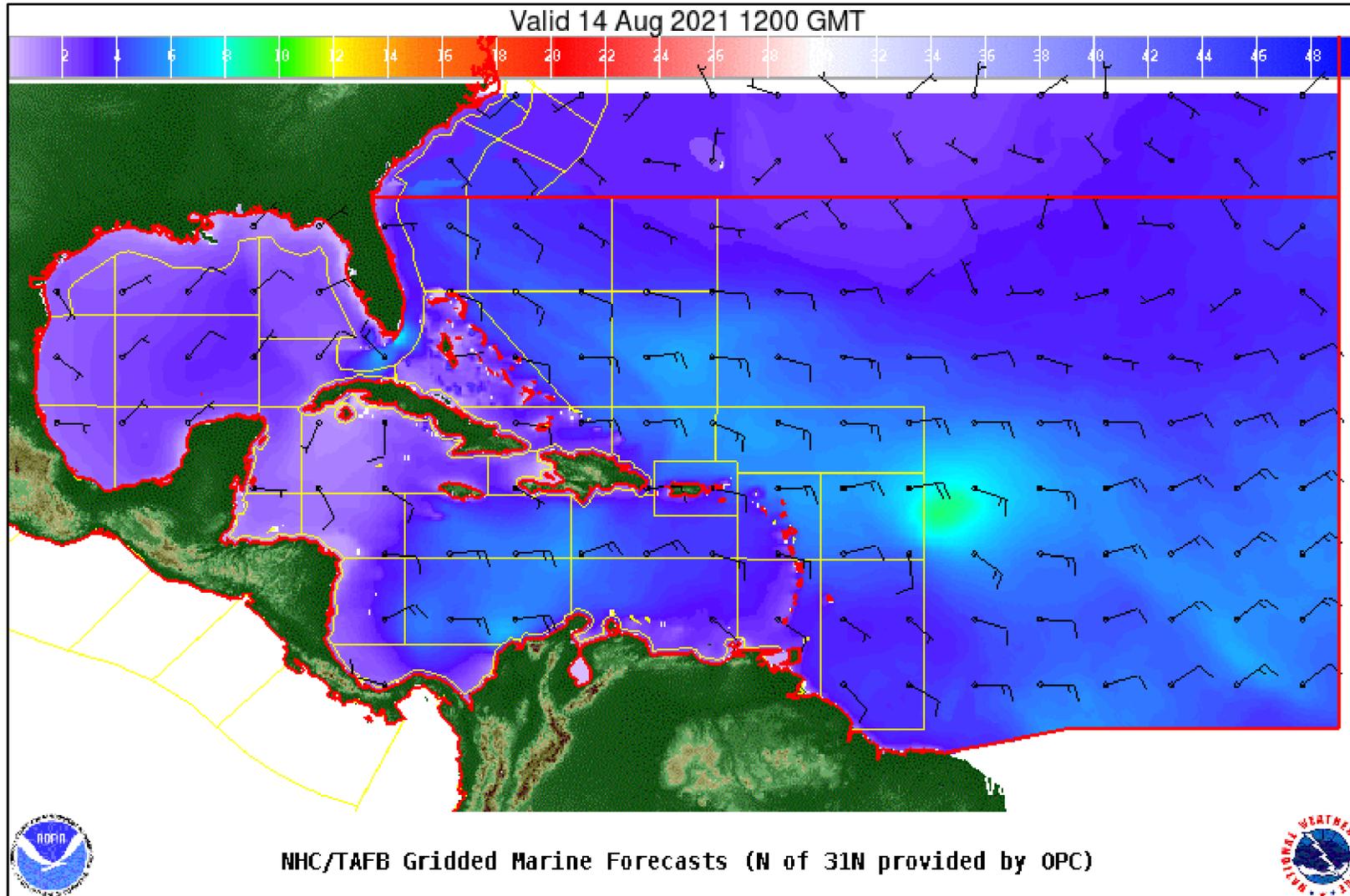


Wind And Waves

Tropical Depression Fred



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NWS National Hurricane Center



24 Hour Forecast

8am EDT, Saturday, August 14th

Peak Winds: 35 kt

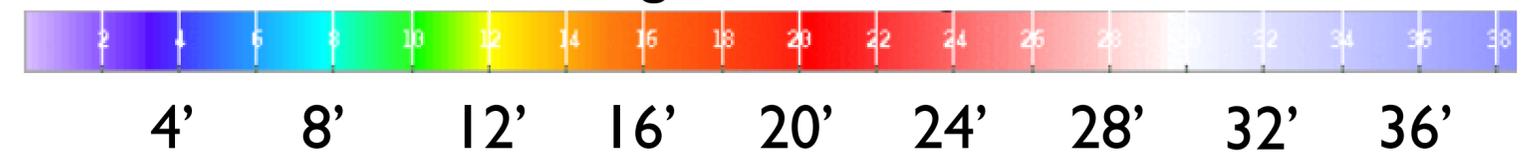
Peak Seas: 10 ft

Invest 95L:

Peak Winds 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet

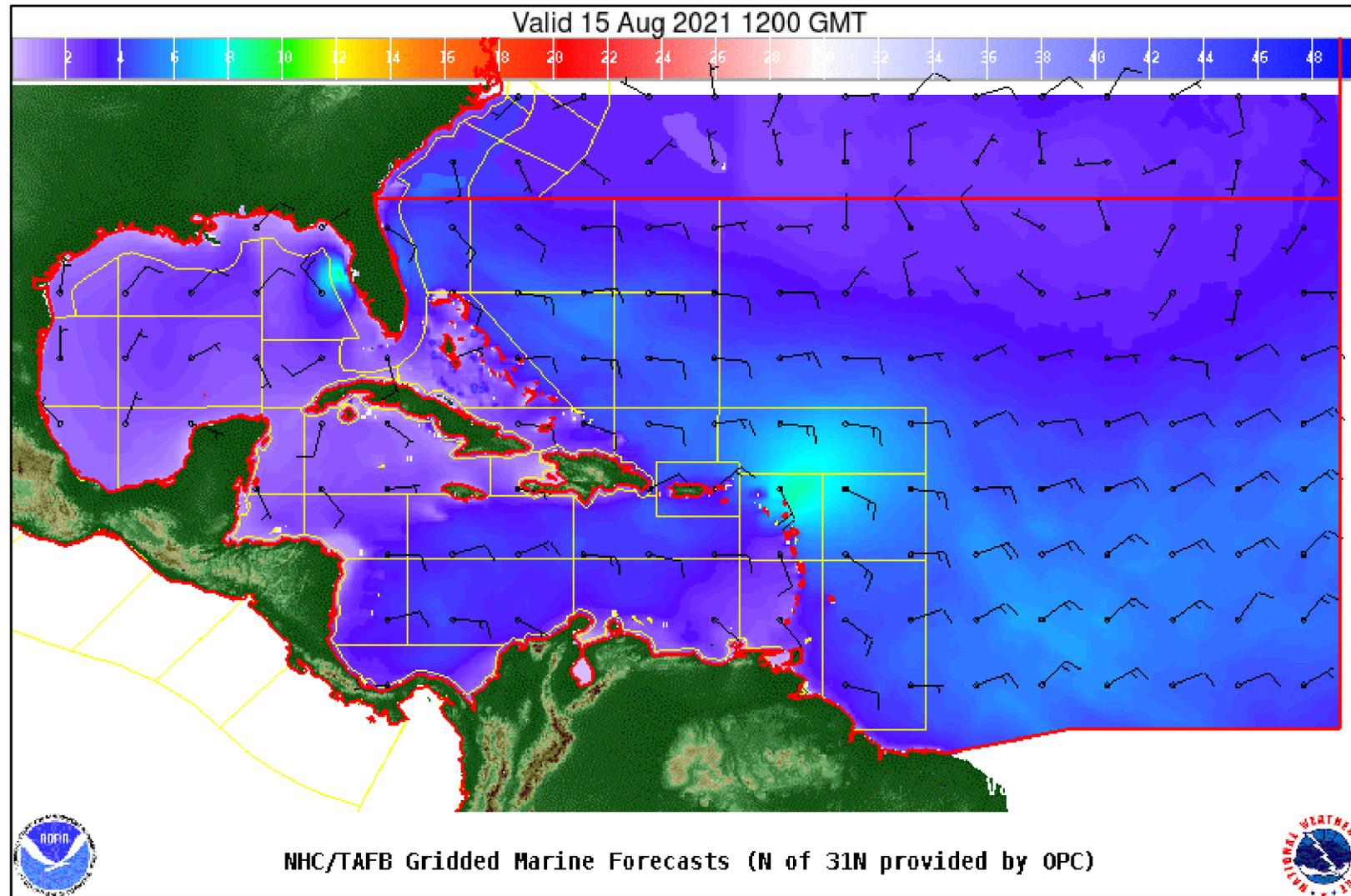


Wind And Waves

Tropical Depression Fred



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NWS National Hurricane Center



NHC/TAFB Gridded Marine Forecasts (N of 31N provided by OPC)

48 Hour Forecast

8am EDT, Sunday, August 15th

Peak Winds: 40 kt

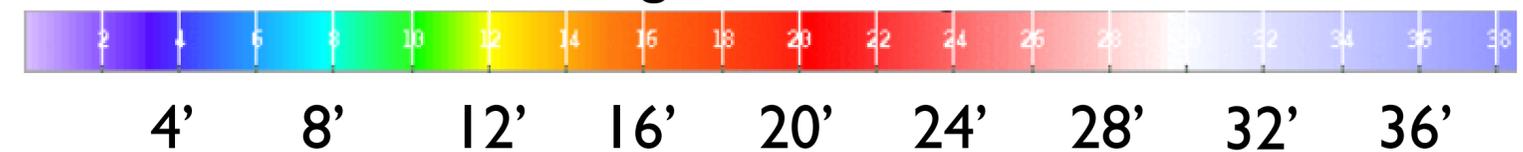
Peak Seas: 12 ft

Invest 95L:

Peak Winds 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet

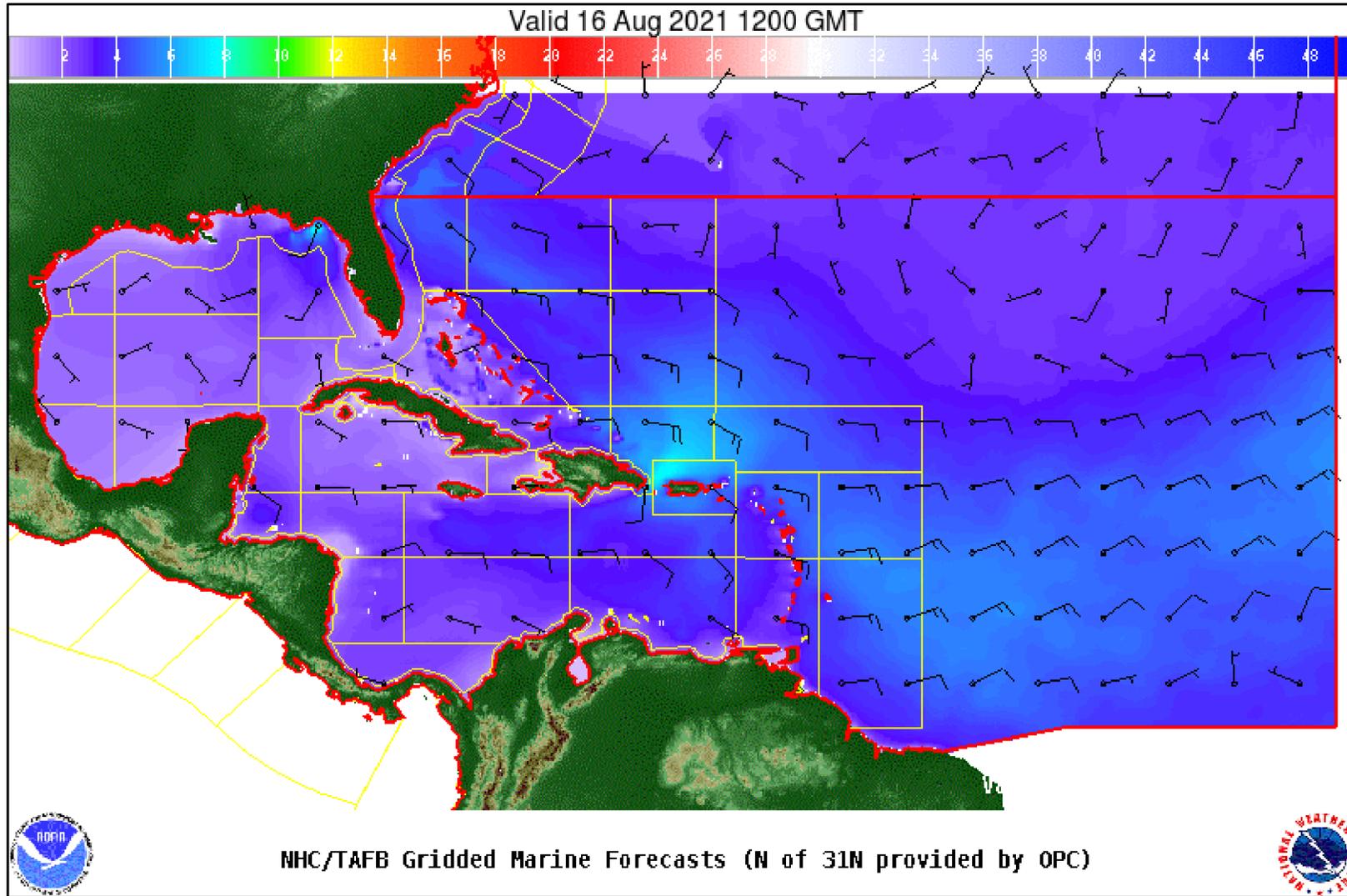


Wind And Waves

Tropical Depression Fred



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72 Hour Forecast

8am EDT, Monday, August 16th

Peak Winds: 20 kt

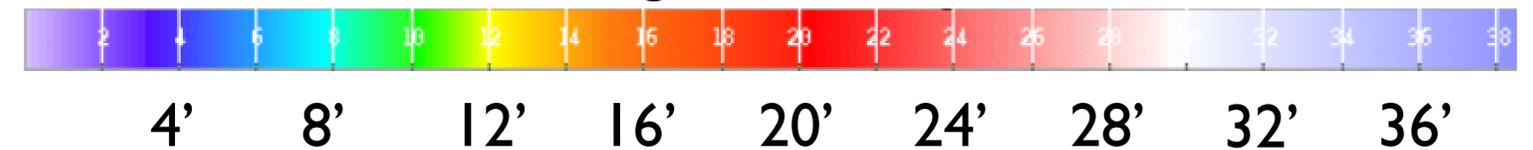
Peak Seas: 8 ft

Invest 95L:

Peak Winds 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet

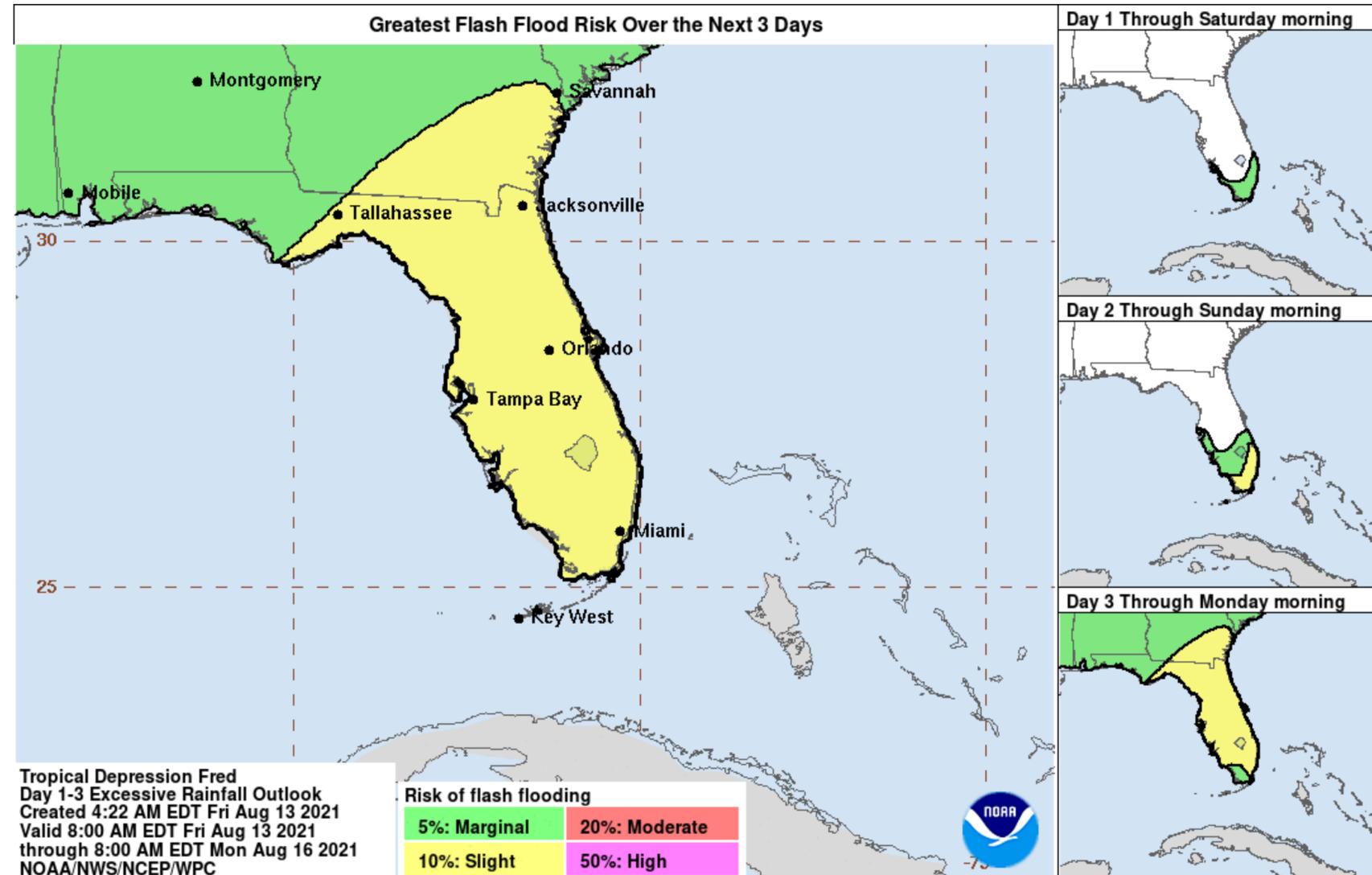
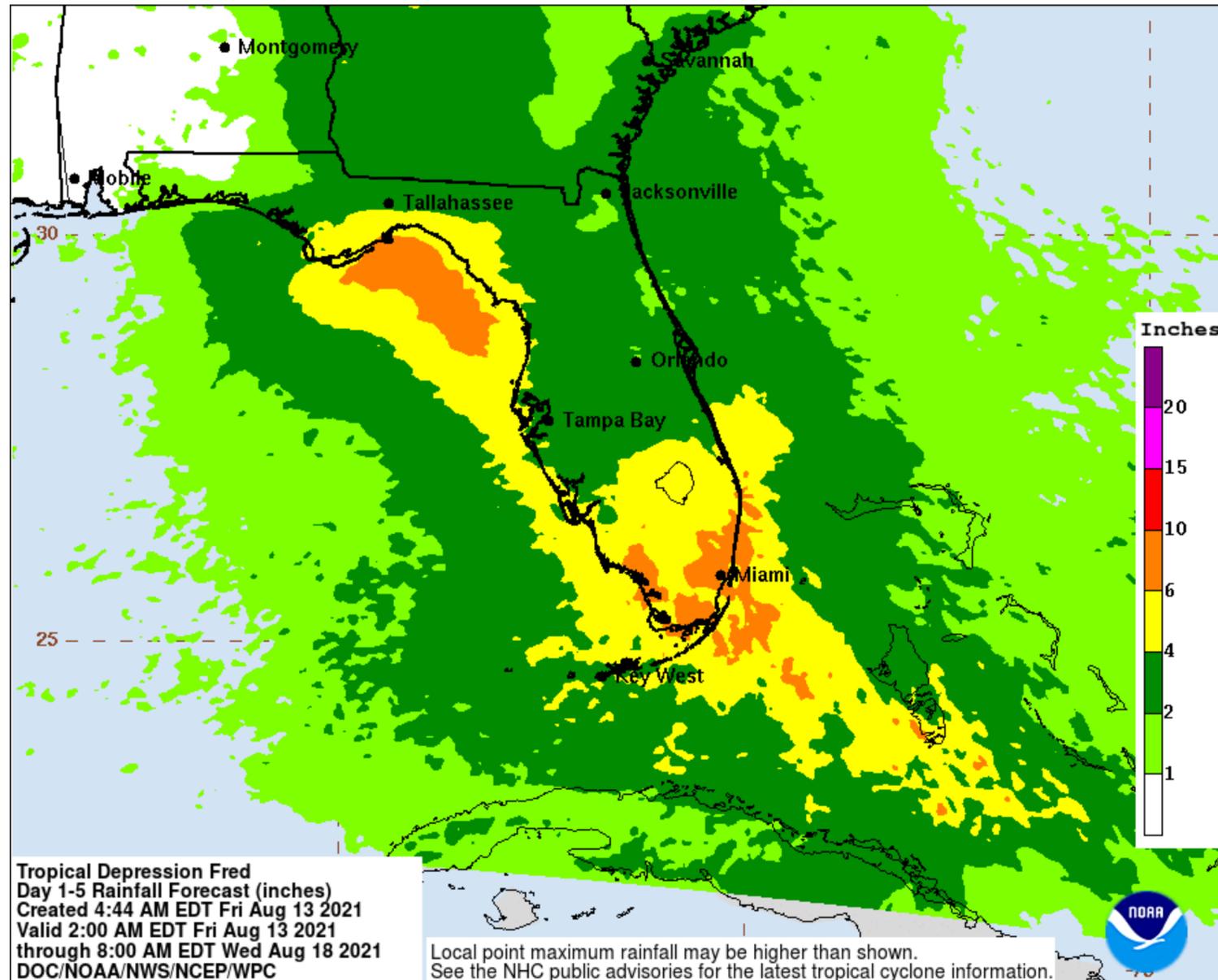


Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

Tropical Depression Fred Images from NWS Weather Prediction Center



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 Monday morning

Key Messages

Tropical Depression Fred



Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Key Messages for Tropical Depression Fred

Advisory 15: 5:00 AM EDT Fri Aug 13, 2021



1. From today into Monday, heavy rainfall could lead to areal, urban, small stream, and exacerbated river flooding, across southern and central Florida into the Big Bend. From Sunday onward, heavy rain and flood impacts could extend into other portions of the Southeast and into the southern and central Appalachians and Piedmont.

2. Tropical storm conditions are expected in the Florida Keys on Saturday, where a Tropical Storm Warning has been issued.

3. Tropical storm conditions are possible late Saturday and early Sunday across portions of the west coast of Florida in the Tropical Storm Watch area. The risk of tropical storm conditions will spread northward along the Florida west coast and to the Florida Panhandle Sunday and Monday.

For more information go to hurricanes.gov



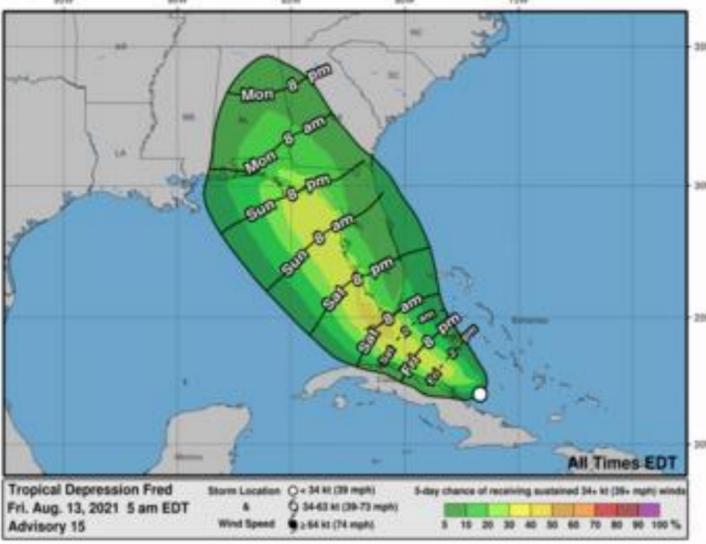
Tropical Depression Fred
Friday August 13, 2021
5 AM EDT Advisory 15
NWS National Hurricane Center

Current information: x
Center location 22.0 N 76.7 W
Maximum sustained wind 35 mph
Movement WNW at 10 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 extent: Hurricane Trop Stm

Most Likely Arrival Time of Tropical-Storm-Force Winds



Tropical Depression Fred
Fri. Aug. 13, 2021 5 am EDT
Advisory 15

Storm Location ○ = 34 kt (39 mph) 5-day chance of receiving sustained 34+ kt (39+ mph) winds
● = 34-63 kt (39-73 mph)
● = 64 kt (74 mph)

Wind Speed 5 10 20 30 40 50 60 70 80 90 100 %

IMPACTS FOR D7 (through next 5 days)

Winds – Moderate

Storm Surge – Low

Rainfall/Flash Flooding – Moderate

Tornadoes – None

Waves - Low



TROPICAL DEPRESSION FRED BRIEFING

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

*The Next Briefing Will Be:
Saturday 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