

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

**Winds – High to Extreme**

**Storm Surge – High to Extreme**

**Rainfall/Flash Flooding – High**

**Tornadoes – Low to Medium**

**Waves - Extreme**

# TROPICAL STORM IAN BRIEFING

9:00 AM EDT

Sunday, September 25, 2022

Prepared by:

**Chris Landsea**

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*



NHC\_TAFB

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

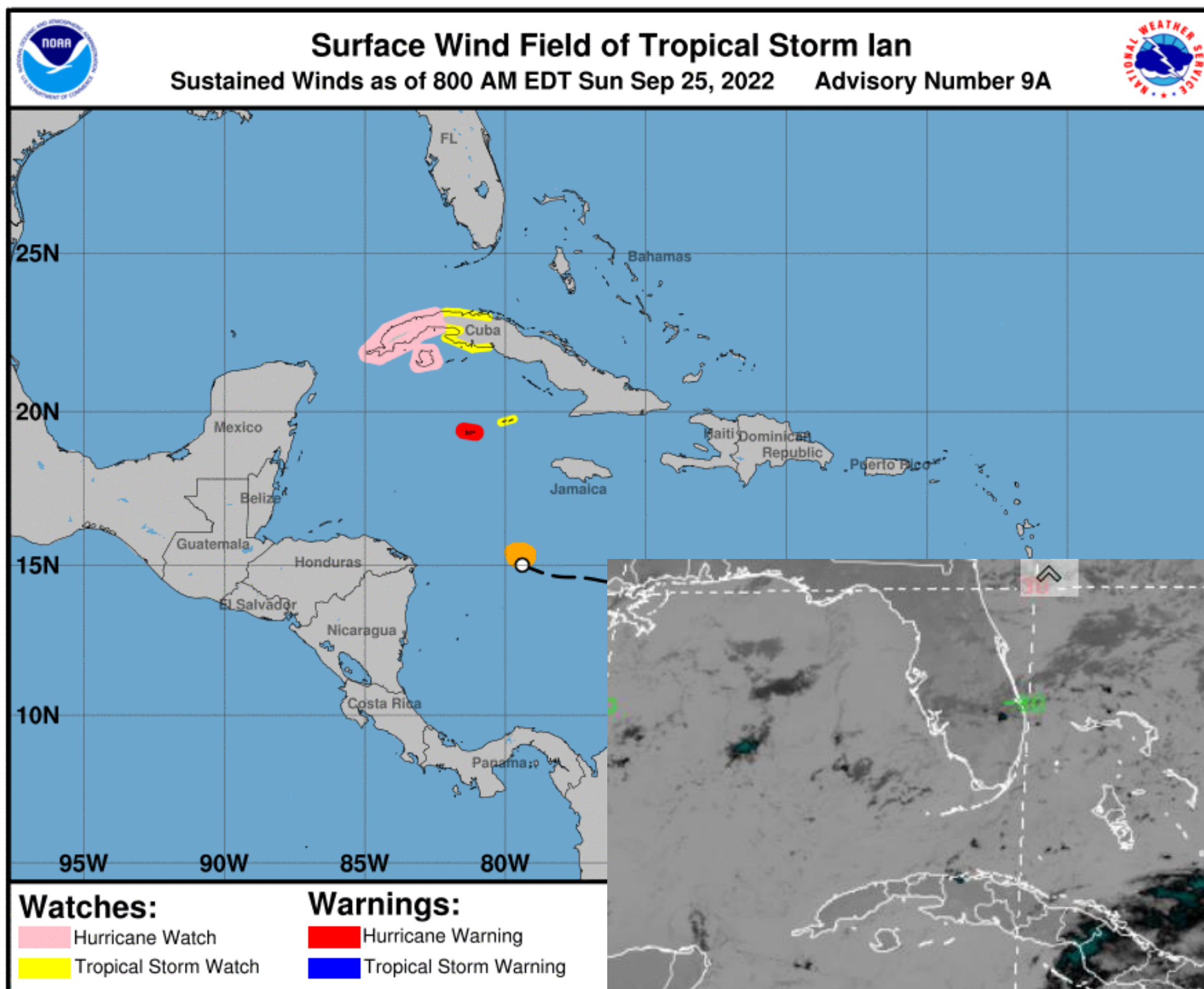


# Situation Overview

## Tropical Storm Ian



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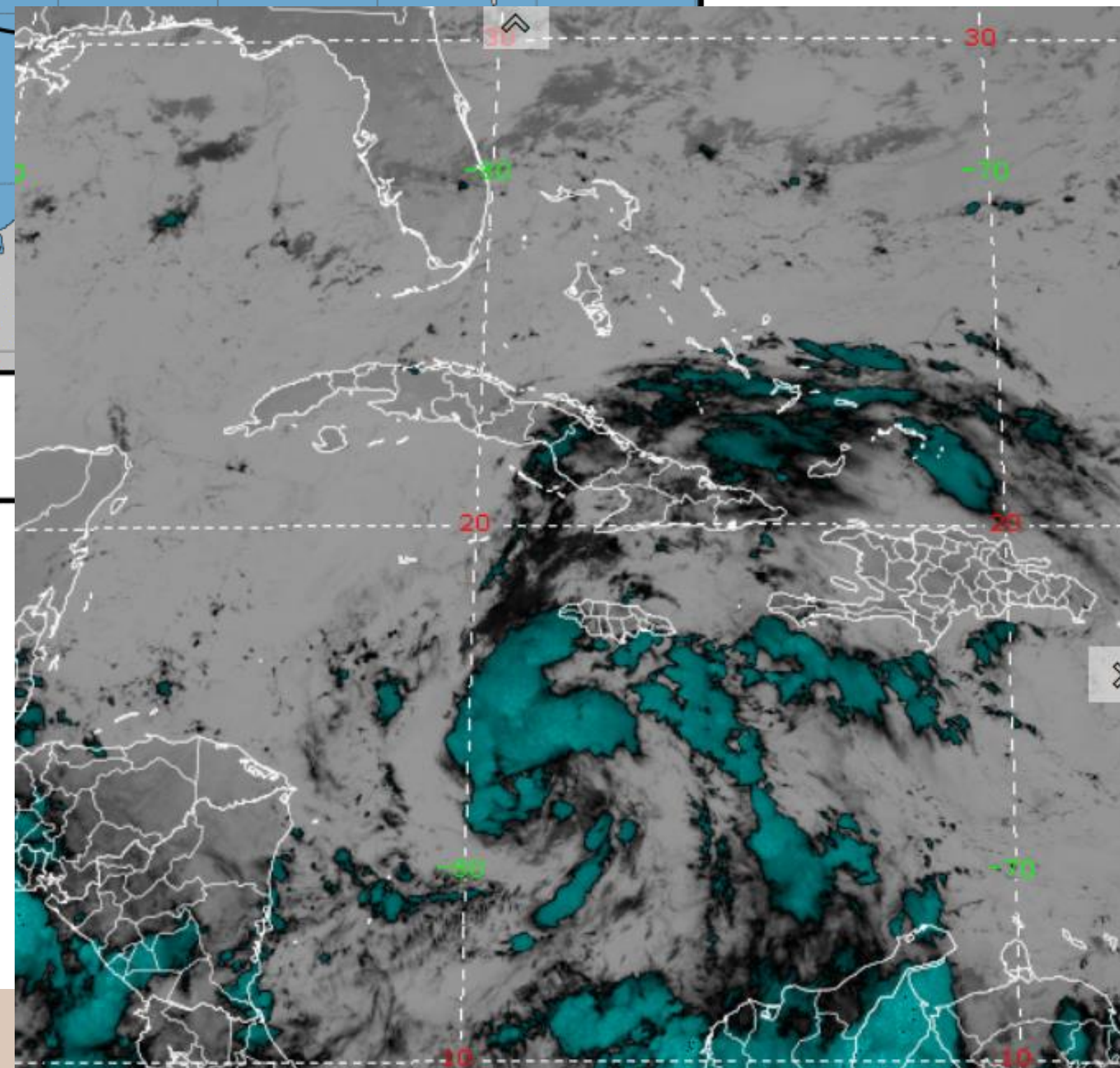
**...IAN FORECAST TO BEGIN RAPIDLY  
STRENGTHENING LATER TODAY...  
...RISK OF SIGNIFICANT WIND AND  
STORM SURGE IMPACTS INCREASING  
FOR WESTERN CUBA...**

### SUMMARY OF 800 AM EDT INFORMATION

LOCATION...15.0N 79.4W  
ABOUT 270 NM SSE OF GRAND CAYMAN  
MAXIMUM SUSTAINED WINDS...45 KT  
PRESENT MOVEMENT...WNW AT 11 KT  
PEAK SEAS 13 FT

### SIZE

34 KT..... 40NE 0SE 0SW 50NW.  
12 FT SEAS.. 30NE 0SE 0SW 30NW.



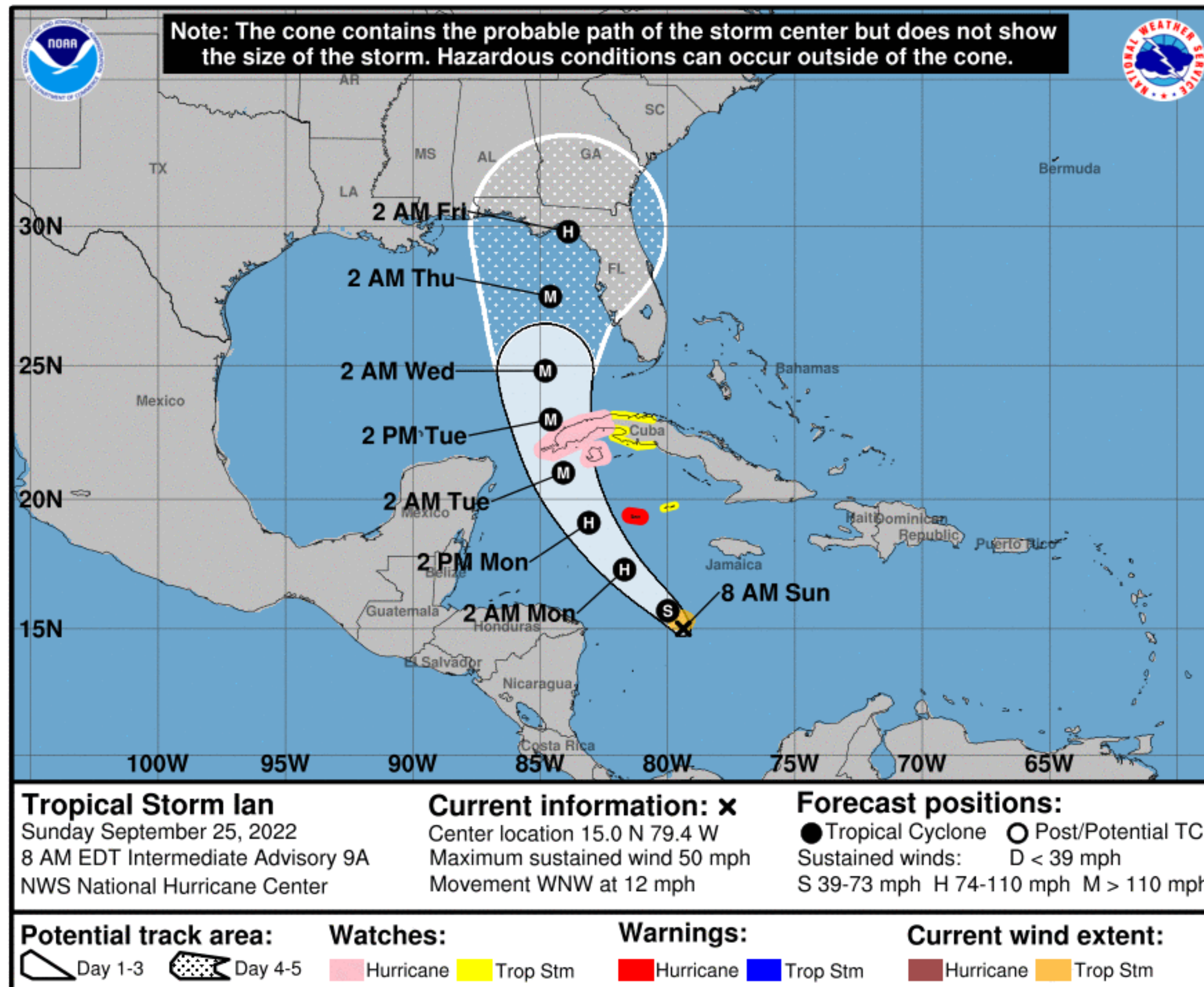


# Forecast Information

## Tropical Storm Ian



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

- Ian is expected to turn toward the north by Tuesday with about the same rate of forward speed
- The tropical storm is forecast to become a hurricane on tonight or Monday morning, and a major hurricane around Tuesday
- Likely impact by the system as a hurricane or major hurricane somewhere along the Florida peninsula west coast or Florida panhandle between Wednesday night morning and Friday morning
- 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.

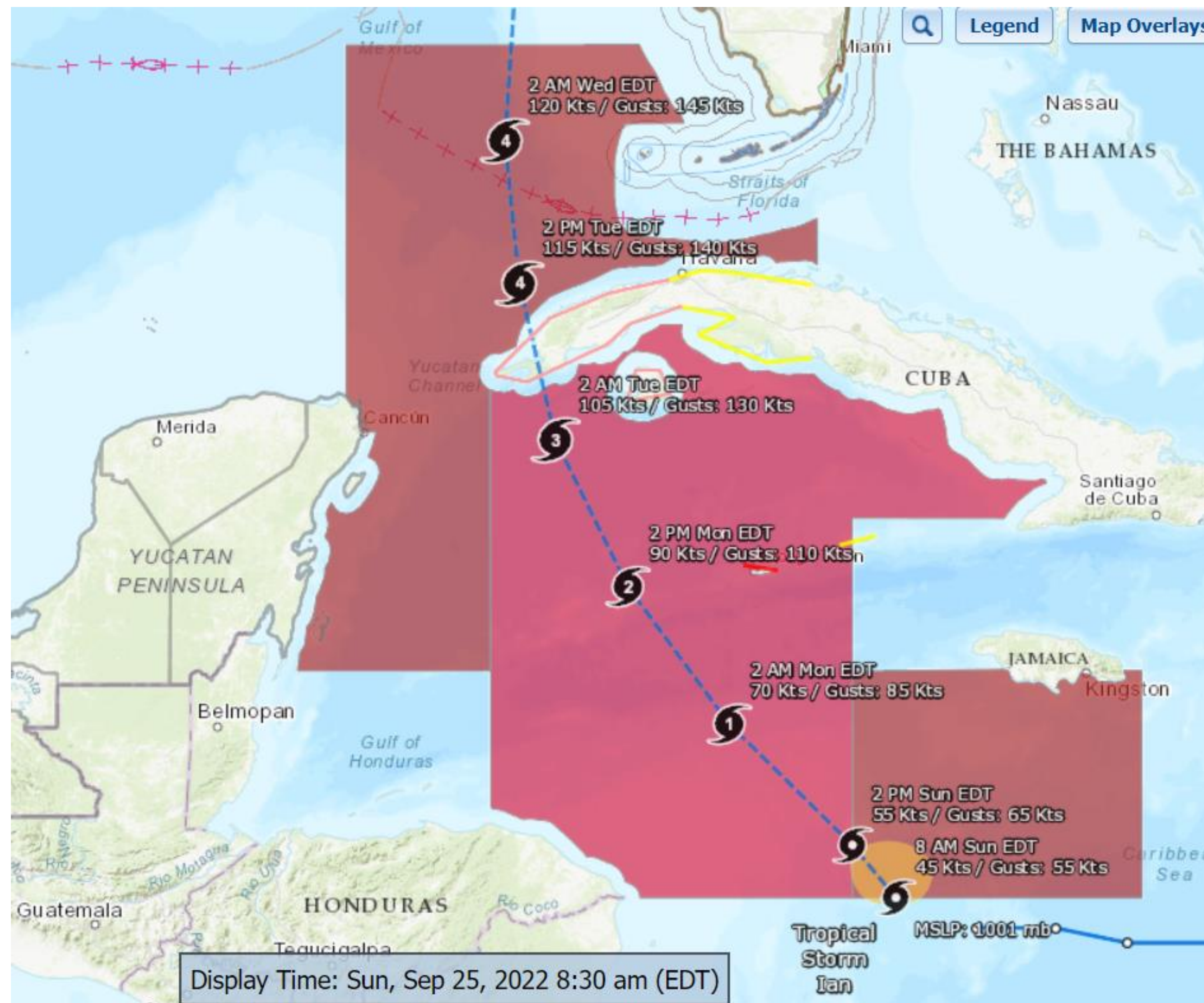


# Hazards Map

## Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



■ <https://nowcoast.noaa.gov/>

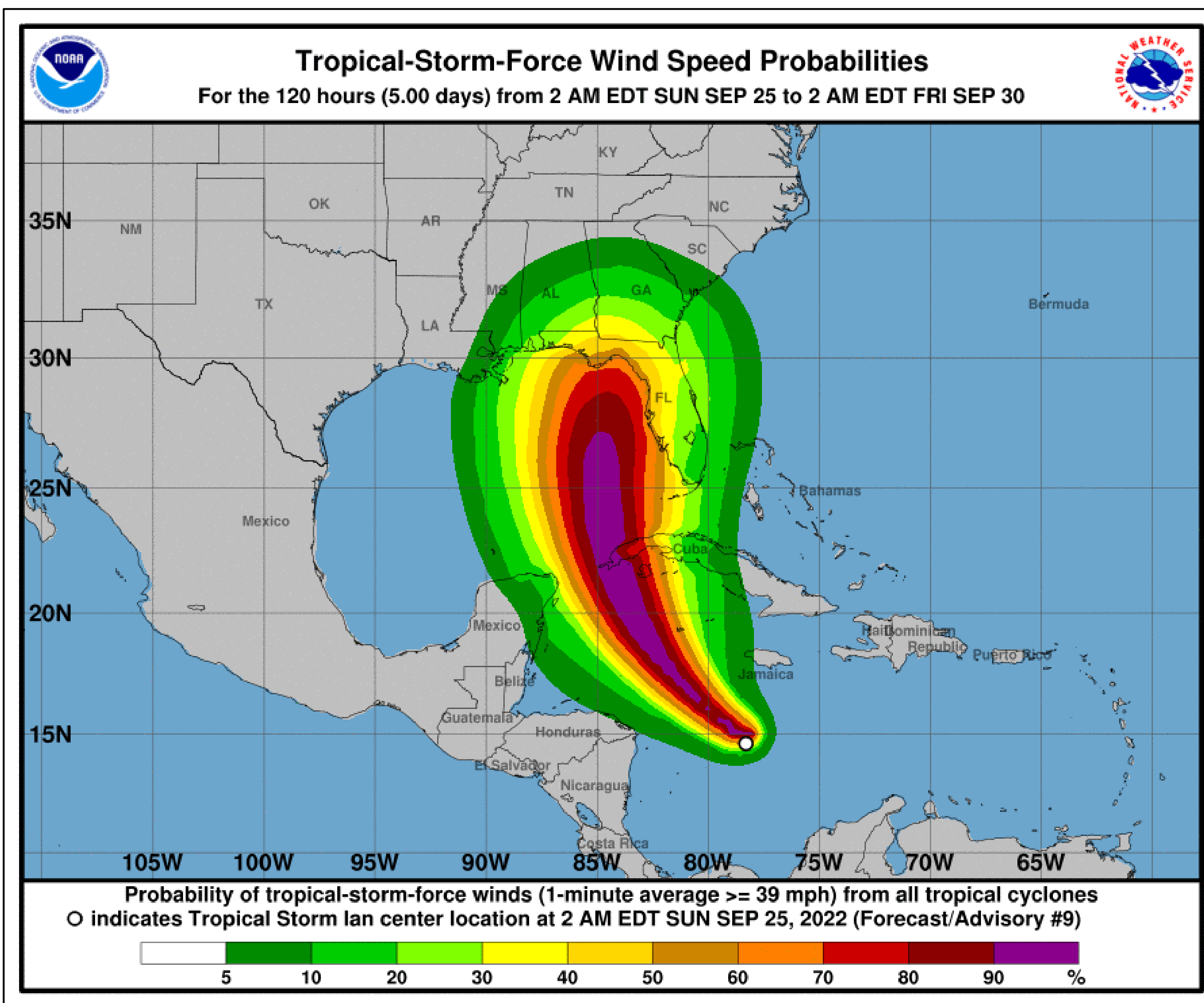


# T.S. Wind Speed Probabilities

## Tropical Storm Ian



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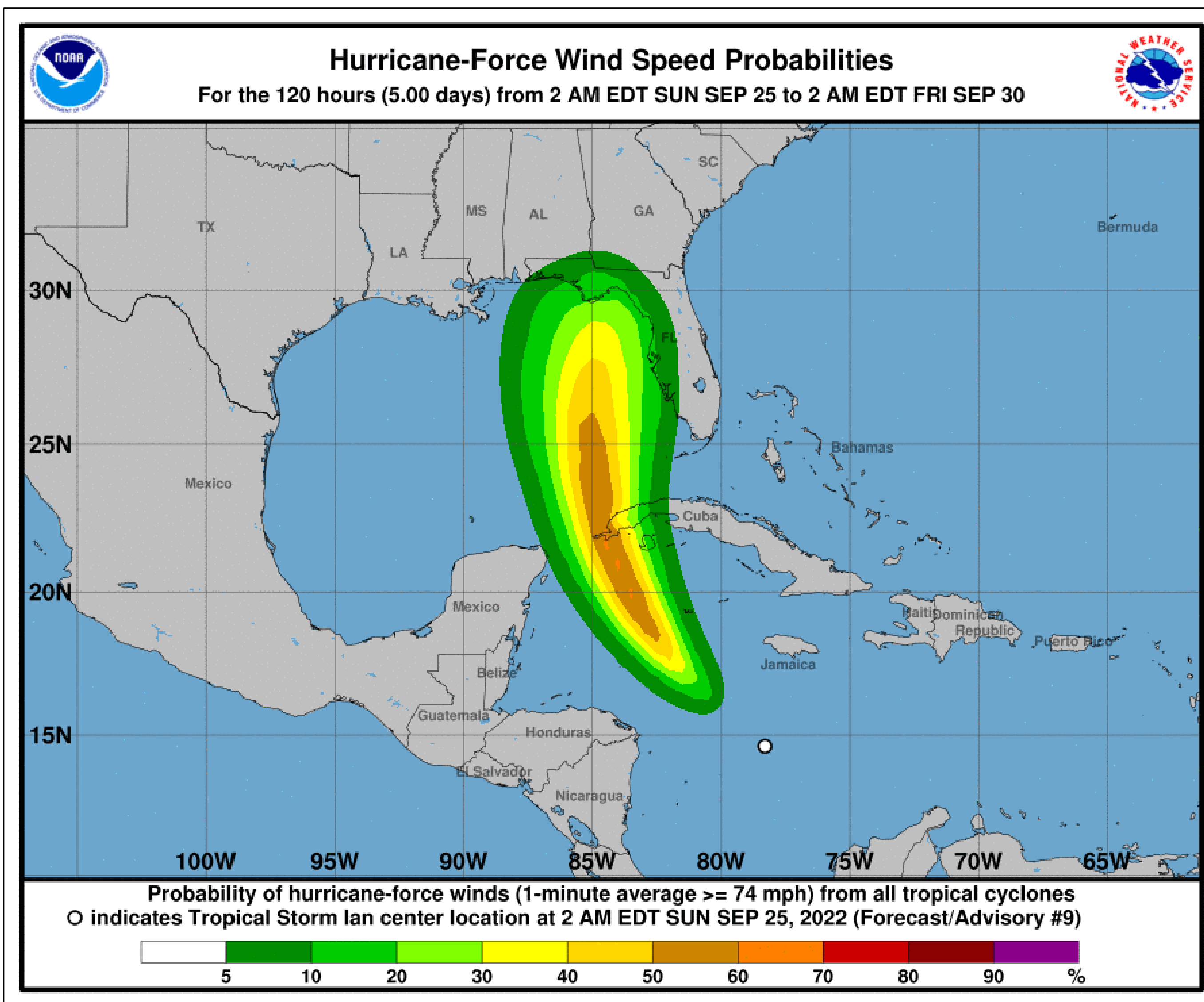
- **Gulfport – 10%**
  - **Mobile – 15%**
  - **Pensacola – 25%**
  - **Whiting Field – 25%**
  - **Destin – 35%**
  - **Panama City – 55%**
  - **Apalachicola – 65%**
  - **St. Marks – 50%**
  - **Cedar Key – 65%**
  - **Tampa – 65%**
  - **Venice – 65%**
  - **Ft. Myers – 40%**
  - **Naples – 50%**
  - **Key West – 50%**
  - **Marathon – 35%**
  - **Homestead – 15%**
  - **Miami – 15%**
  - **Ft. Lauderdale – 25%**
  - **West Palm Beach – 25%**
  - **Ft. Pierce – 30%**
  - **Patrick AFB – 35%**
  - **Cocoa Beach – 35%**
  - **Daytona Beach – 30%**
  - **Jacksonville – 30%**
  - **Mayport – 35%**
  - **Kings Bay – 35%**
  - **Savannah – 15%**
  - **Beaufort – 15%**
  - **Charleston – 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.

# Hurricane Wind Speed Probabilities

Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

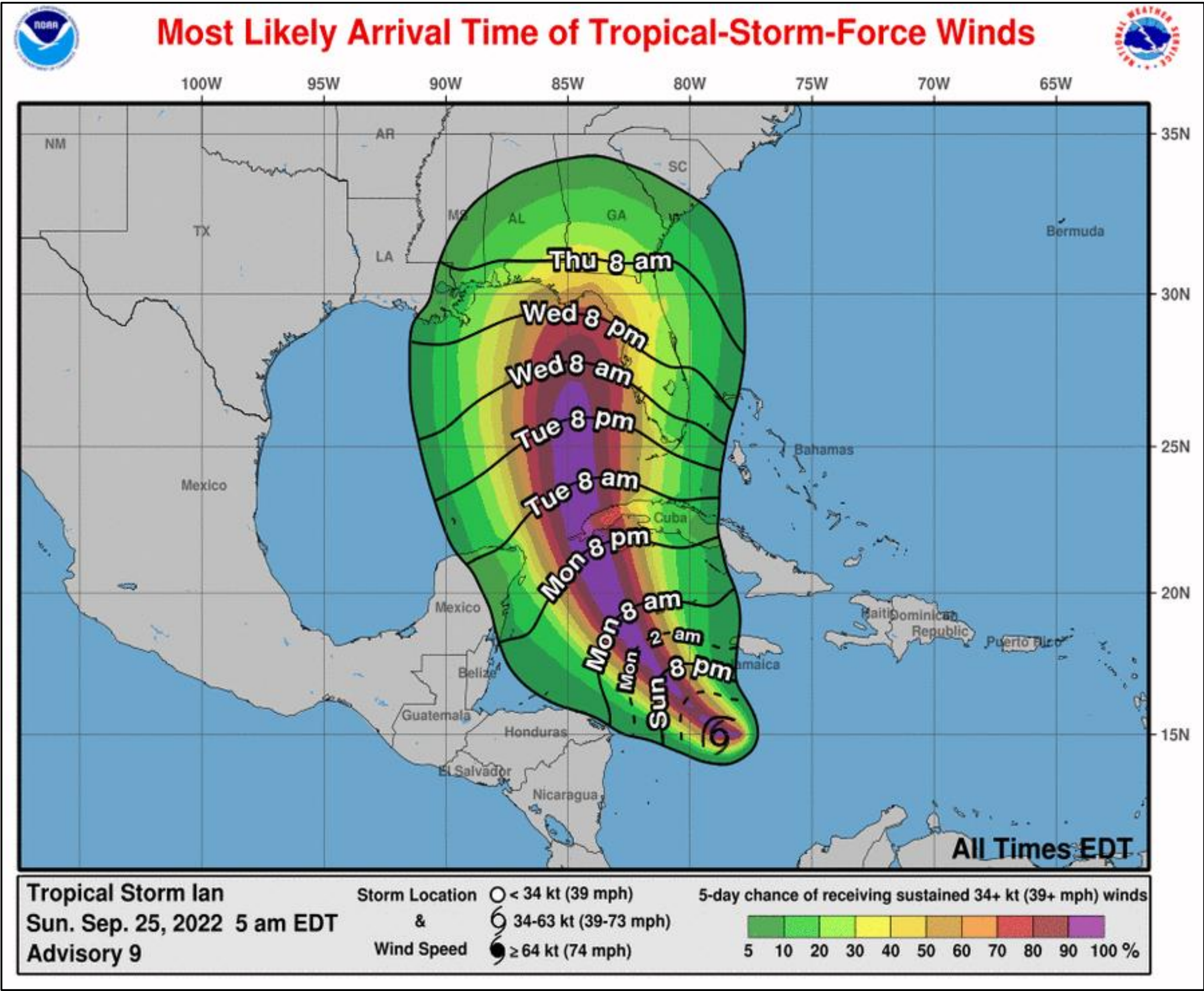


- **Destin – 5%**
- **Apalachicola – 20%**
- **Cedar Key – 15%**
- **Tampa – 15%**
- **Venice – 20%**
- **Ft. Myers – 5%**
- **Naples – 10%**
- **Key West – 5%**
- Probabilities of sustained hurricane force winds (64 kt +) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or 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 Ian



- **Florida Keys – Tuesday Afternoon**
- **Ft. Myers/Sarasota – Wednesday Morning**
- **Tampa – Wednesday Afternoon**
- **Big Bend – Wednesday 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.

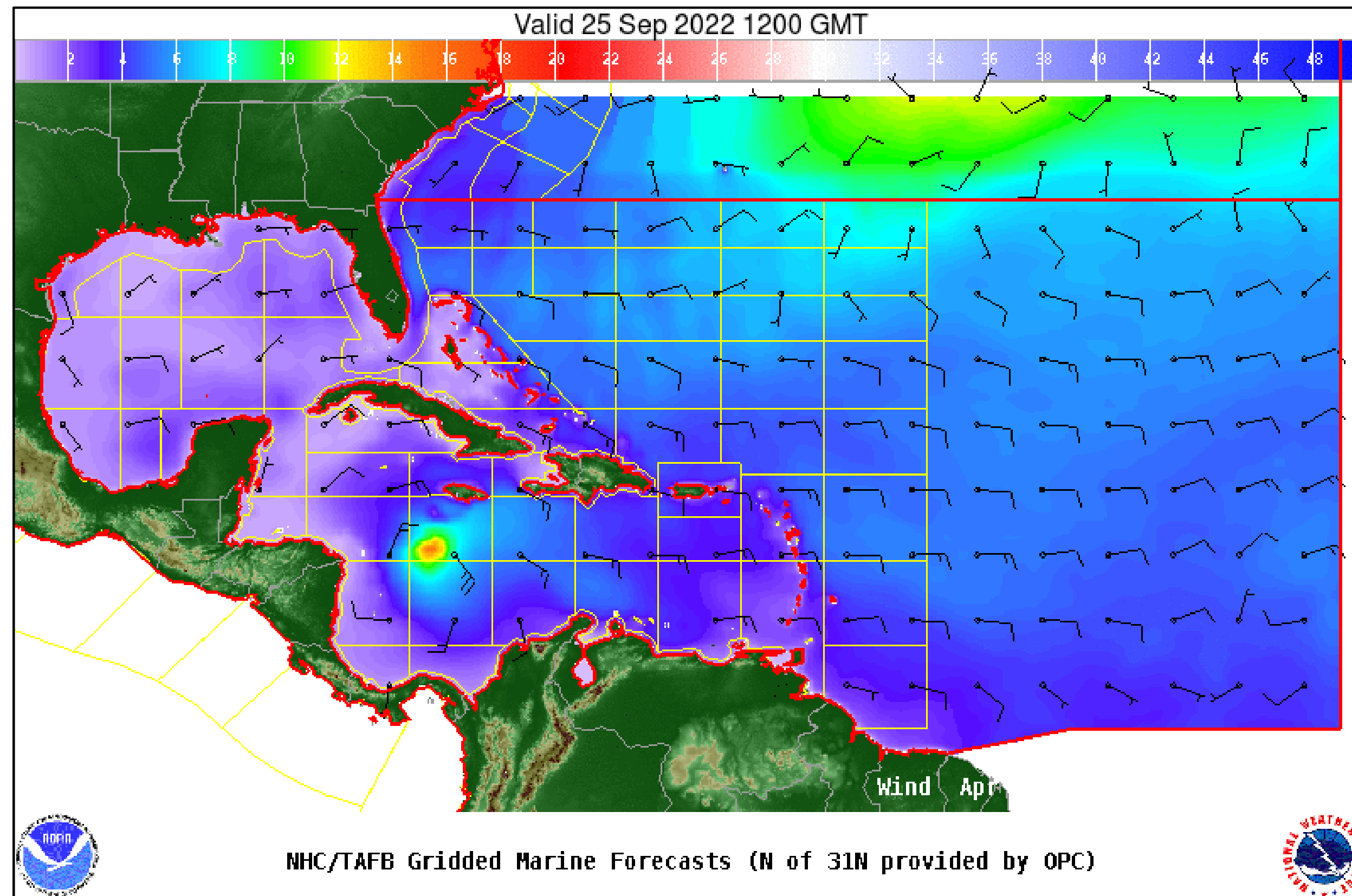


# Wind And Waves

Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



Current Conditions

**8am EDT Sunday September 25**

Peak Winds: 45 kt

Peak Seas: 13 ft

- Wave heights are in feet



Significant Wave Height (ft)

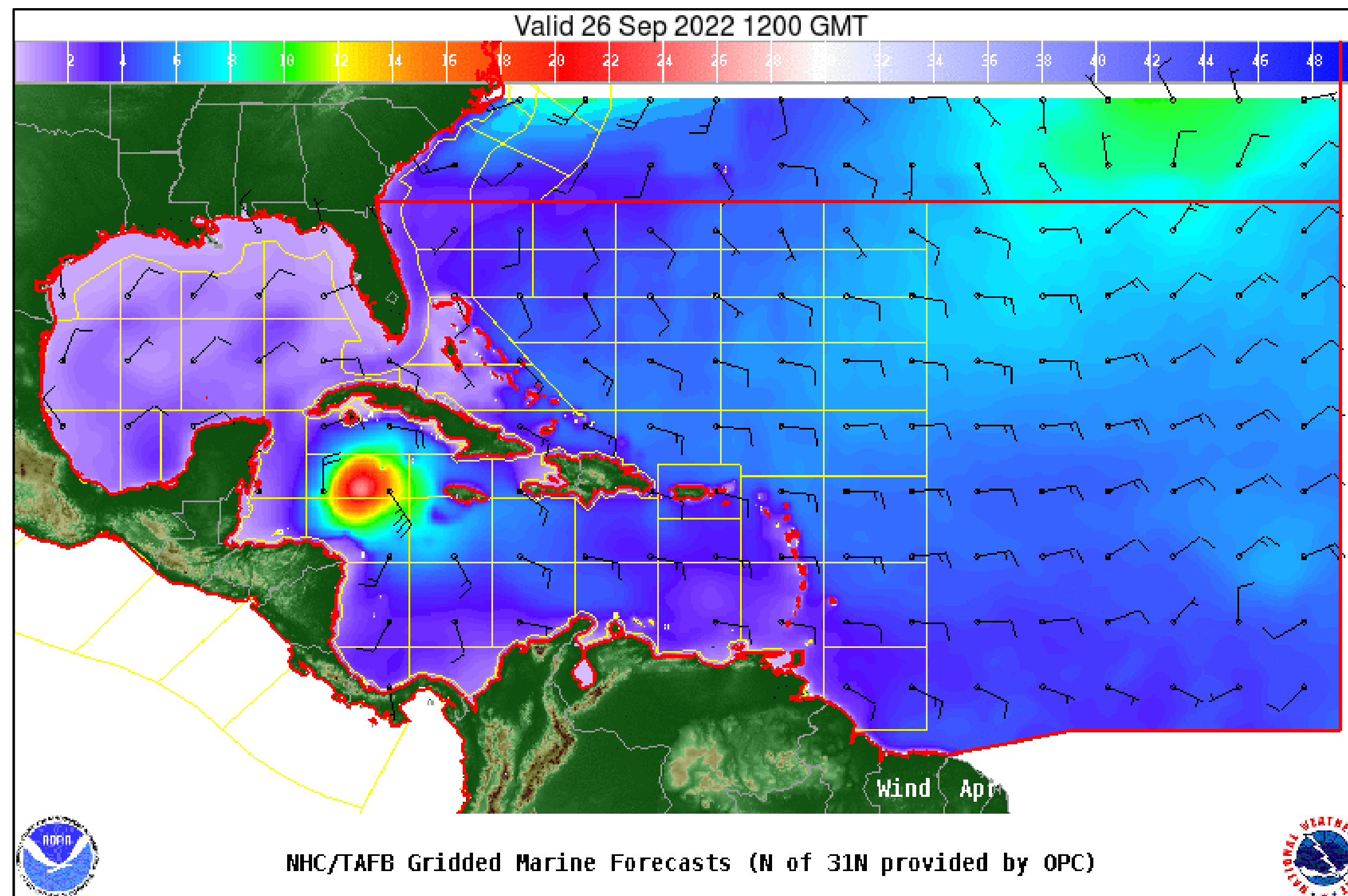


# Wind And Waves

Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



24 Hour Forecast

**8am EDT Mon September 26**

Peak Winds: 70 kt

Peak Seas: 22 ft

- Wave heights are in feet



Significant Wave Height (ft)

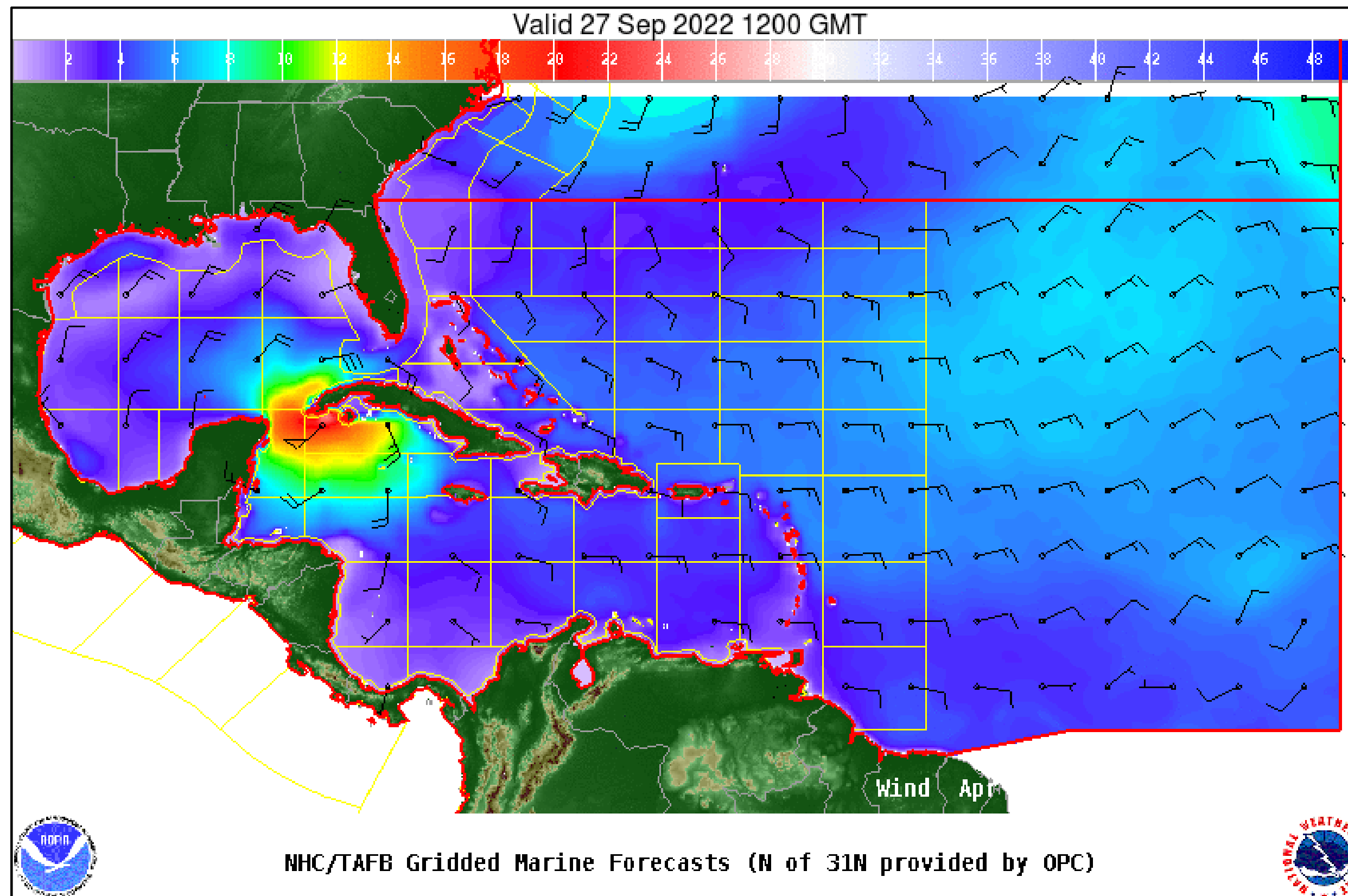


# Wind And Waves

Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



48 Hour Forecast

**8am EDT Tue September 27**

Peak Winds: 105 kt

Peak Seas: 33 ft

- Wave heights are in feet



Significant Wave Height (ft)

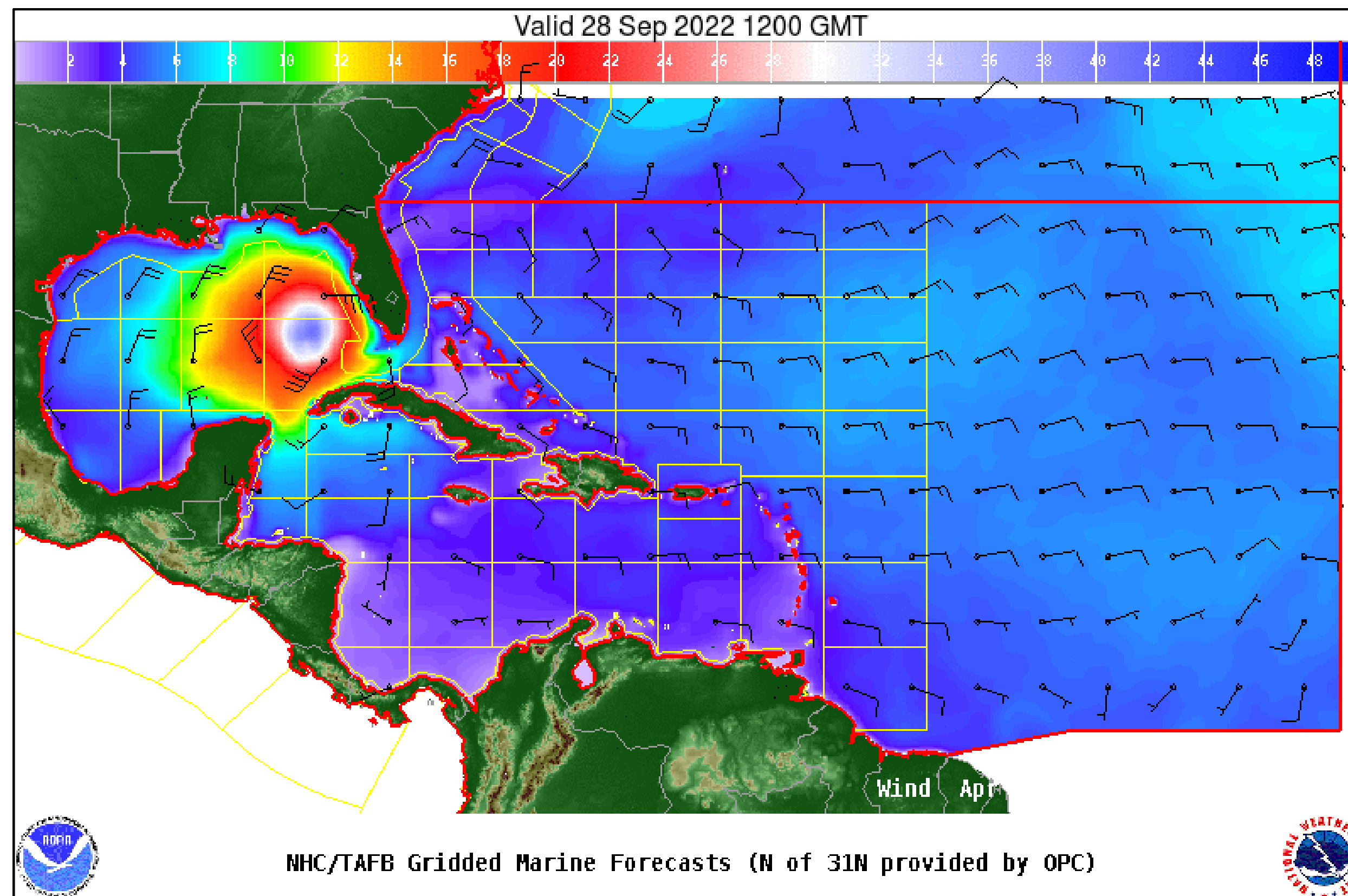


# Wind And Waves

Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



72 Hour Forecast

**8am EDT Wed September 28**

Peak Winds: 120 kt

Peak Seas: 40 ft

- Wave heights are in feet



Significant Wave Height (ft)

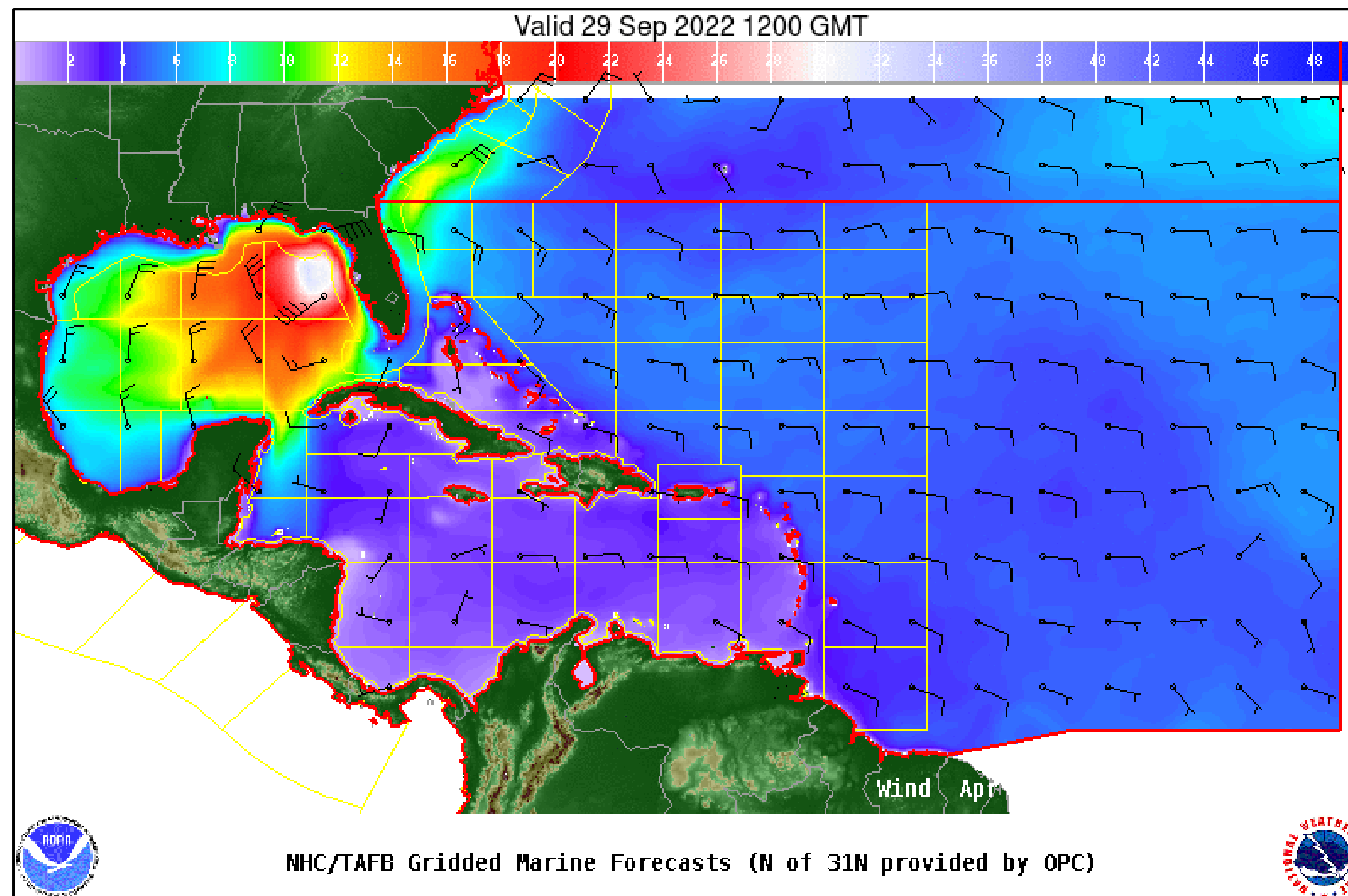


# Wind And Waves

Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



96 Hour Forecast

**8am EDT Thu September 29**

Peak Winds: 80 kt

Peak Seas: 30 ft

- Wave heights are in feet



Significant Wave Height (ft)

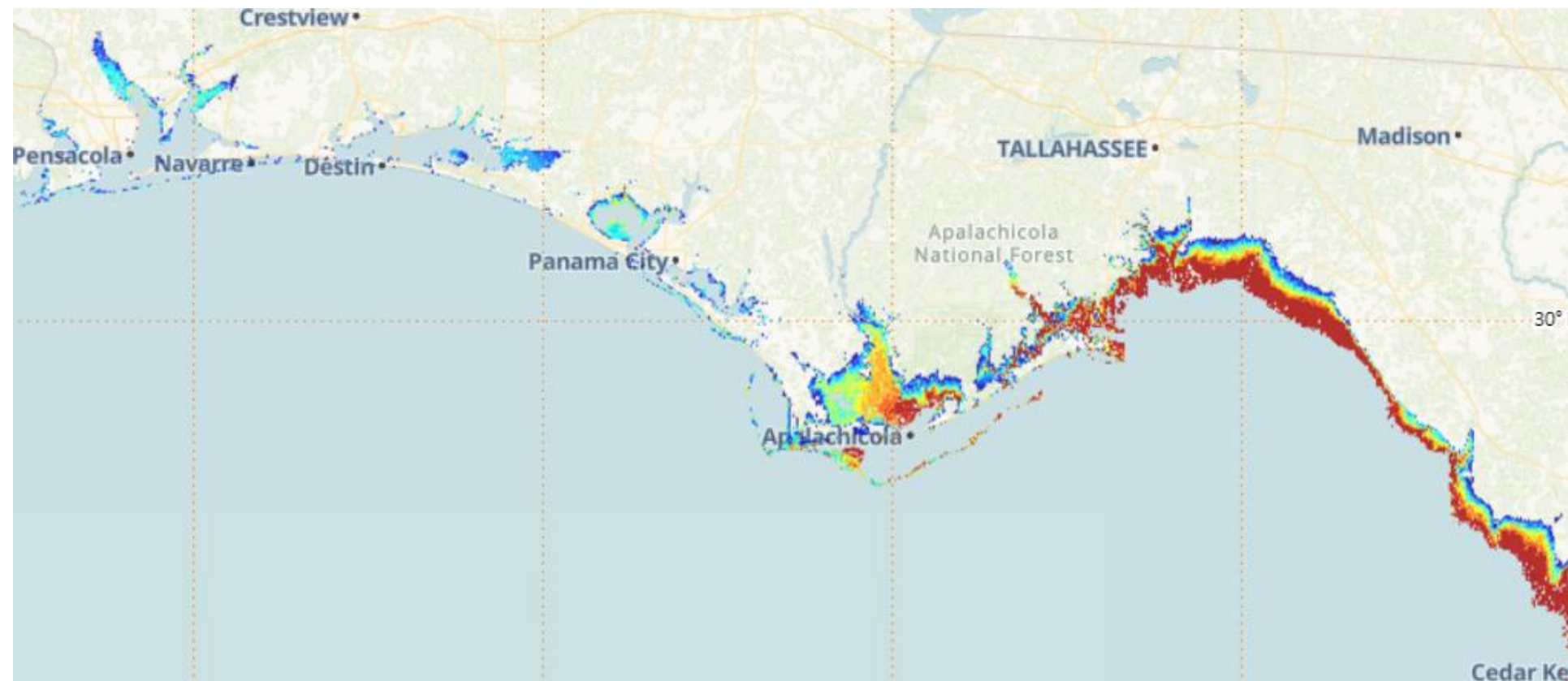


# Potential Storm Surge

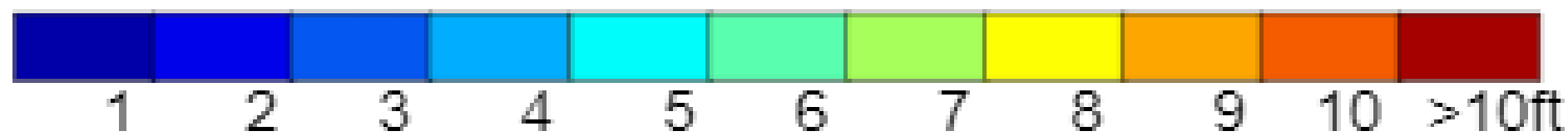
Tropical Storm Ian



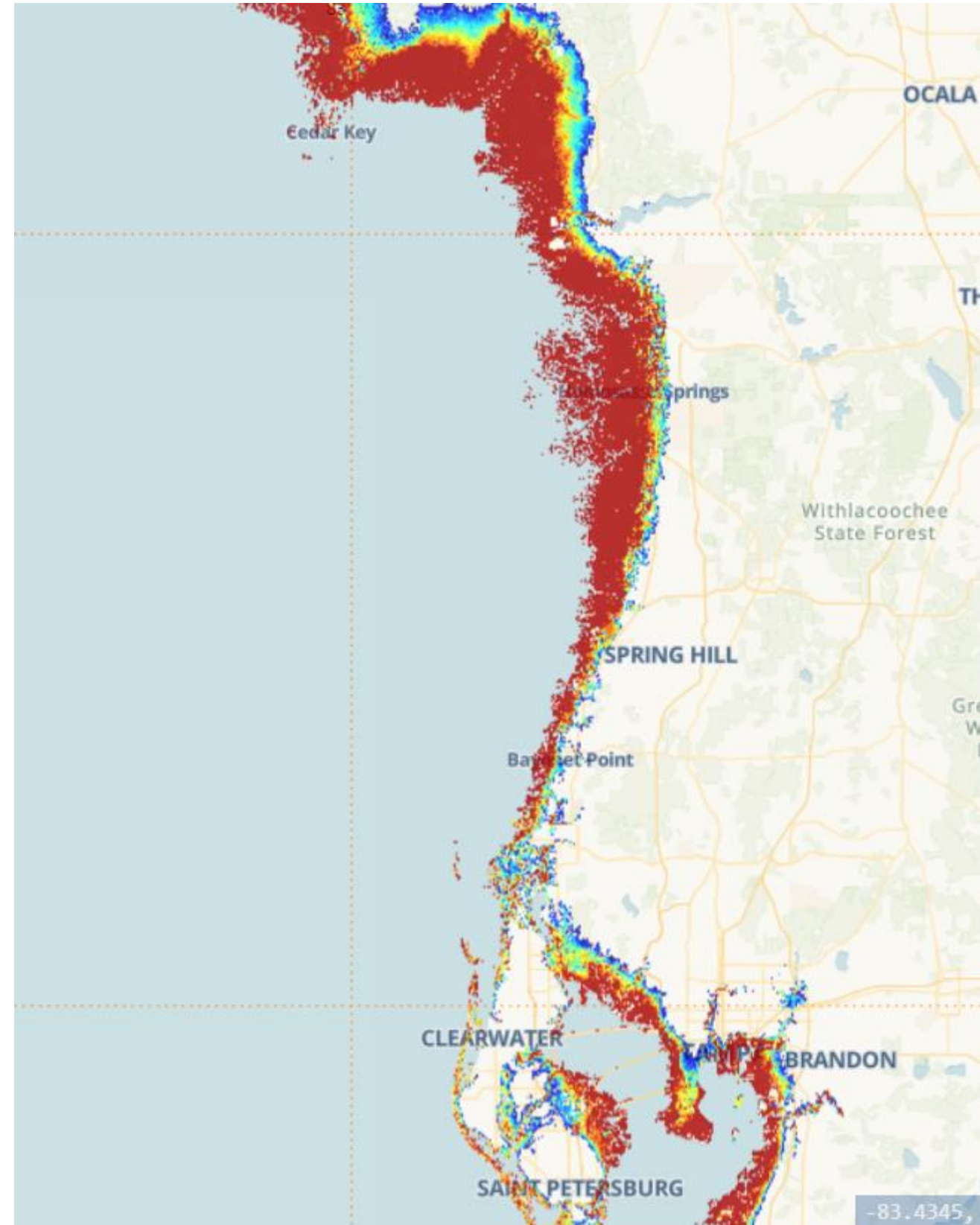
Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



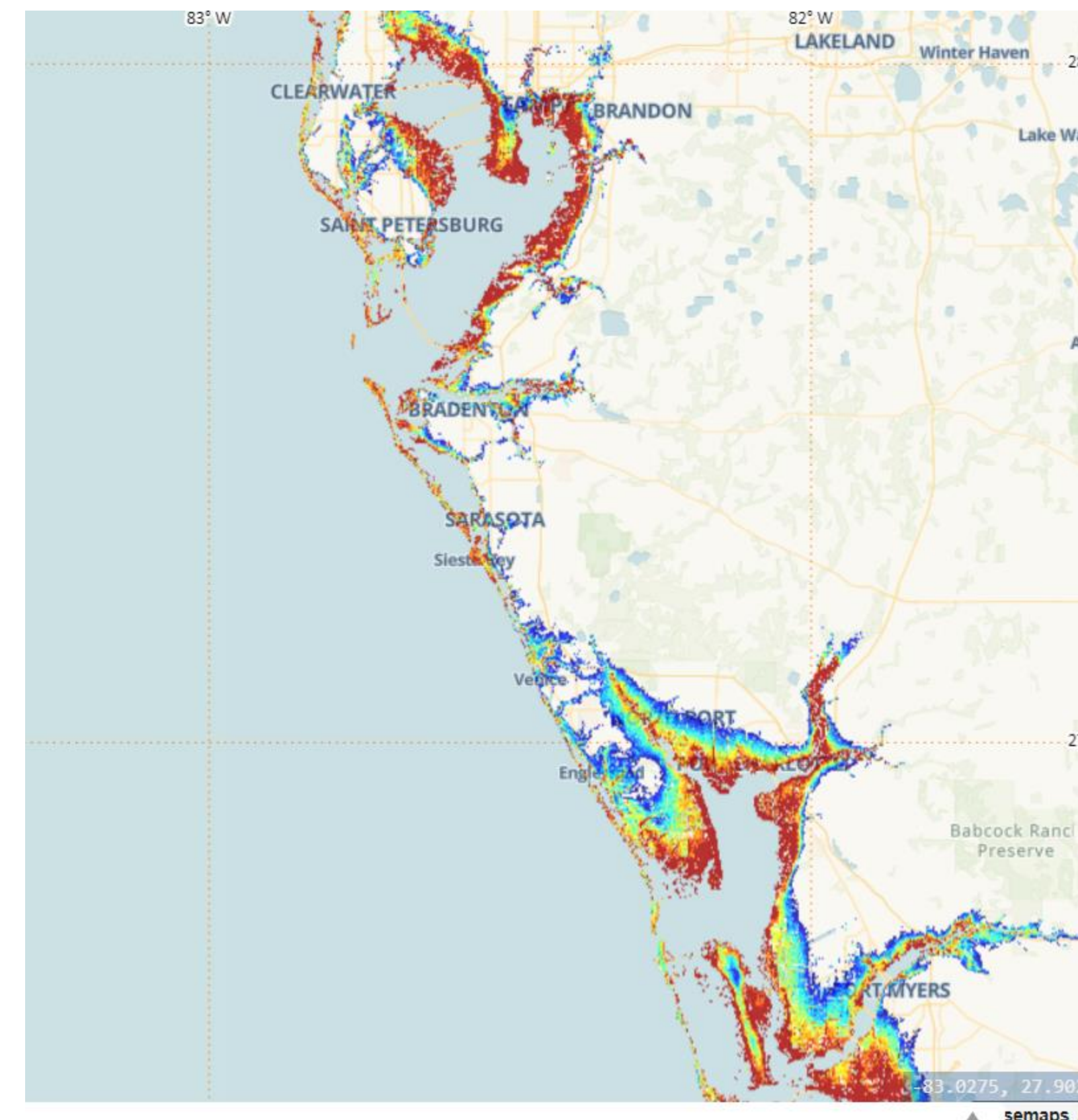
**SLOSH MEOW (Maximum Envelope of Water) for a Category 2 moving N and NE at 10 mph at high tide – Above Ground Level**



- This is **NOT** an expected flooding footprint
- This is worst case everywhere assuming a Cat 3 landfall Florida peninsula/Cat 2 Florida panhandle
- Potential storm surge is represented in feet above the ground at any given point.



**SLOSH MEOW (Maximum Envelope of Water) for a Category 3 moving NE and ENE at 10 mph at high tide – Above Ground Level**





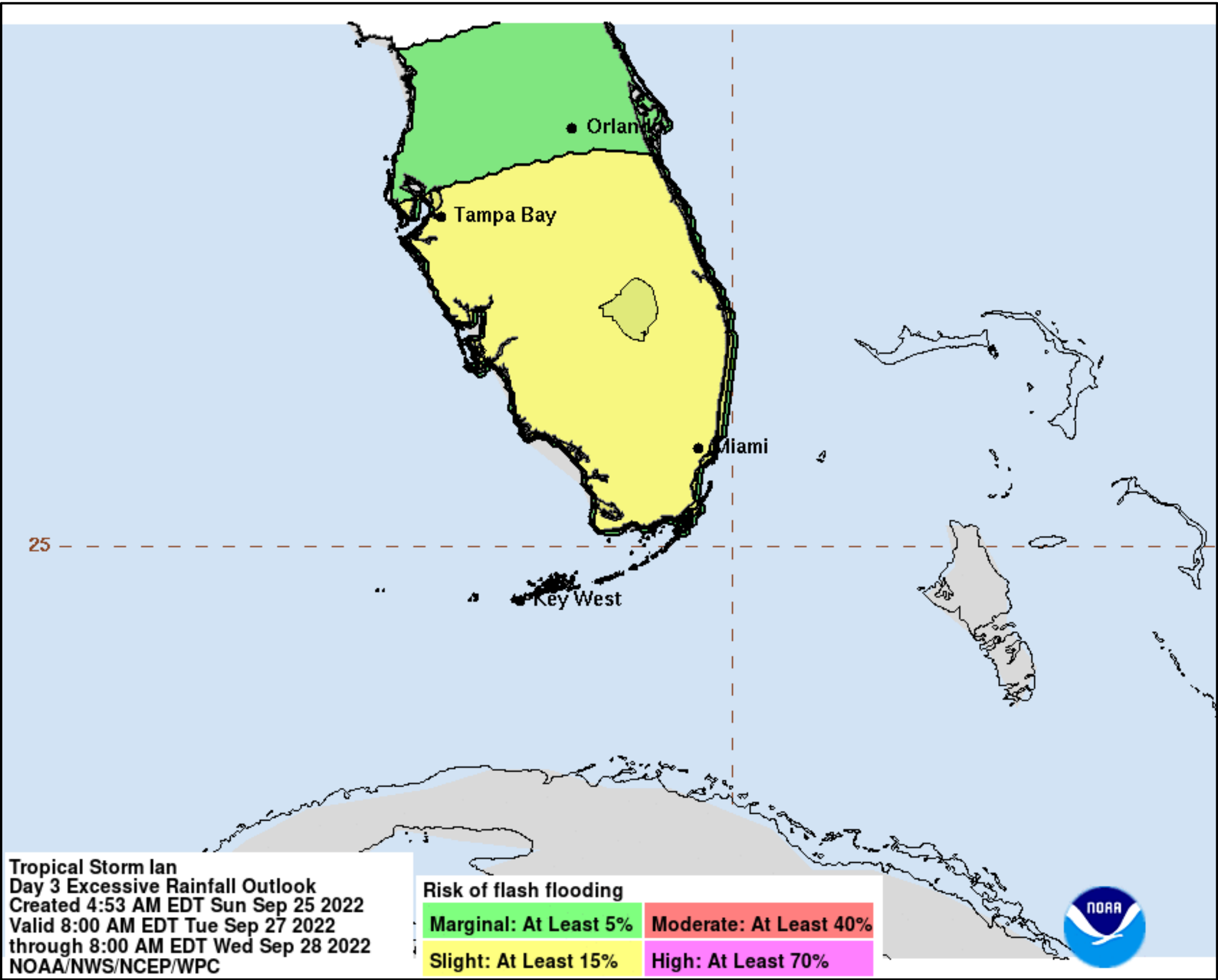
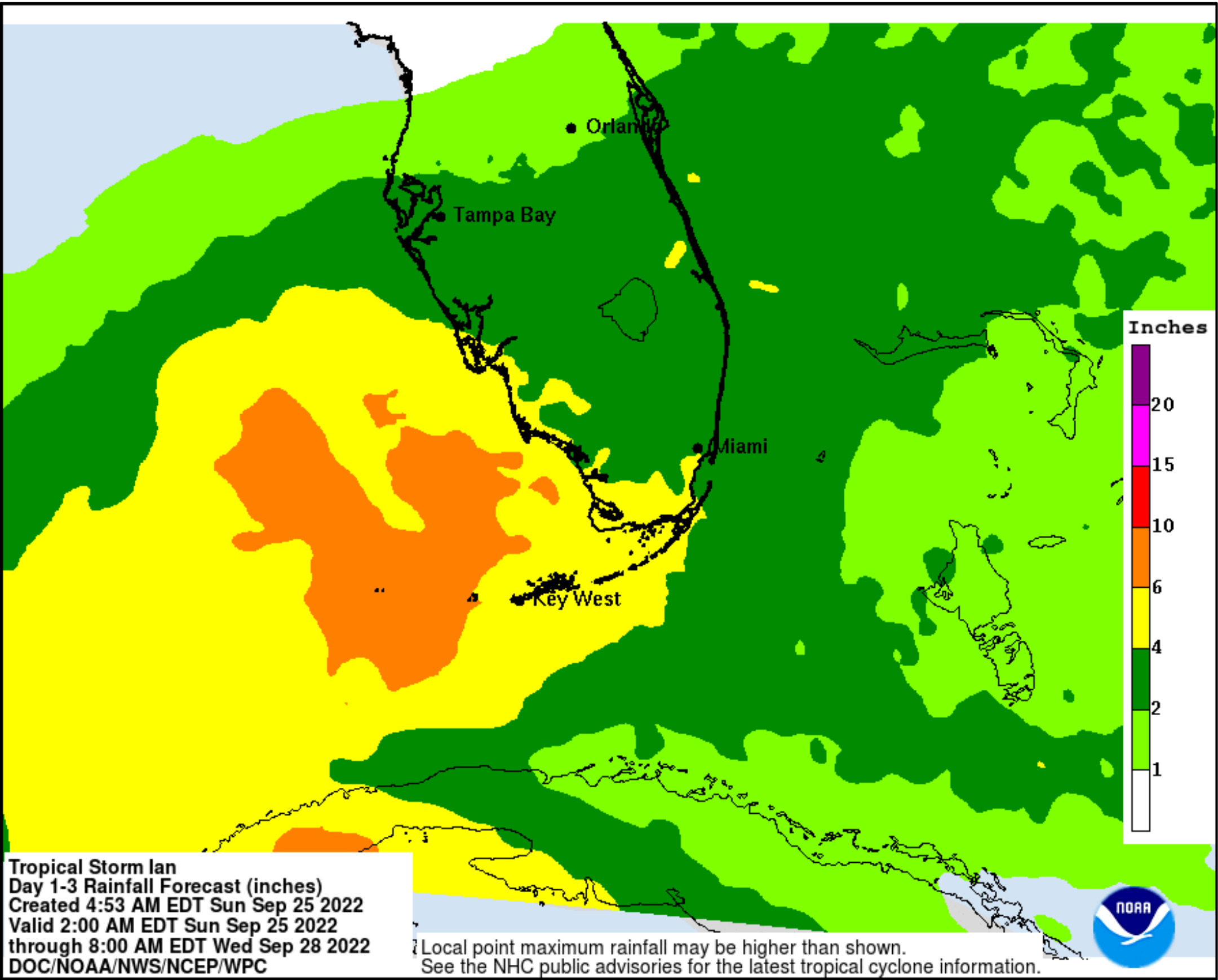
# Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Tropical Storm Ian

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%**

Valid through Wednesday morning

■ Rainfall through Wednesday morning

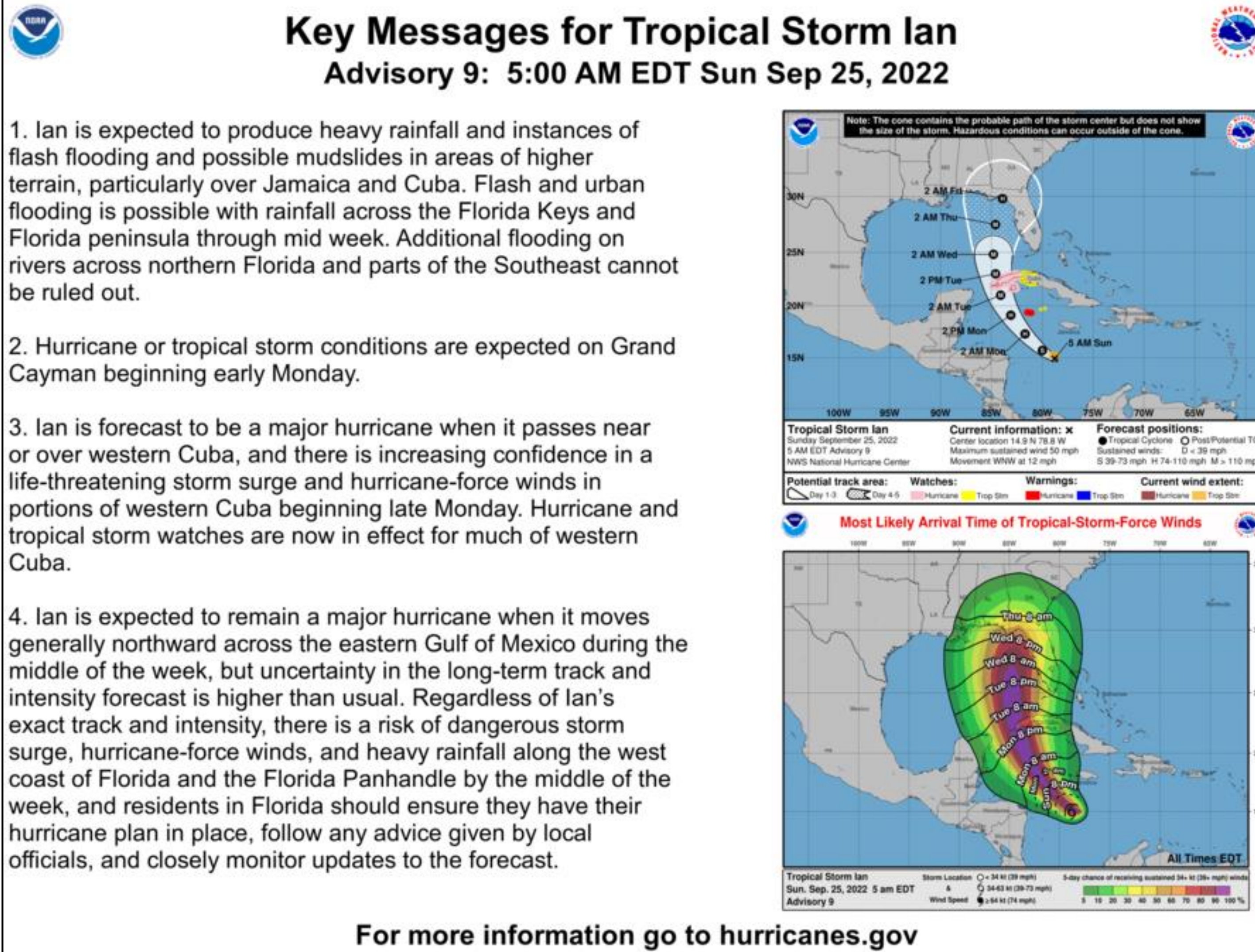


# Key Messages

## Tropical Storm Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



## IMPACTS FOR D7 (through next 5 days)

Winds – **High** to **Extreme**

Storm Surge – **High** to **Extreme**

Rainfall/Flash Flooding – **High**

Tornadoes – **Low** to **Medium**

Waves - **Extreme**

- **Marine Key Messages:**
- Peak seas currently 13 ft, building to 30 ft in NW Caribbean by Monday
- Seas expected to rapidly build in the Florida Straits to around 20 ft Tuesday and in the SE Gulf to around 40 ft on Wednesday





# TROPICAL STORM IAN 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)*



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