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

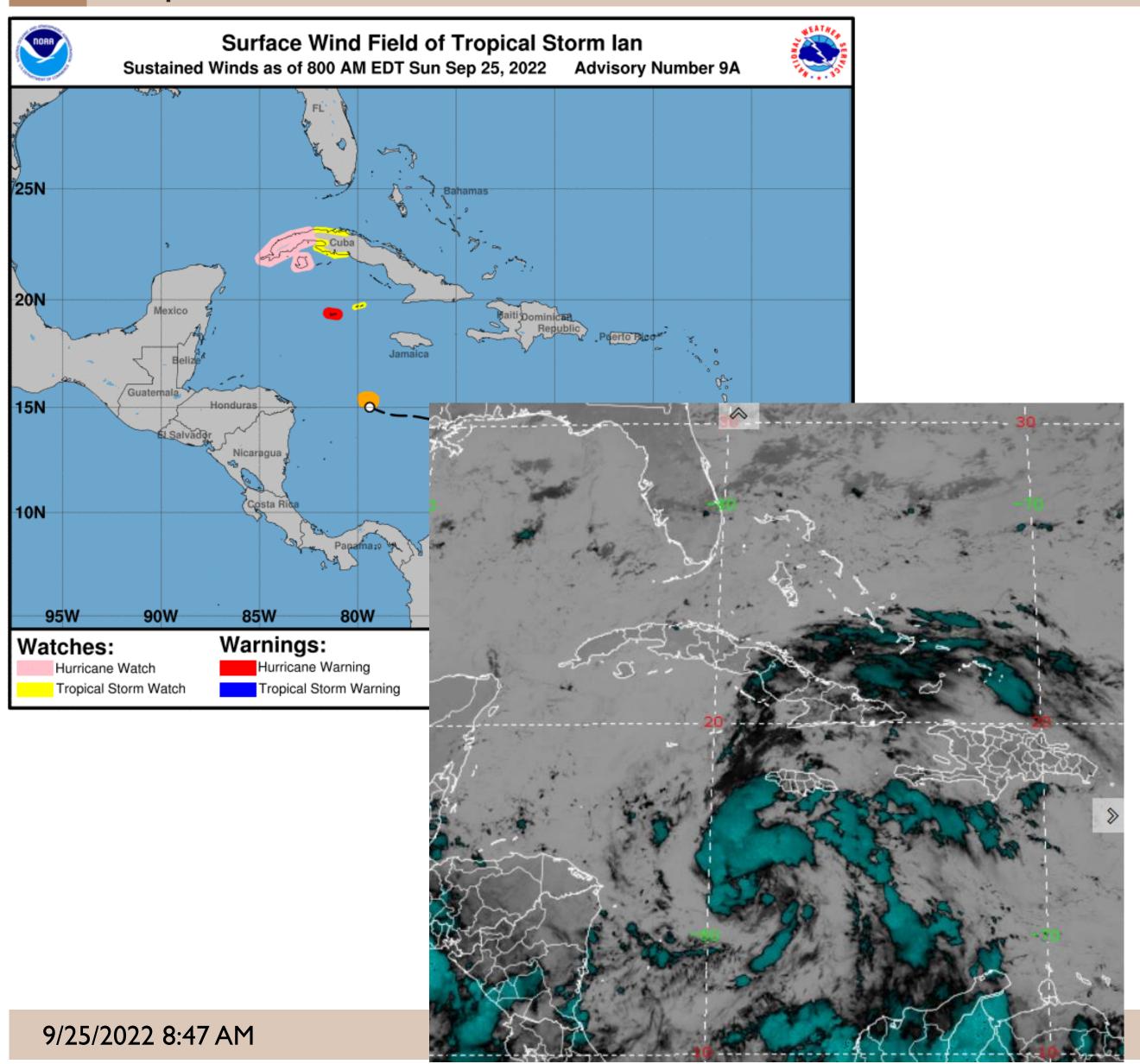
Tropical Analysis and Forecast Branch
NWS National Hurricane Center



Situation Overview

Tropical Analysis and Forecast Branch NWS National Hurricane Center

Tropical Storm Ian



...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

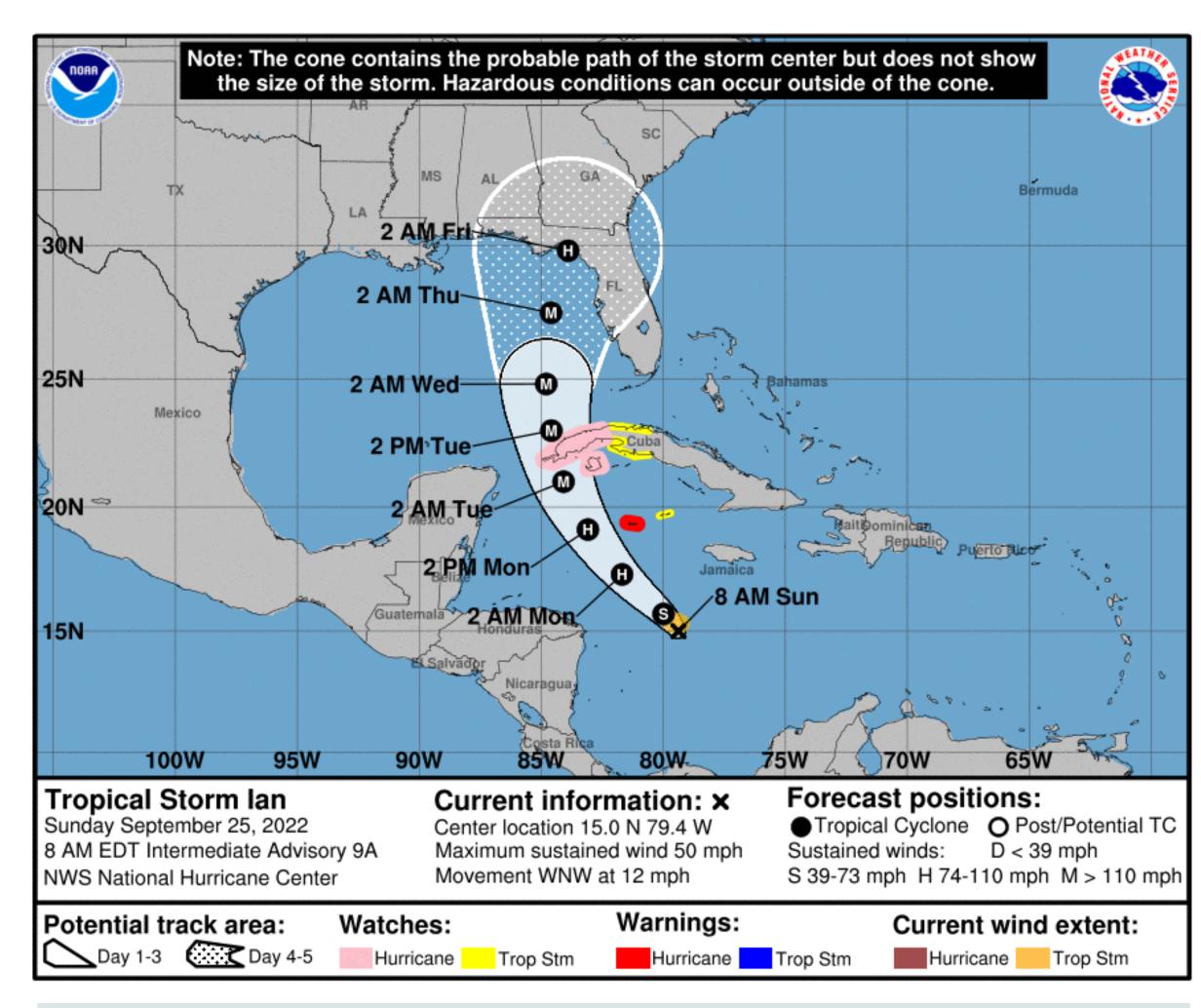
LOCATION... 15.0N 79.4W
ABOUT 270 NM SSE OF GRAND CAYMAN
MAXIMUM SUSTAINED WINDS...45 KT
PRESENT MOVEMENT... WNW AT 11 KT
PEAK SEAS 13 FT

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

Forecast Information

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Tropical Storm Ian



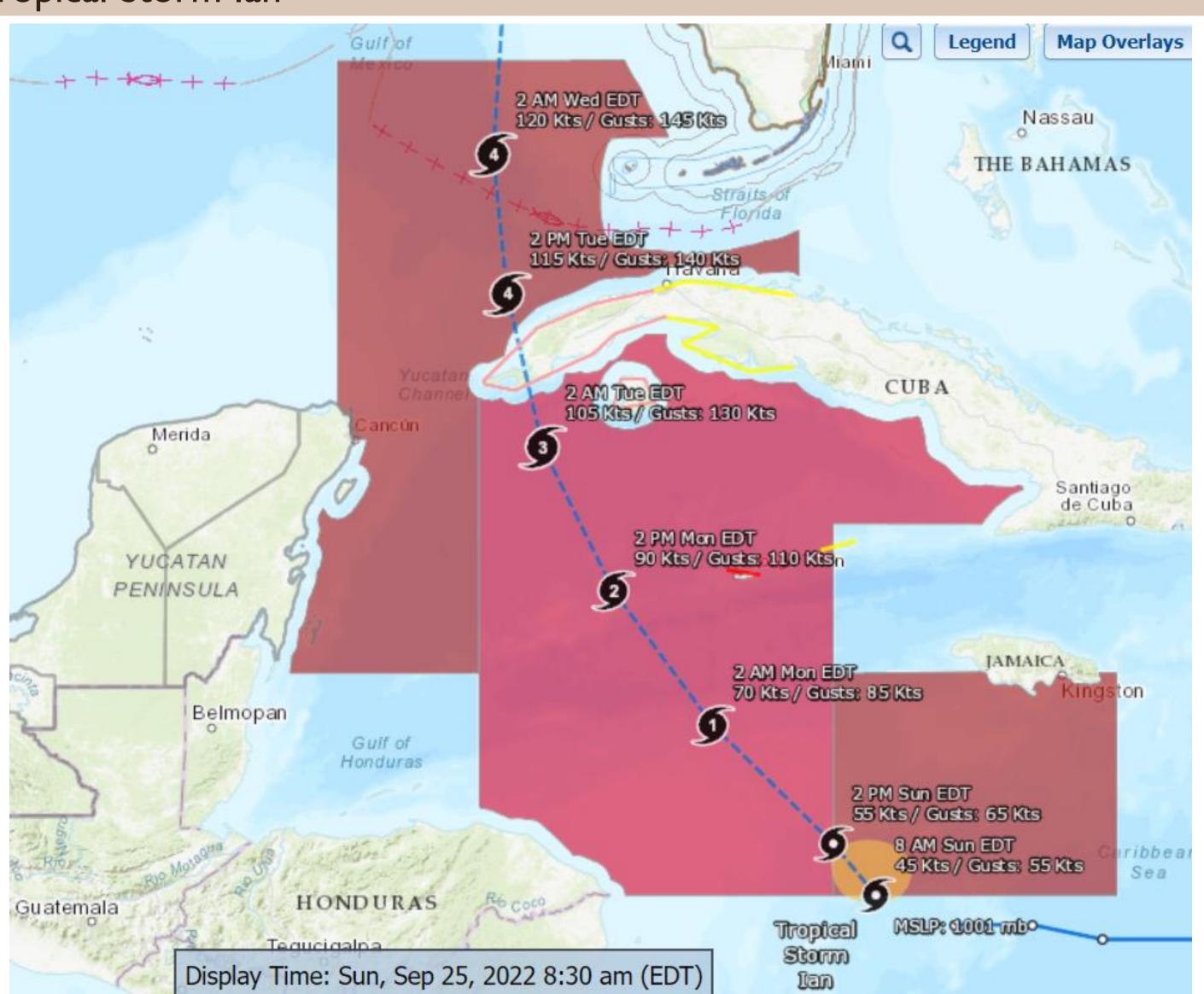
NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

- lan 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 swatch 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.

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Tropical Storm Ian

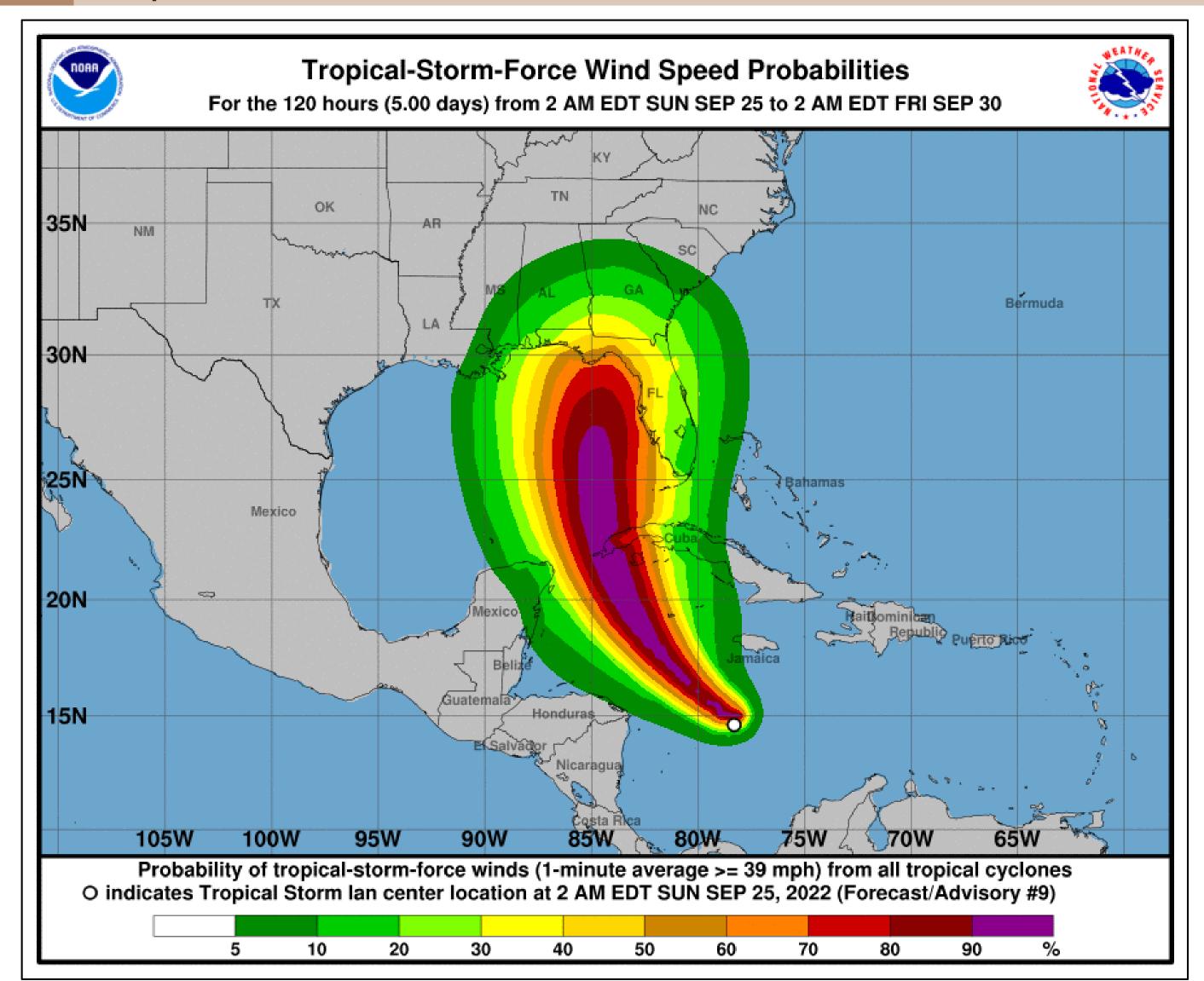




https://nowcoast.noaa.gov/

T.S. Wind Speed Probabilities

Tropical Storm Ian





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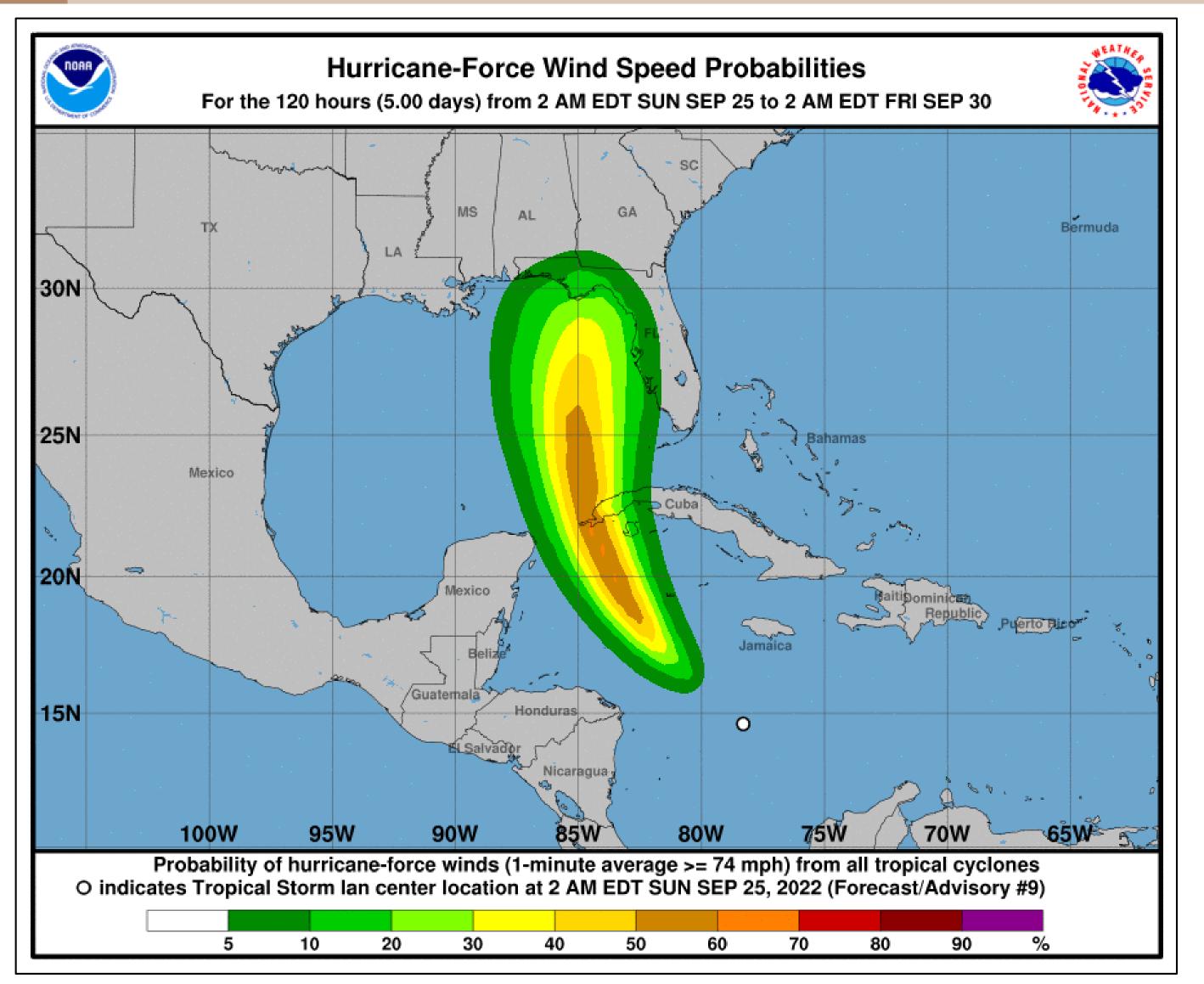
- Gulfport 10%
- Mobile 15%
- Pensacola 25%
- Whiting Field 25%
- **Destin 35%**
- Panama City 55%
- Apalachicola 65%
- **St. Marks 50%**
- Cedar Key 65%
- <u>Tampa 65%</u>
- **Venice 65%**
- Ft. Myers 40%
- Naples 50%
- **Key West 50%**
- **Marathon 35**%

- 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

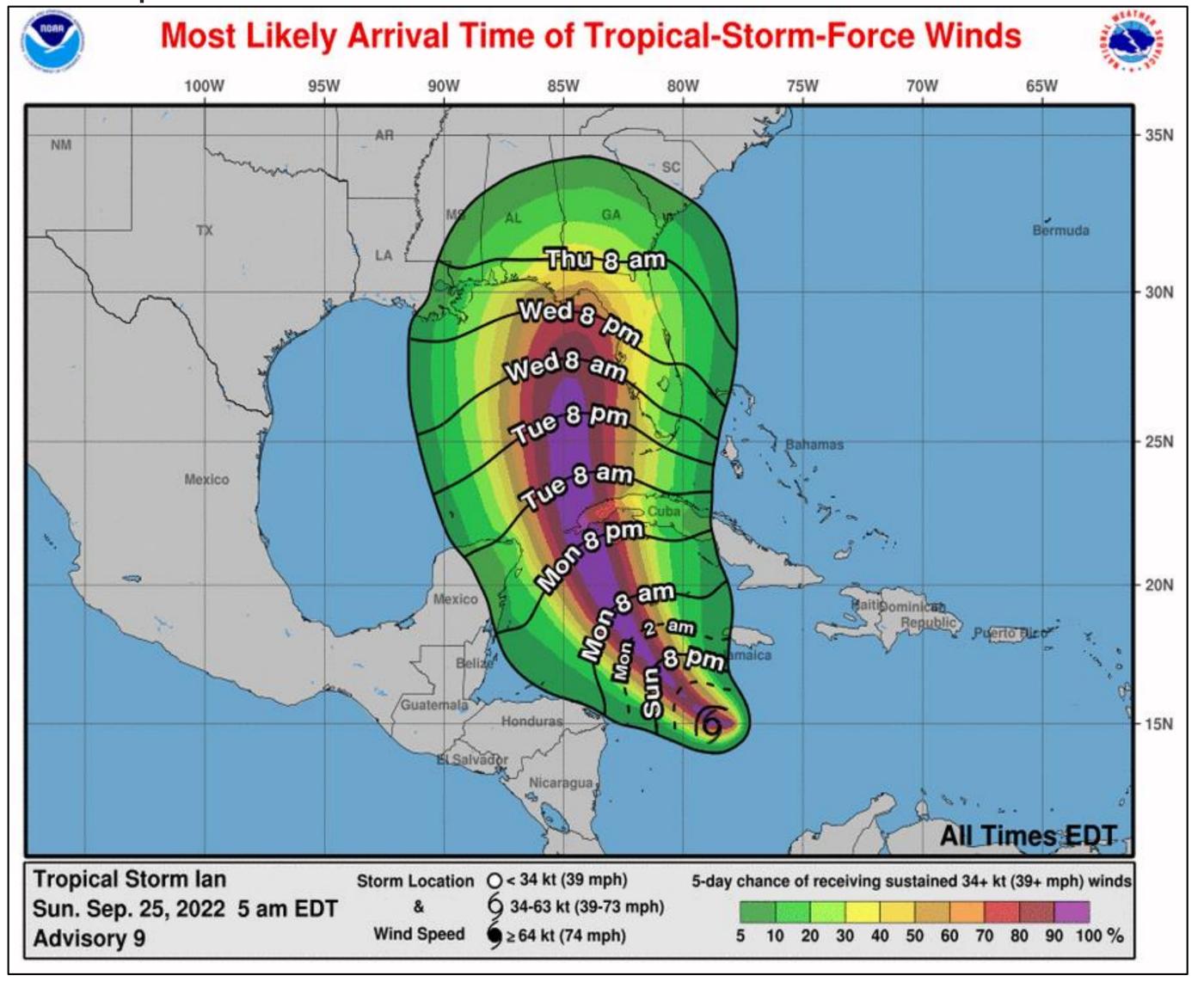
Tropical Analysis and Forecast Branch NWS National Hurricane Center

Tropical Storm Ian



- **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.

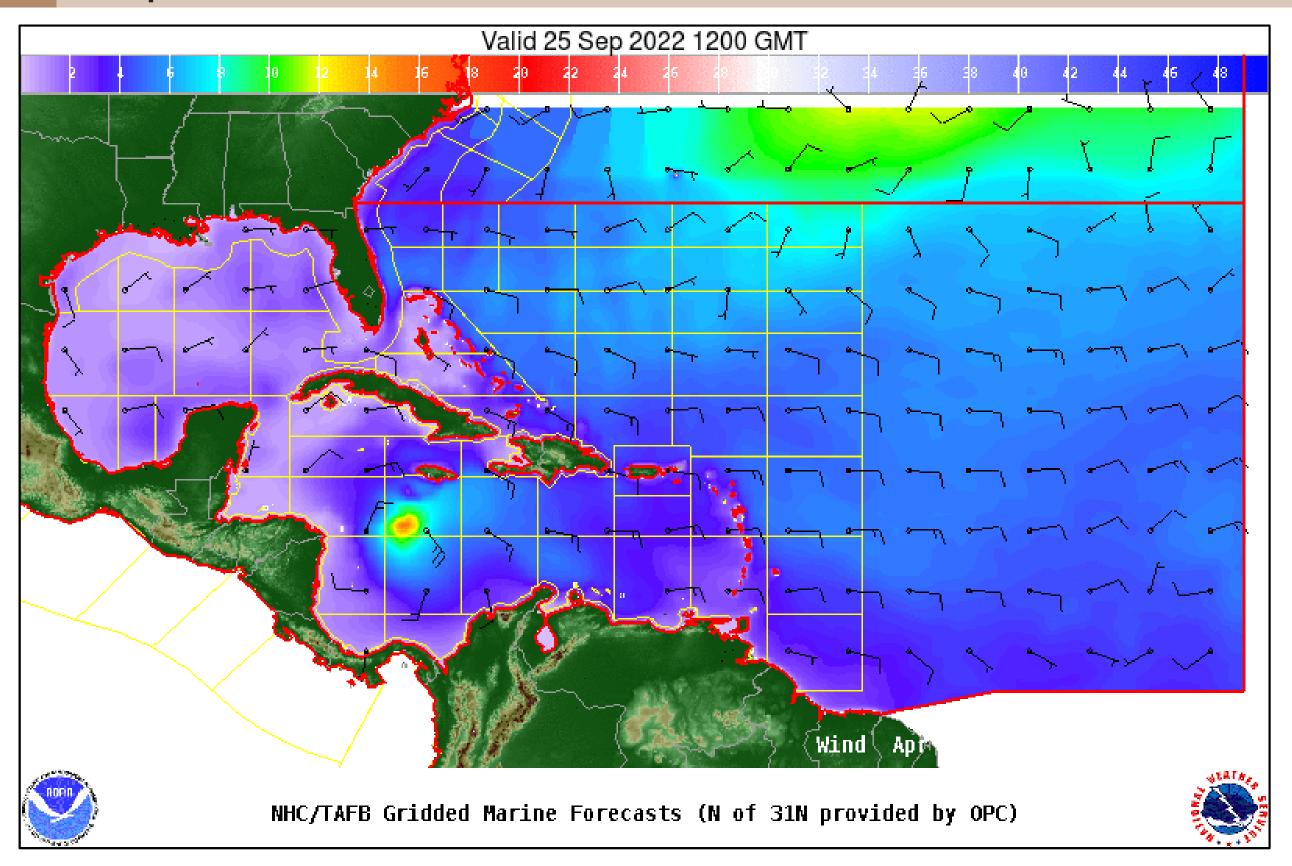
Tropical Storm Ian



- 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.

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Tropical Storm Ian



Current Conditions

8am EDT Sunday September 25

Peak Winds: 45 kt

Peak Seas: 13 ft

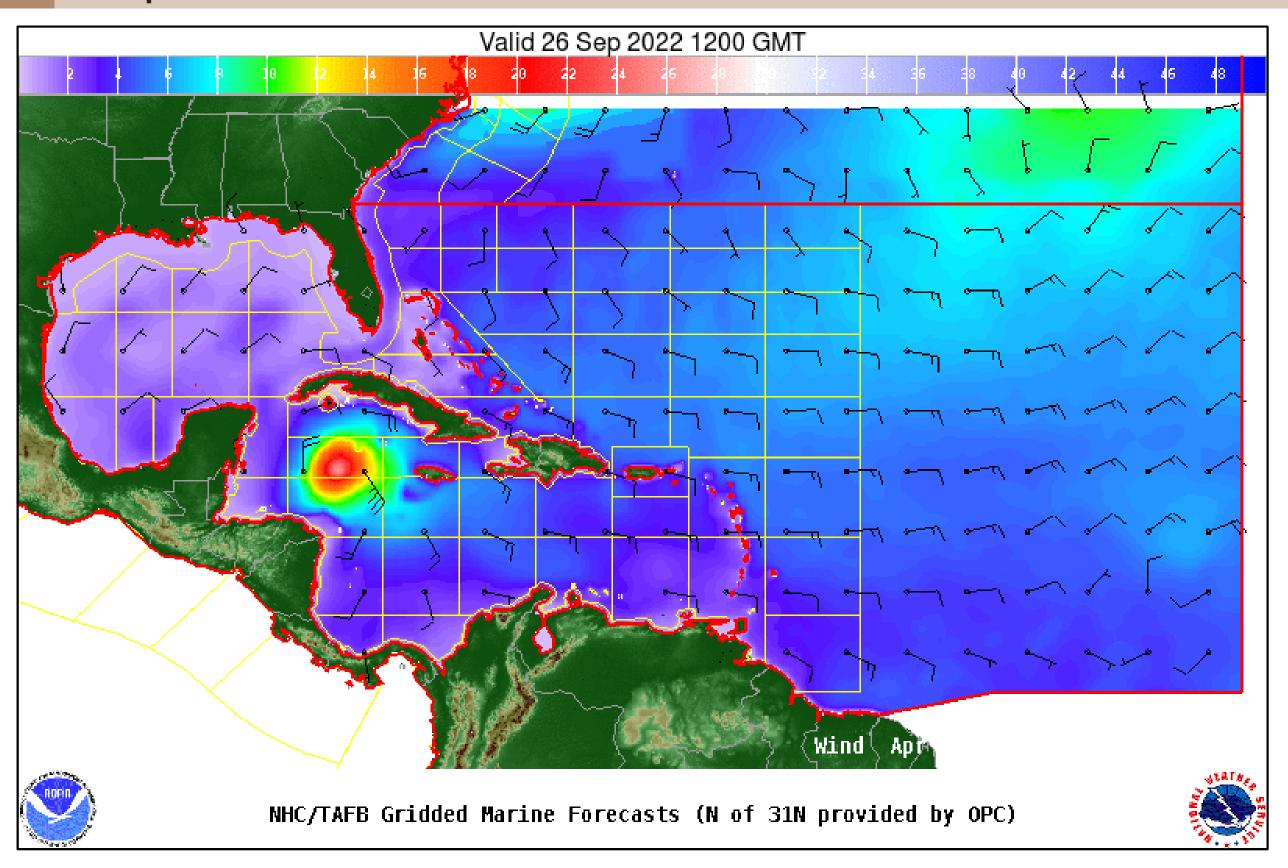
Wave heights are in feet



Significant Wave Height (ft)

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Tropical Storm Ian



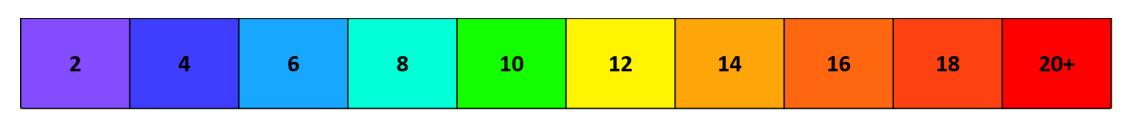
24 Hour Forecast

8am EDT Mon September 26

Peak Winds: 70 kt

Peak Seas: 22 ft

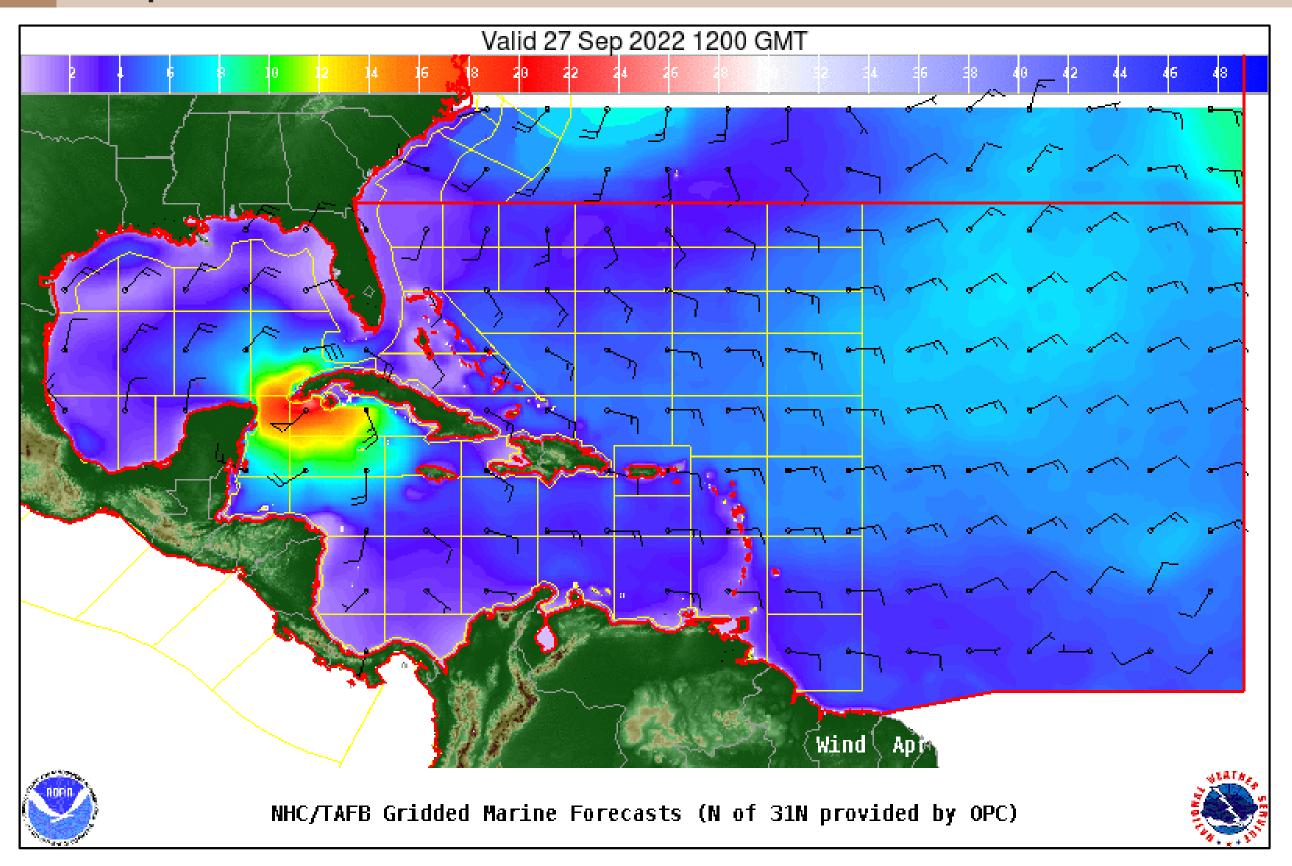
Wave heights are in feet



Significant Wave Height (ft)

Tropical Analysis and Forecast Branch NWS National Hurricane Center

Tropical Storm Ian



48 Hour Forecast

8am EDT Tue September 27

Peak Winds: 105 kt

Peak Seas: 33 ft

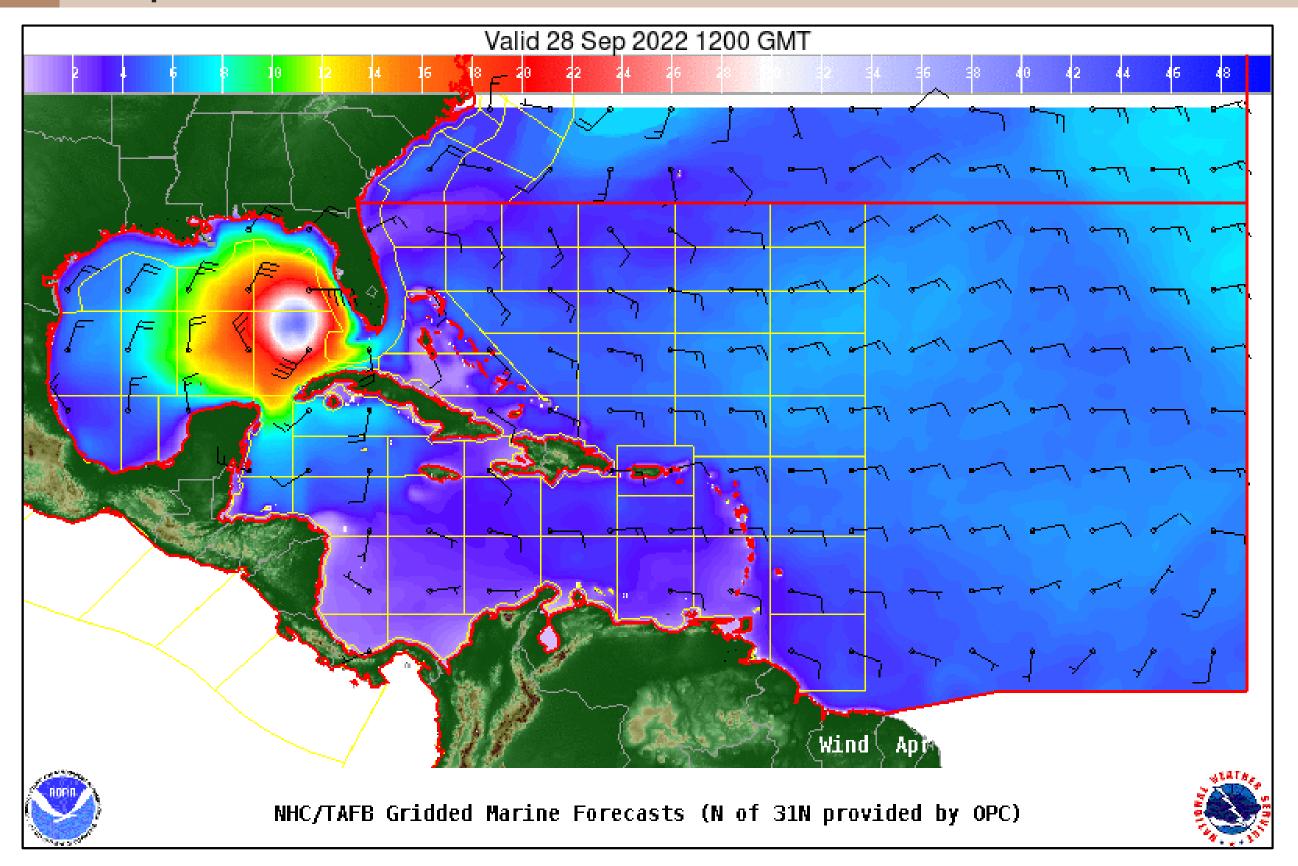
Wave heights are in feet



Significant Wave Height (ft)

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Tropical Storm lan



72 Hour Forecast

8am EDT Wed September 28

Peak Winds: 120 kt

Peak Seas: 40 ft

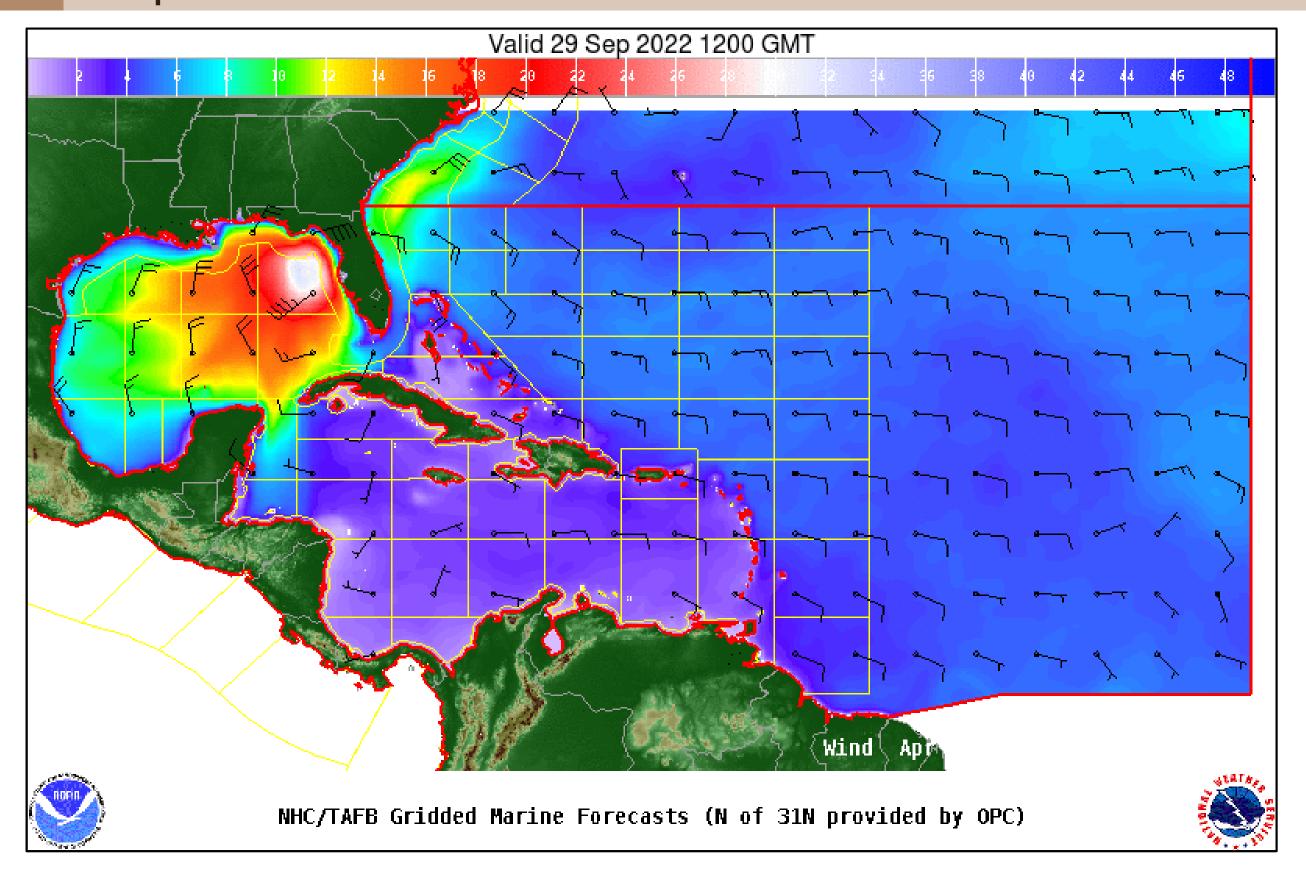
Wave heights are in feet



Significant Wave Height (ft)

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Tropical Storm lan



96 Hour Forecast

8am EDT Thu September 29

Peak Winds: 80 kt

Peak Seas: 30 ft

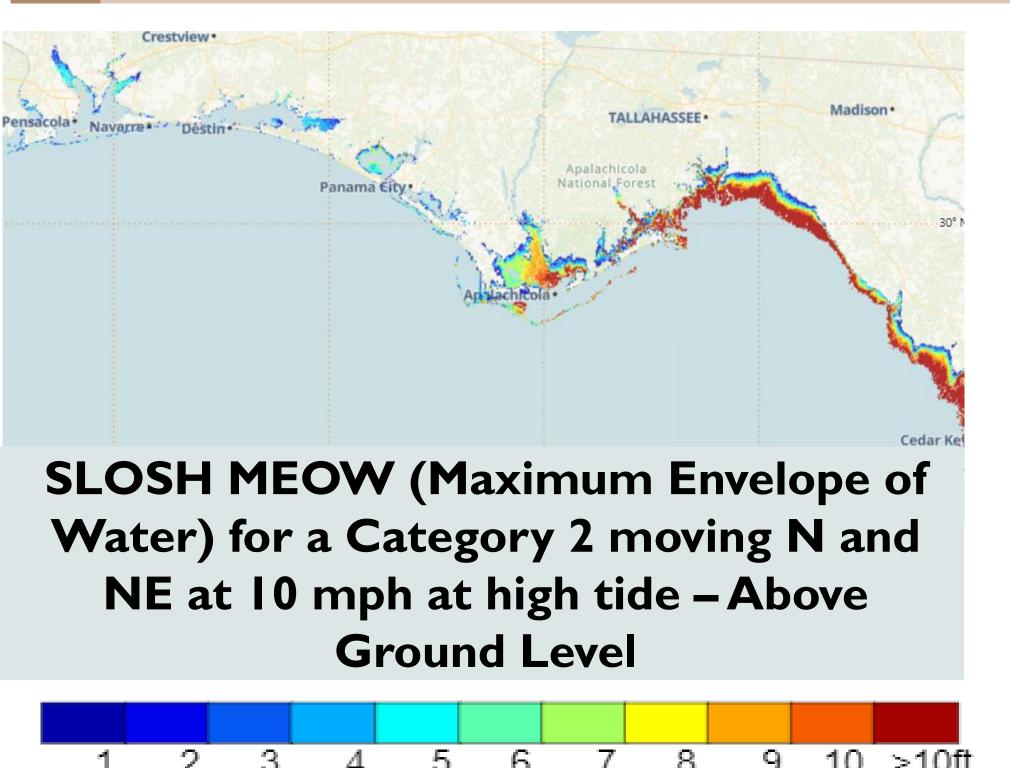
Wave heights are in feet

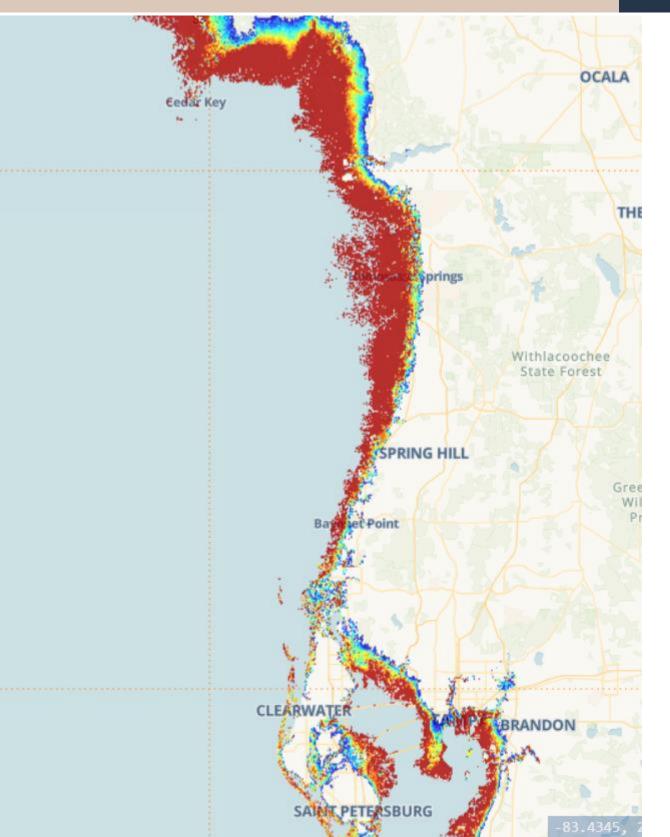


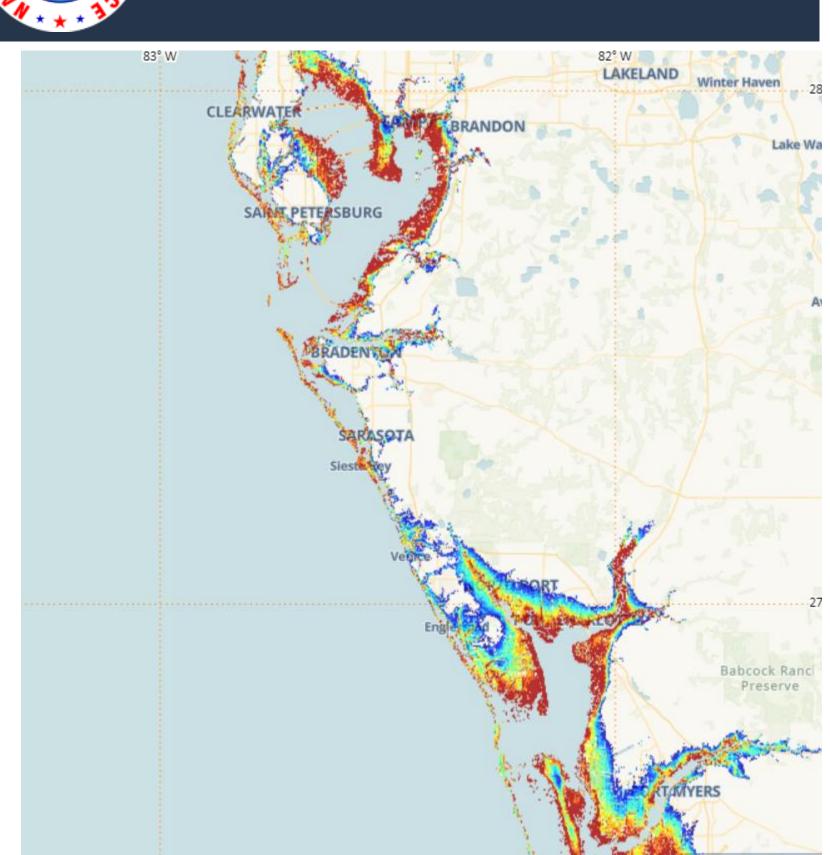
Significant Wave Height (ft)

Potential Storm Surge









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- This is NOT an expected flooding footprint
- This is worst case everywhere assuming a Cat 3 landfall Florida peninsúla/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**

www.nhc.noaa.gov

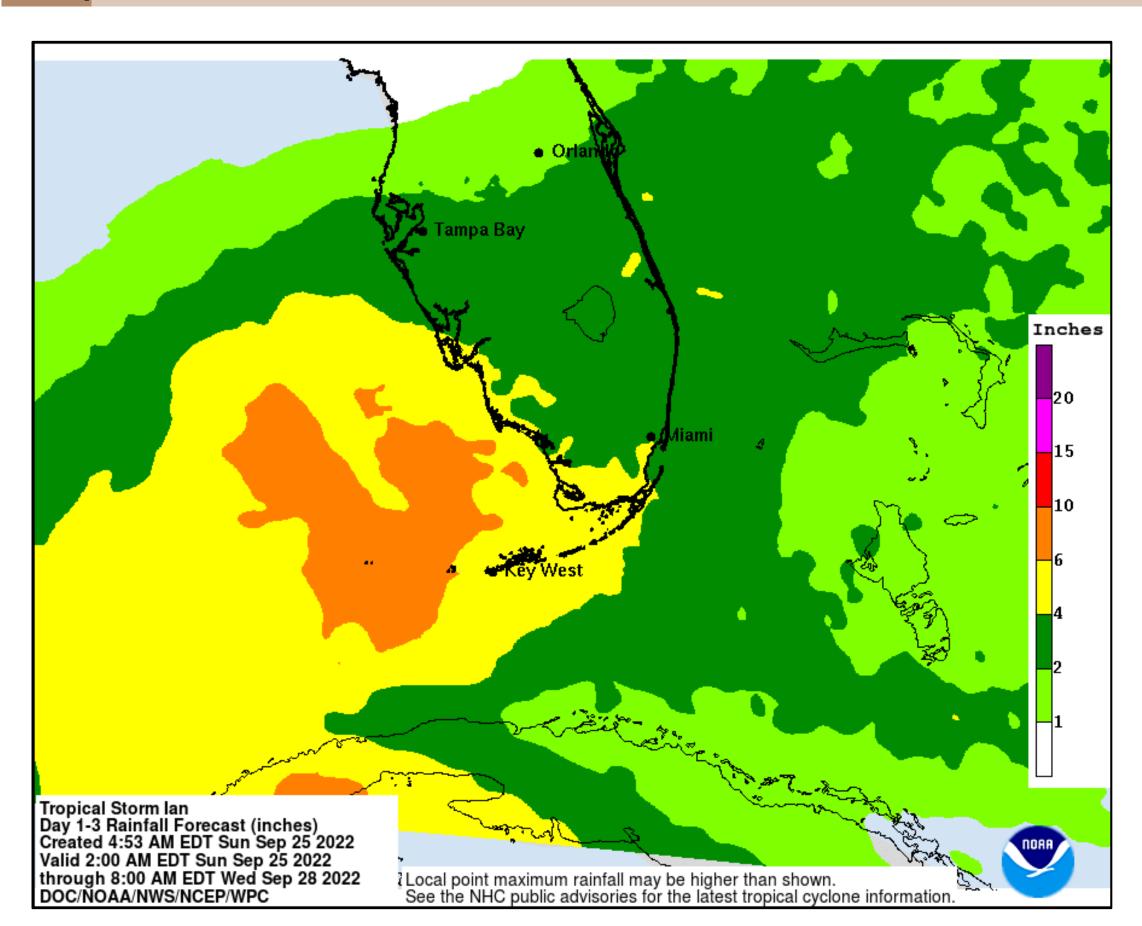
Expected Storm Total Rainfall and Chance of Rainfall Flooding

SER SERVICE

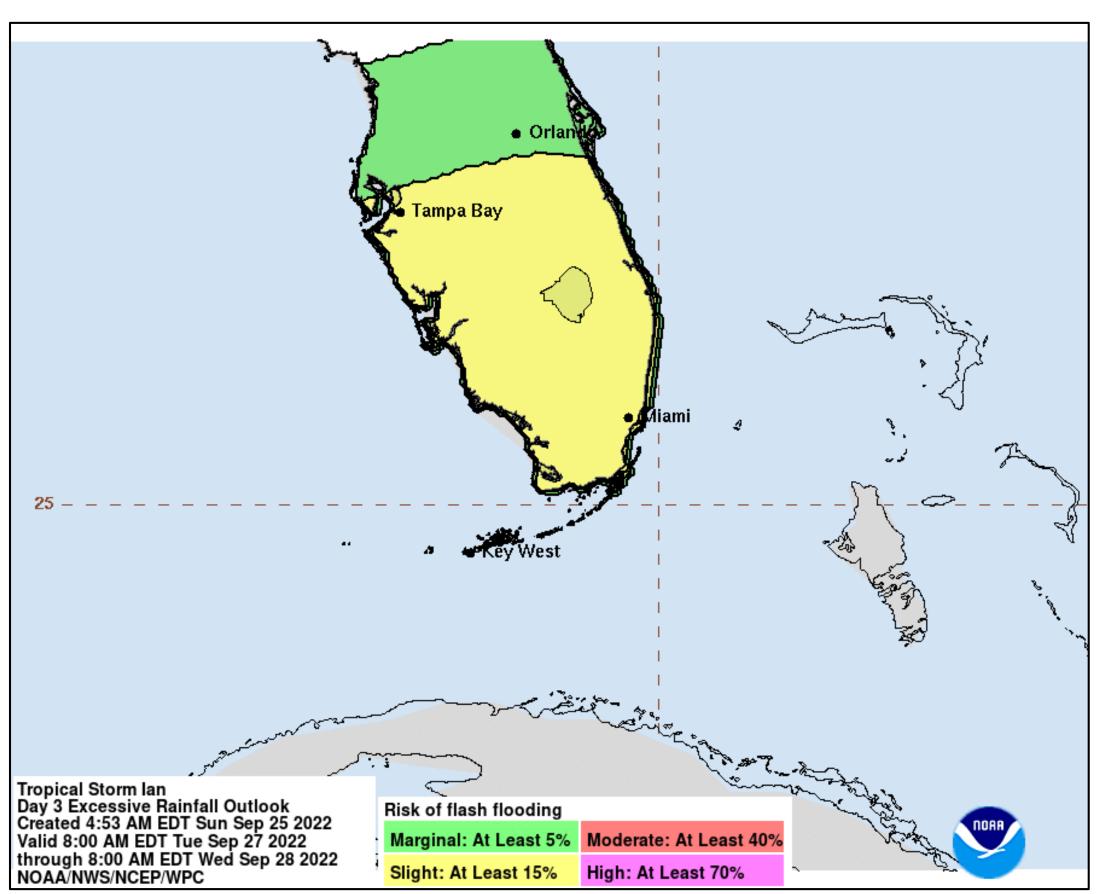
Tropical Analysis and Forecast Branch NWS National Hurricane Center

Tropical Storm lan

Images from NWS Weather Prediction Center



Rainfall through Wednesday morming



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

Tropical Storm Ian

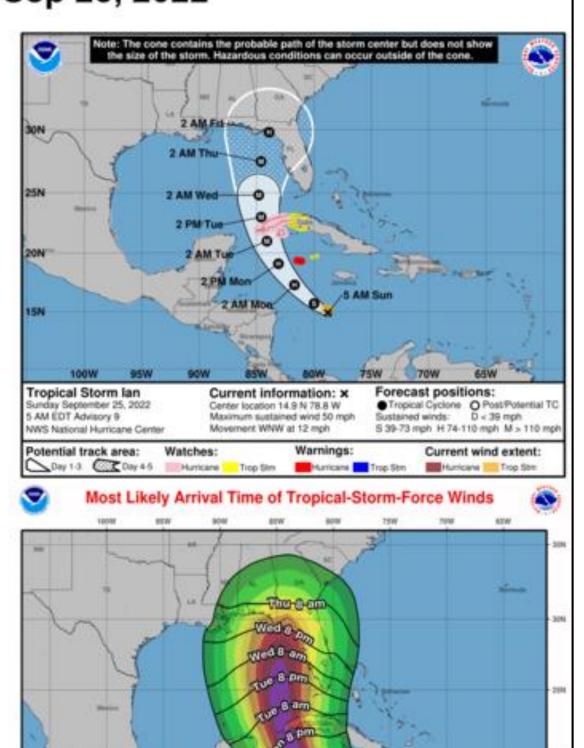


Tropical Analysis and Forecast Branch NWS National Hurricane Center



Key Messages for Tropical Storm Ian Advisory 9: 5:00 AM EDT Sun Sep 25, 2022

- 1. Ian is expected to produce heavy rainfall and instances of flash flooding and possible mudslides in areas of higher terrain, particularly over Jamaica and Cuba. Flash and urban flooding is possible with rainfall across the Florida Keys and Florida peninsula through mid week. Additional flooding on rivers across northern Florida and parts of the Southeast cannot be ruled out.
- Hurricane or tropical storm conditions are expected on Grand Cayman beginning early Monday.
- 3. Ian is forecast to be a major hurricane when it passes near or over western Cuba, and there is increasing confidence in a life-threatening storm surge and hurricane-force winds in portions of western Cuba beginning late Monday. Hurricane and tropical storm watches are now in effect for much of western Cuba.
- 4. Ian is expected to remain a major hurricane when it moves generally northward across the eastern Gulf of Mexico during the middle of the week, but uncertainty in the long-term track and intensity forecast is higher than usual. Regardless of lan's exact track and intensity, there is a risk of dangerous storm surge, hurricane-force winds, and heavy rainfall along the west coast of Florida and the Florida Panhandle by the middle of the week, and residents in Florida should ensure they have their hurricane plan in place, follow any advice given by local officials, and closely monitor updates to the forecast.



For more information go to hurricanes.gov

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

9/25/2022 8:47 AM www.nhc.noaa.gov

Storm Location () < 34 kt (39 mph) 5-day chance of receiving austained 54+ kt (36+ mph) winds

A 6 54-63 M (39-73 mg/k)



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