

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

**Winds – Extreme**

**Storm Surge – Extreme**

**Rainfall/Flash Flooding – Extreme**

**Tornadoes – Medium**

**Waves - Extreme**

# HURRICANE IAN BRIEFING

4:00 PM EDT

Tuesday, September 27, 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

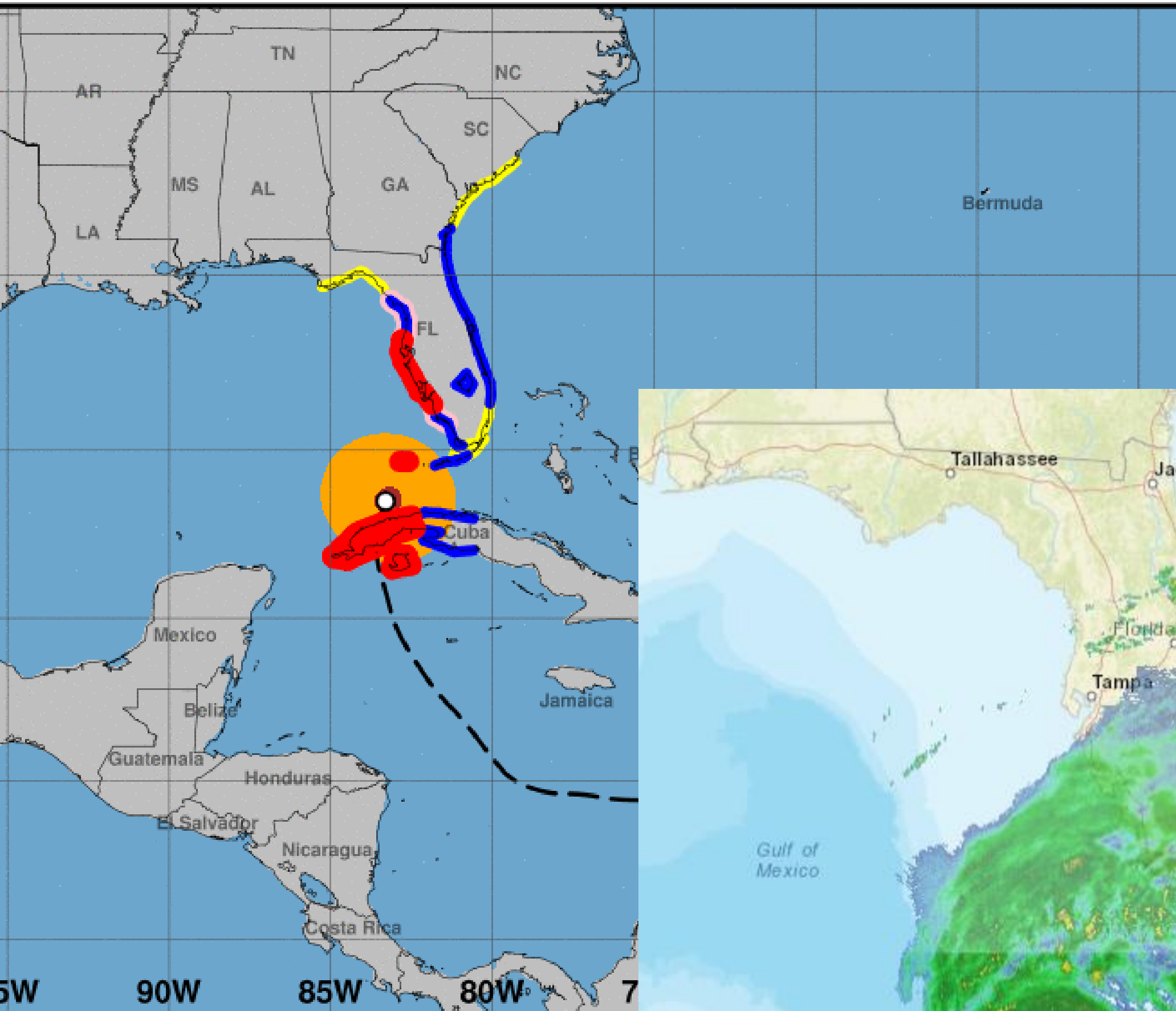
## Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

### Surface Wind Field of Hurricane Ian

Winds as of 200 PM EDT Tue Sep 27, 2022    Advisory Number 18A



**Warnings:**  
Hurricane Warning  
Tropical Storm Warning

**Sustained W:**  
Hurricane Force  
Tropical Storm



**...HURRICANE IAN GROWING STRONGER  
IN THE SOUTHEASTERN GULF OF  
MEXICO...**

SUMMARY OF 300 PM EDT...1900  
UTC...INFORMATION

LOCATION...23.7N 83.3W  
ABOUT 220 NM S OF SARASOTA FLORIDA  
MAXIMUM SUSTAINED WINDS...105 KT  
PRESENT MOVEMENT...N AT 9 KT  
PEAK SEAS 20 FT

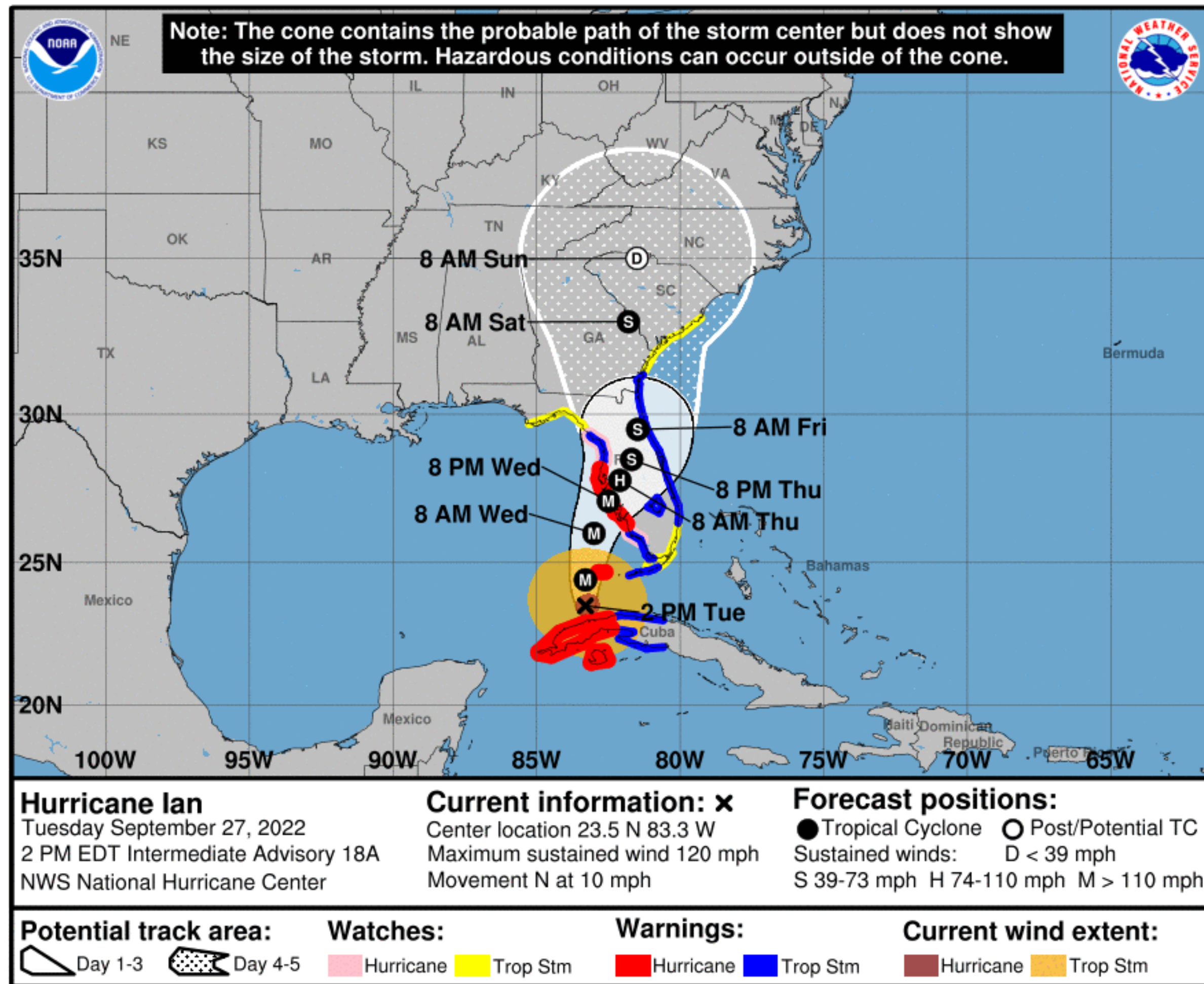
SIZE  
64 KT..... 30NE 25SE 20SW 20NW.  
50 KT..... 60NE 60SE 50SW 60NW.  
34 KT..... 120NE 120SE 100SW 120NW.  
12 FT SEAS.. 75NE 180SE 60SW 90NW.

# Forecast Information

## Hurricane 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 will continue toward the north with a slightly slower forward speed today, then turn **NNE** while slowing down even more on **Wednesday**
- Ian is expected to make landfall along the west coast of **Florida** peninsula between **Ft. Myers** and **Tampa**
- Track confidence is growing in the first 36 hours, although the roughly-parallel track makes it difficult to pinpoint exactly which areas will experience the most severe impacts
- Ian is expected to slow down as it nears the west-central Florida coast – this would prolong the storm surge, wind, rainfall, and wave impacts along the affected portions of the west coast of Florida
- 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

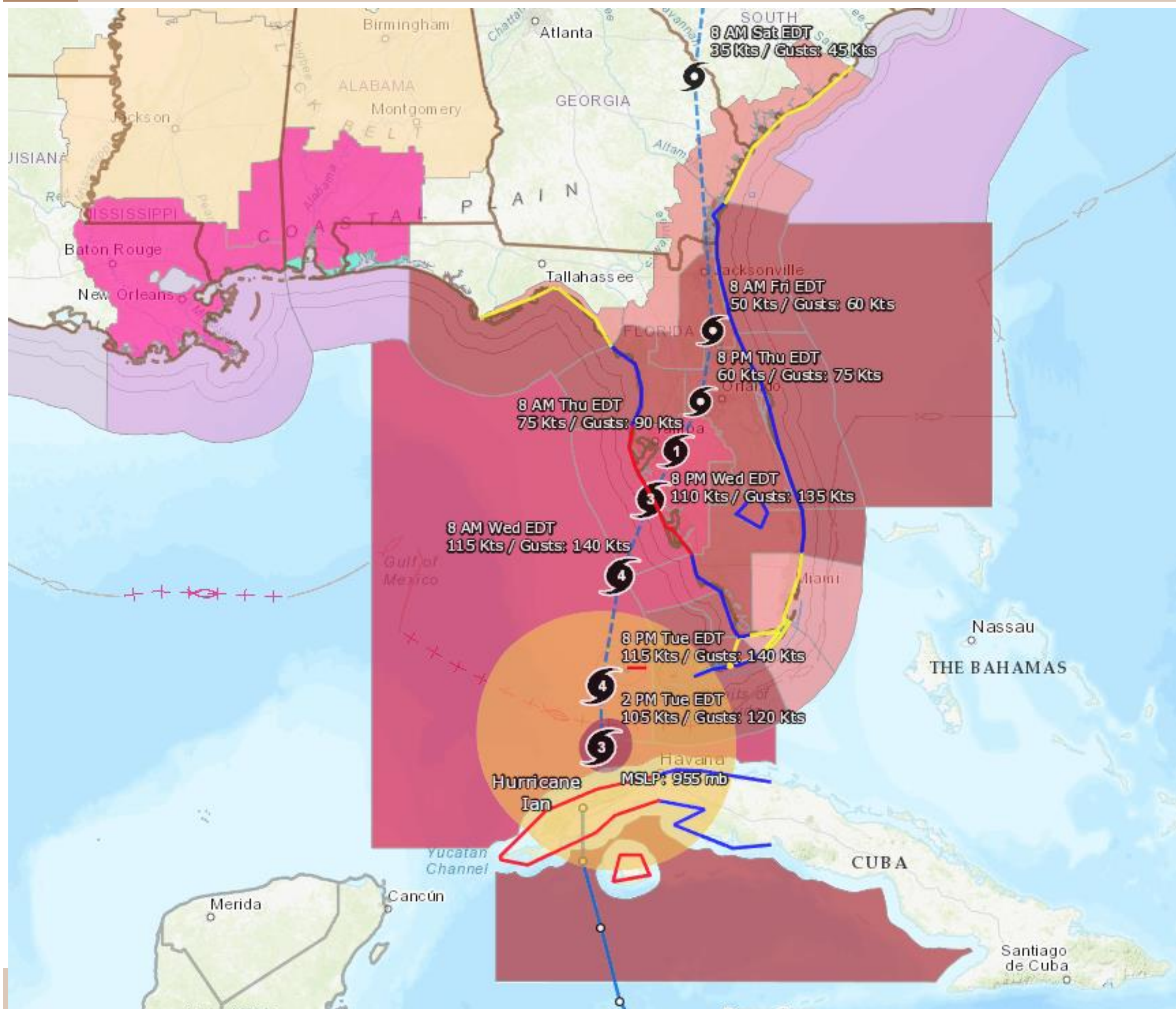
\*\* Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

# Hazards Map

## Hurricane Ian



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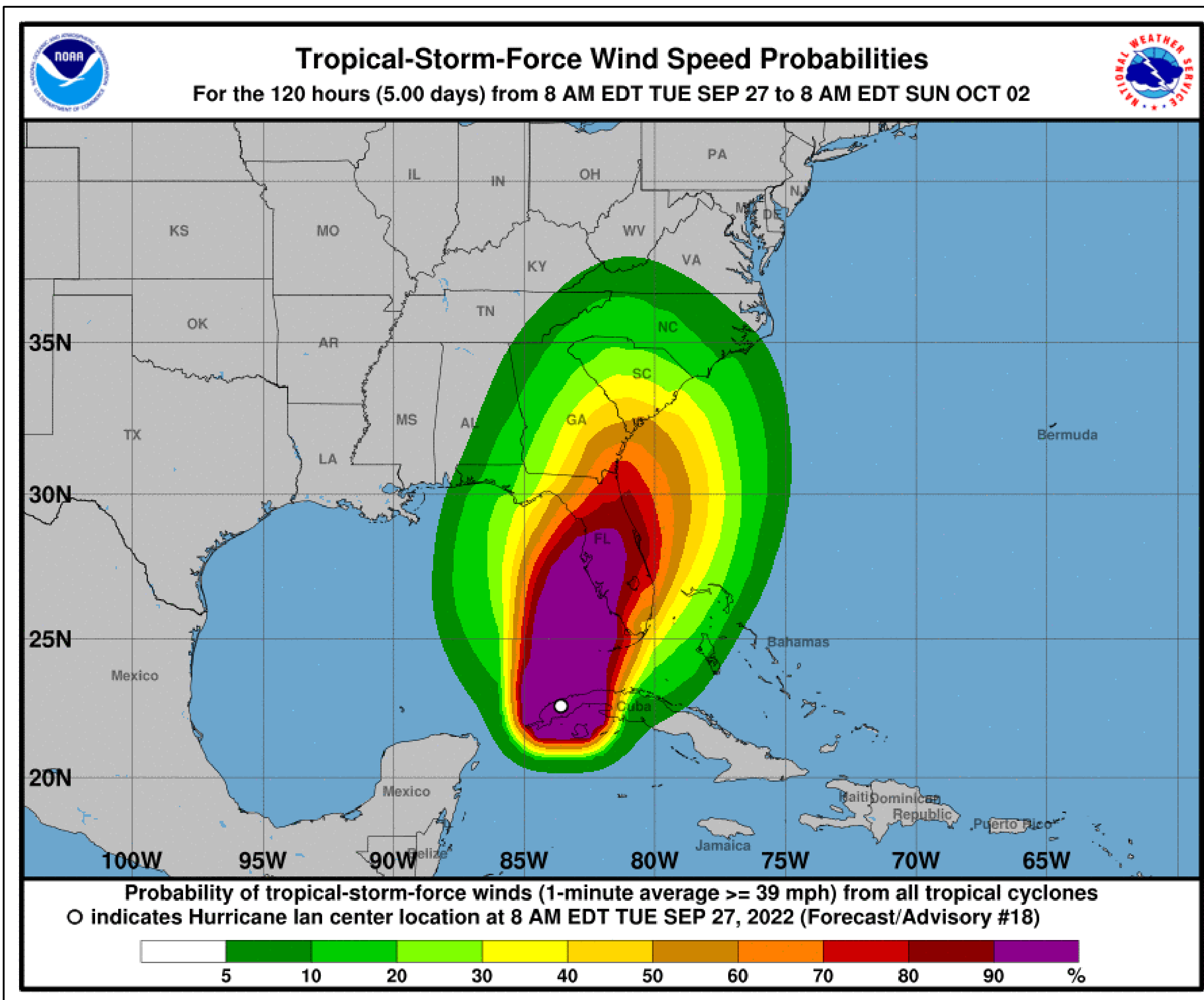
- <https://nowcoast.noaa.gov/>

# T.S. Wind Speed Probabilities

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



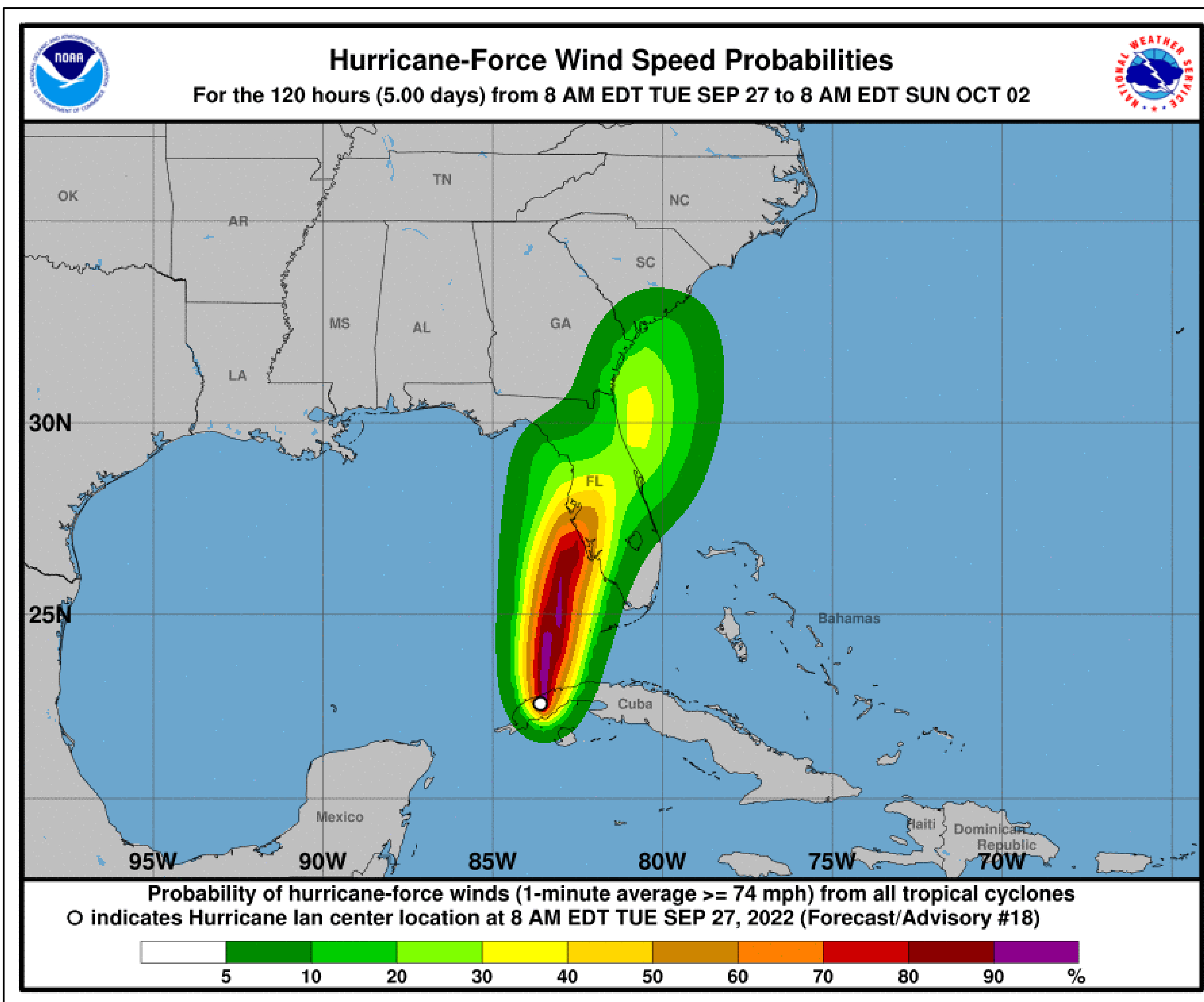
- **KEY WEST FL – 95%**
  - **NAPLES FL - 100%**
  - **FT MYERS FL - 95%**
  - **VENICE FL - 100%**
  - **TAMPA FL - 95%**
  - **CEDAR KEY – 75%**
  - **COLUMBIA – 30%**
  - **CHARLESTON - 50%**
  - **BEAUFORT - 55%**
  - **SAVANNAH – 55%**
  - **KINGS BAY 75%**
  - **MAYPORT – 75%**
  - **JACKSONVILLE – 70%**
  - **DAYTONA BEACH - 80%**
  - **COCOA BEACH – 85%**
  - **PATRICK AFB - 85%**
  - **FT PIERCE – 80%**
  - **W PALM BEACH – 70%**
  - **FT. LAUDERDALE – 65%**
  - **MIAMI FL - 50%**
  - **HOMESTEAD ARB – 50%**
  - **MARATHON FL - 75%**
- 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

Hurricane Ian



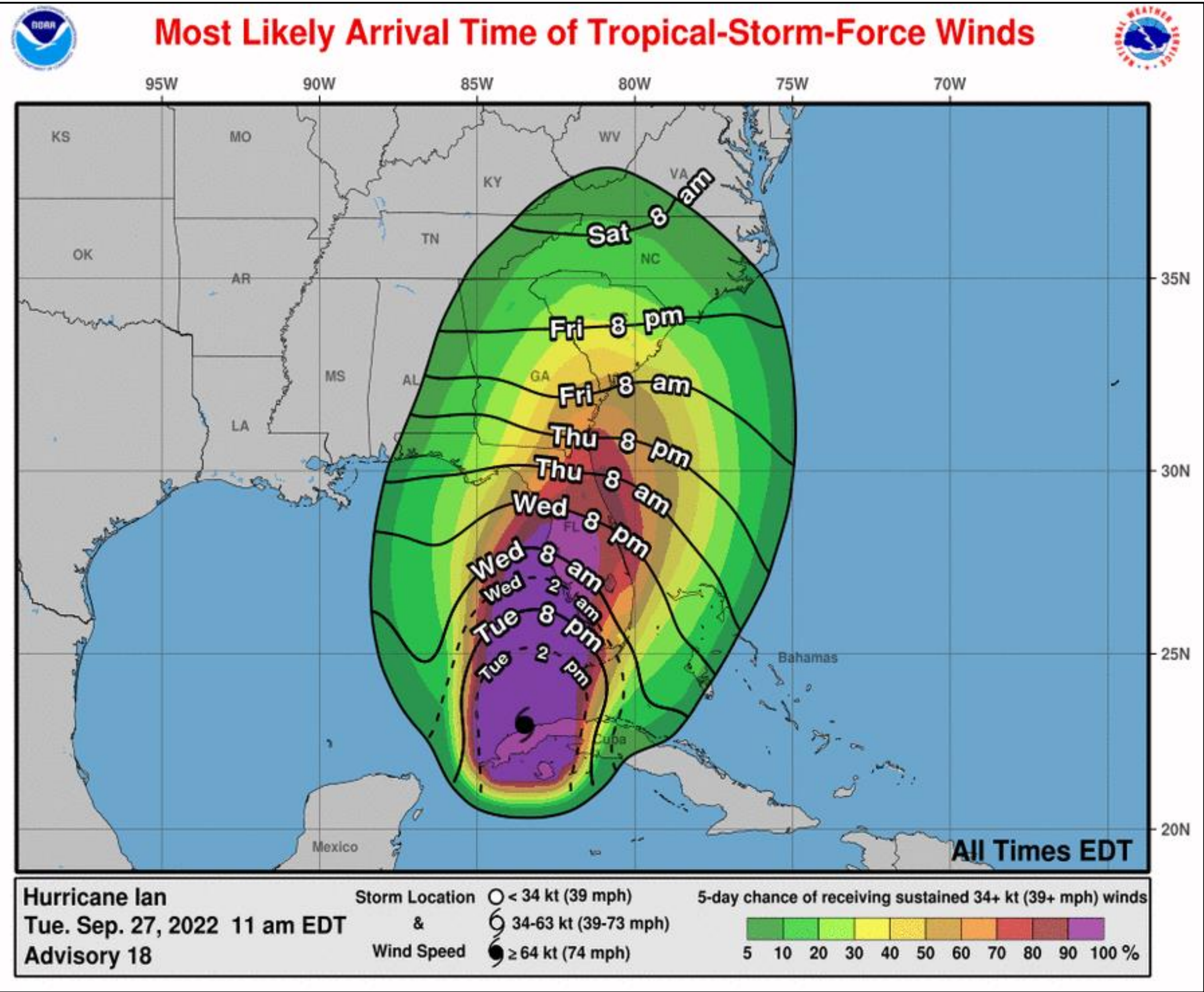
Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- **CHARLESTON – 10%**
- **BEAUFORT – 15%**
- **KINGS BAY – 20%**
- **MAYPORT – 25%**
- **JACKSONVILLE – 10%**
- **DAYTONA BEACH - 20%**
- **COCOA BEACH – 25%**
- **PATRICK AFB - 25%**
  
- **NAPLES – 30%**
- **FT MYERS – 40%**
- **VENICE – 70%**
- **TAMPA – 45%**
- **CEDAR KEY – 15%**
  
- 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.



## Hurricane Ian



- **Ft. Myers/Sarasota – Tonight**
- **Tampa to Ft. Lauderdale – Wednesday morning**
- **Big Bend to Daytona Beach/Jacksonville – Thursday morning**
- **Georgia coast – 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%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.

# Time of Departure

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## **MOST LIKELY**

- **KEY WEST FL – Wednesday afternoon**
- **NAPLES FL - Thursday morning**
- **FT MYERS FL - Thursday morning**
- **VENICE FL - Thursday afternoon**
- **TAMPA FL - Thursday night**
- **CEDAR KEY – Friday morning**

## **LATEST REASONABLE**

- **KEY WEST FL – Thursday afternoon**
- **NAPLES FL - Friday morning**
- **FT MYERS FL - Friday morning**
- **VENICE FL - Friday afternoon**
- **TAMPA FL - Friday afternoon**
- **CEDAR KEY – Friday night**

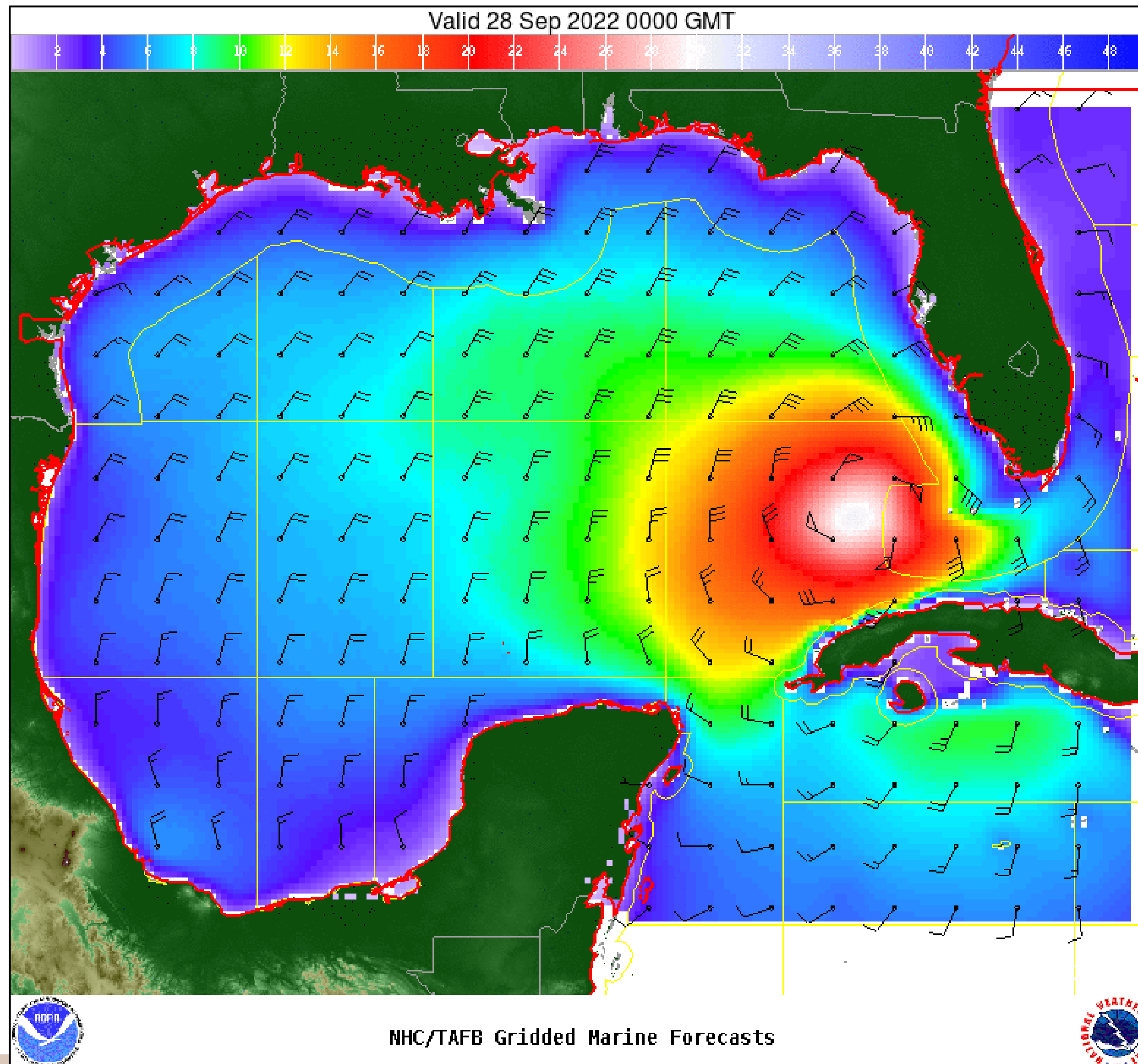
Times locally when sustained winds diminish below tropical storm force (34+ kt)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



This Evening's Forecast

8pm EDT Tuesday September 27th

Peak Winds: 105 kt

Peak Seas: 22 ft

■ Wave heights are in feet



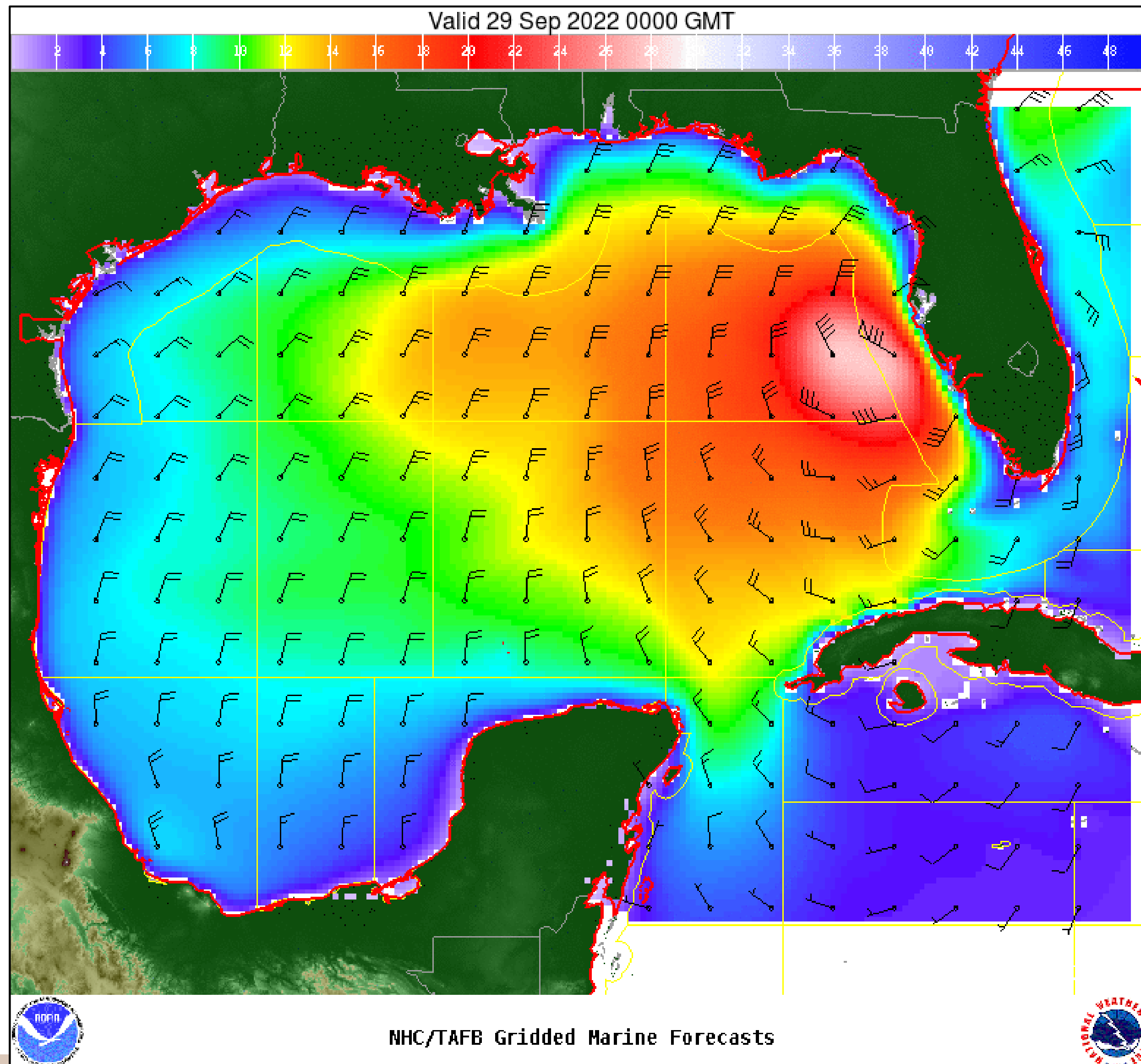
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



## 24 Hour Forecast

8pm EDT Wednesday, September 28th

Peak Winds: 110 kt

Peak Seas: 23 ft

- Wave heights are in feet



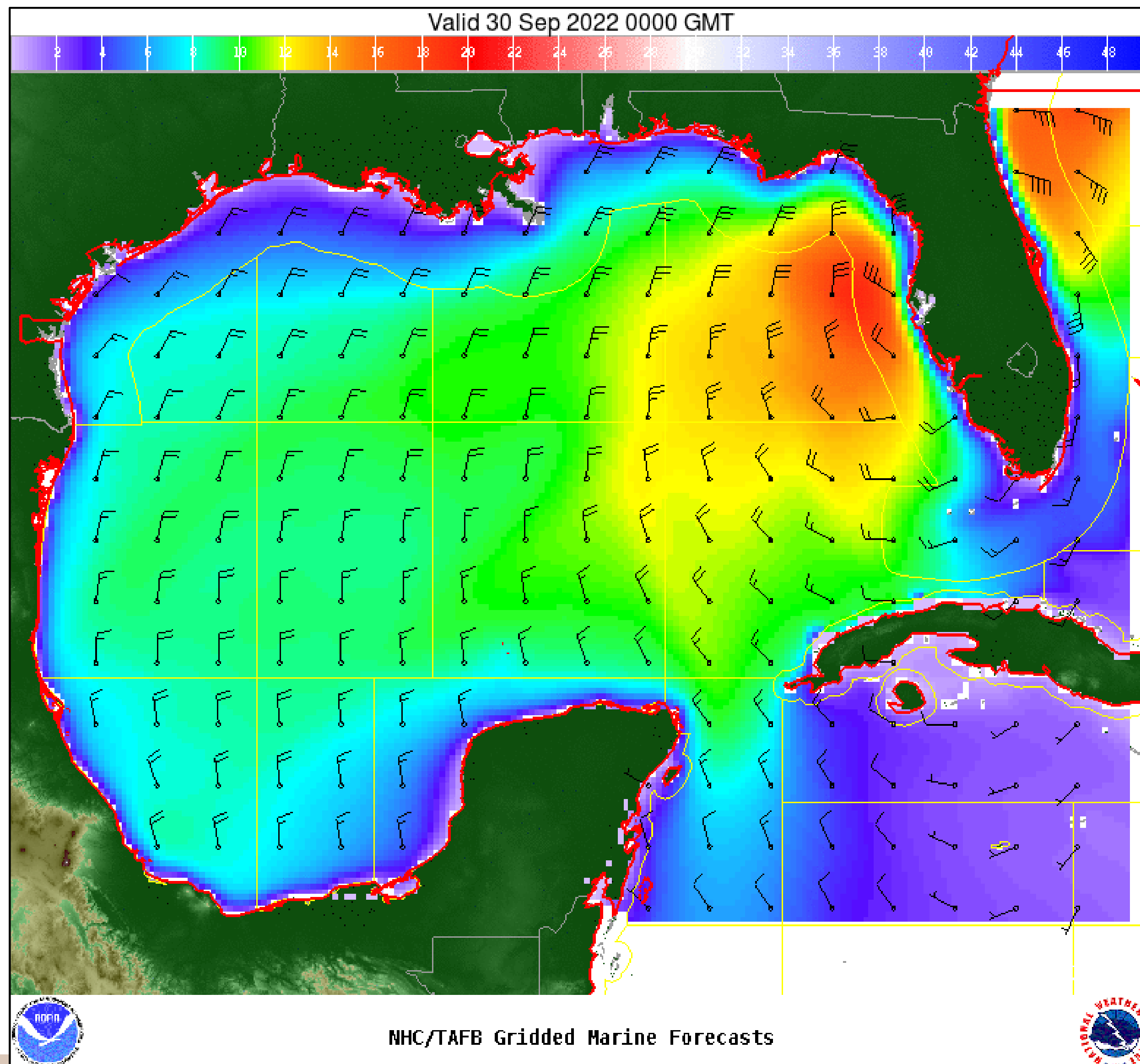
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



48 Hour Forecast

8pm EDT Thursday September 29th

Peak Winds: 60 kt

Peak Seas: 23 ft (in Gulf of Mexico)

■ Wave heights are in feet



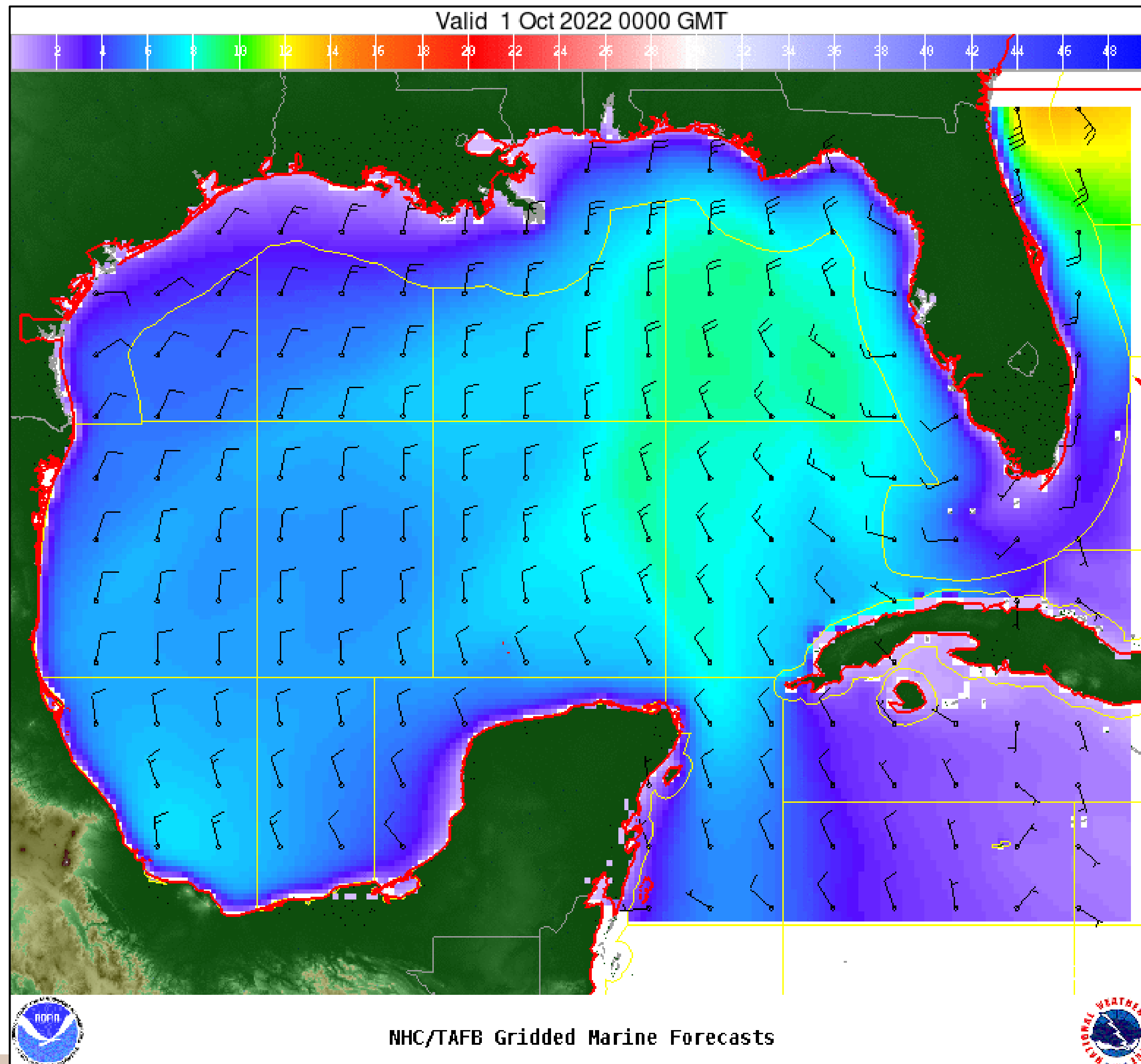
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



## 72 Hour Forecast

8pm EDT Friday September 30th

Peak Winds: 30 kt (in the Gulf)

Peak Seas: 10 ft (in the Gulf)

- Wave heights are in feet



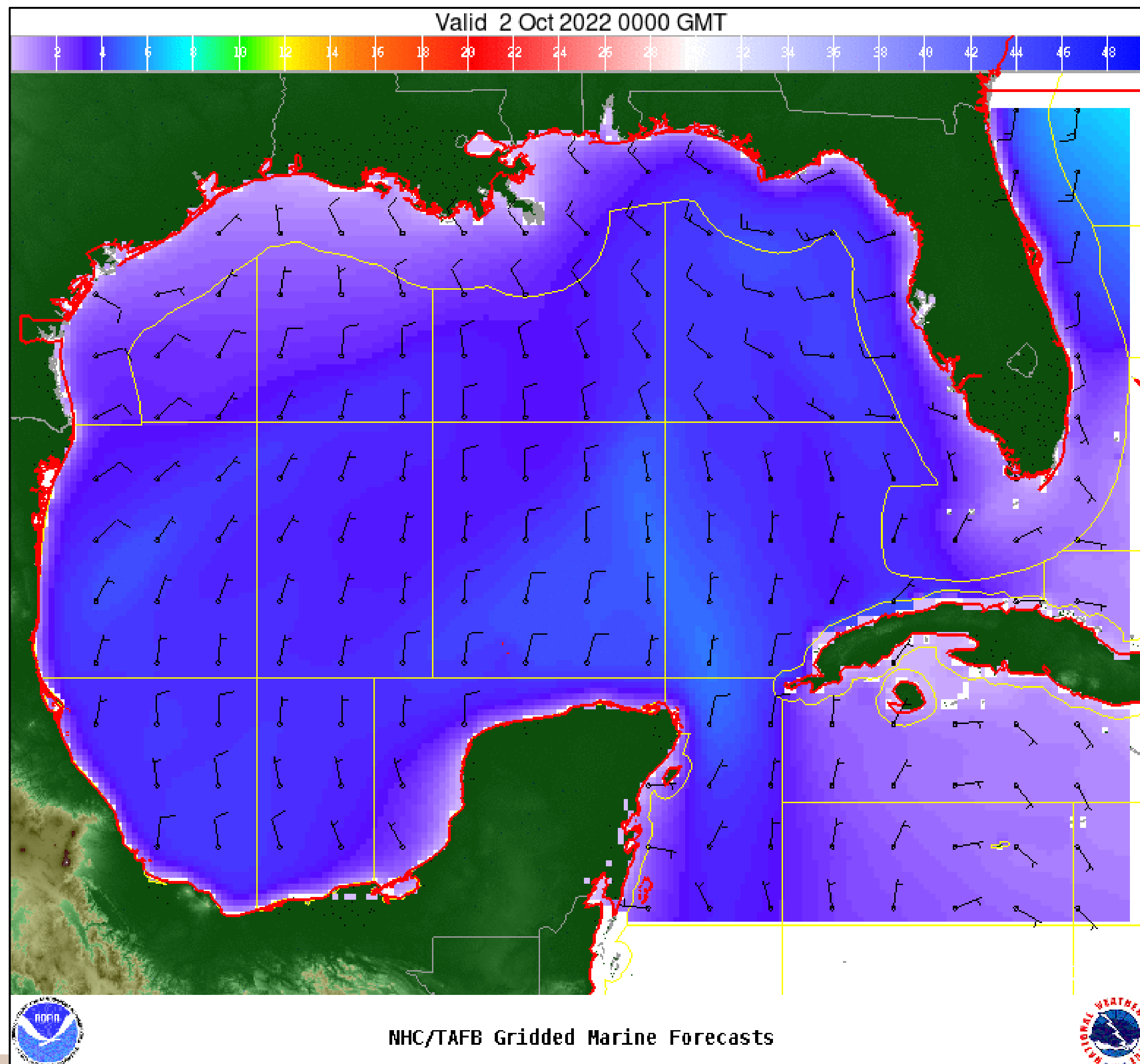
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



96 Hour Forecast

8pm EDT Saturday October 1st

Peak Winds: 15 kt (in Gulf)

Peak Seas: 6 ft (in Gulf)

■ Wave heights are in feet



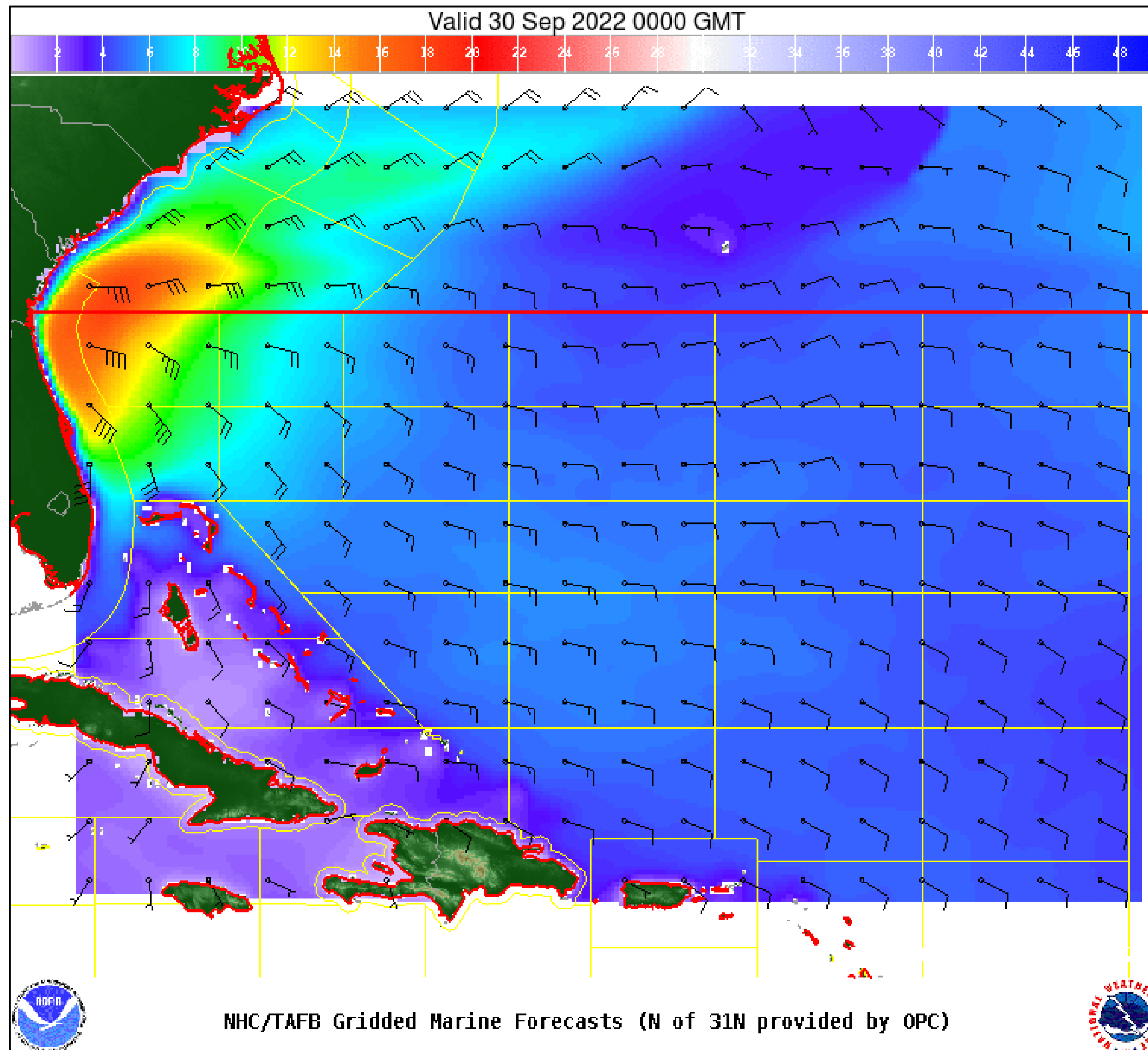
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



48 Hour Forecast

8am EDT Thursday September 29

Peak Winds: 60 kt

Peak Seas: 15 ft

■ Wave heights are in feet



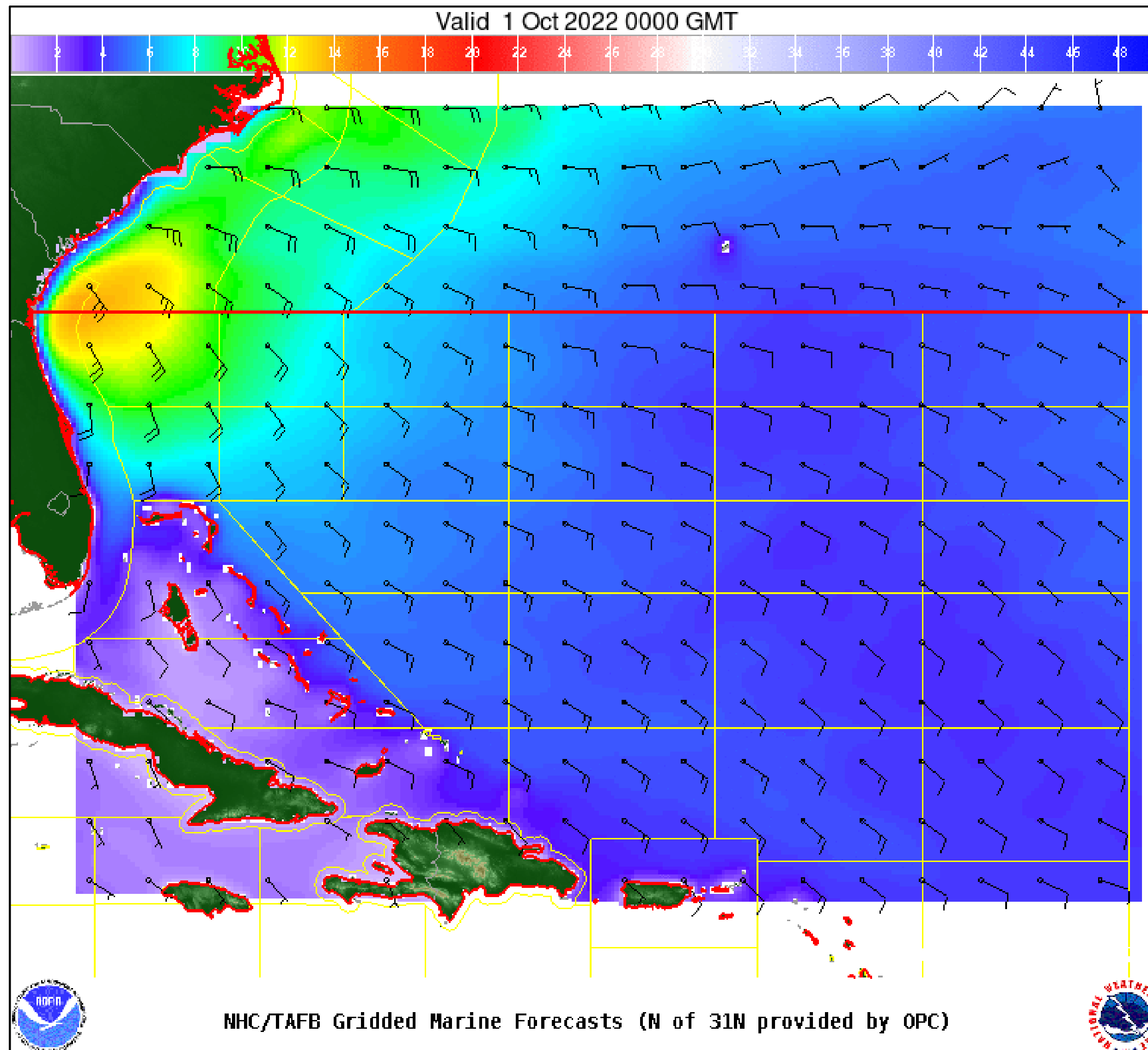
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



72 Hour Forecast

8pm EDT Friday September 30

Peak Winds: 40 kt

Peak Seas: 13 ft

■ Wave heights are in feet



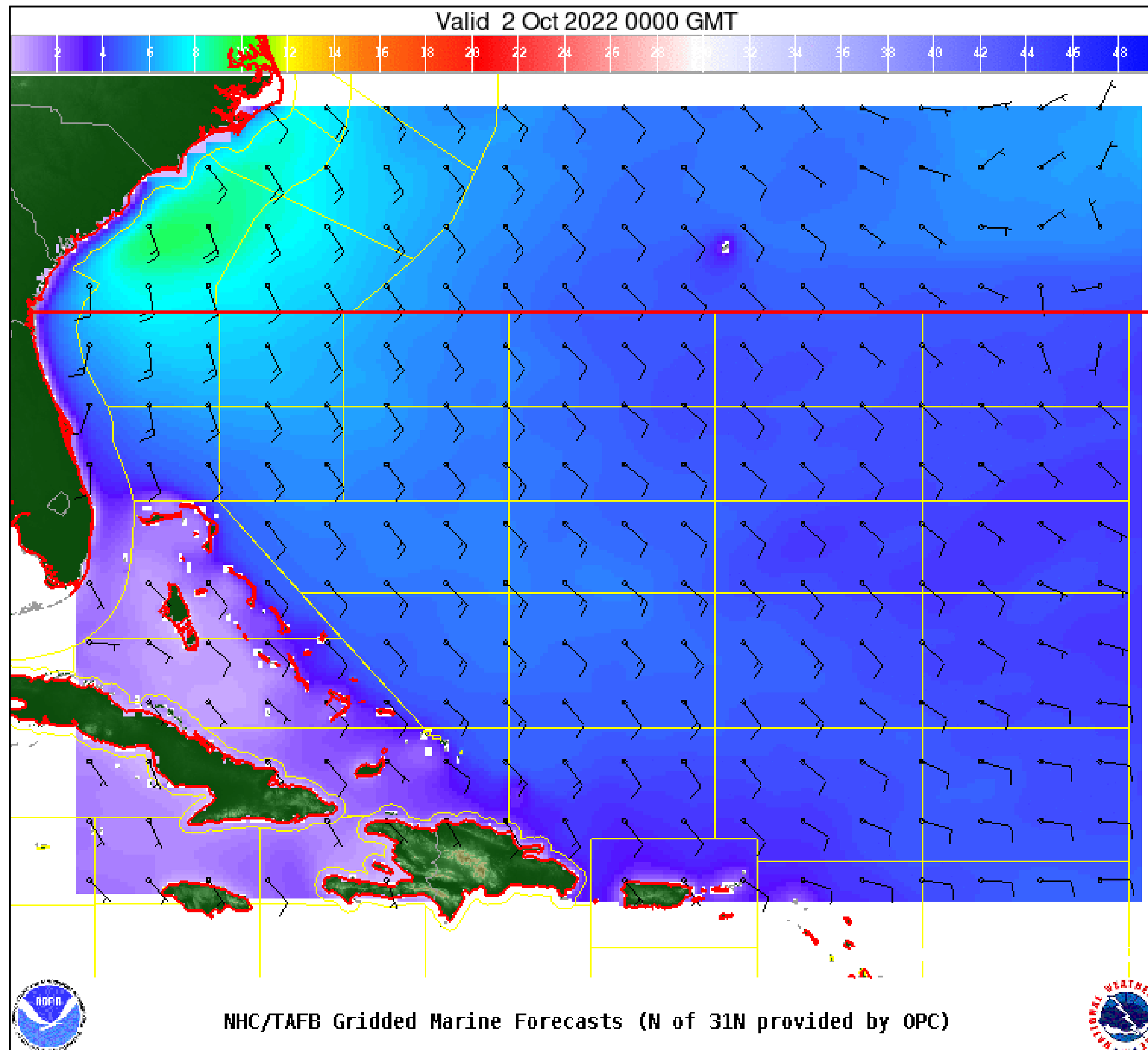
Significant Wave Height (ft)

# Wind And Waves

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



96 Hour Forecast

8pm EDT Saturday October 1st

Peak Winds: 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet



Significant Wave Height (ft)

# Storm Surge Watches and Warnings



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## Hurricane Ian



**Storm Surge Warning** is in effect for...

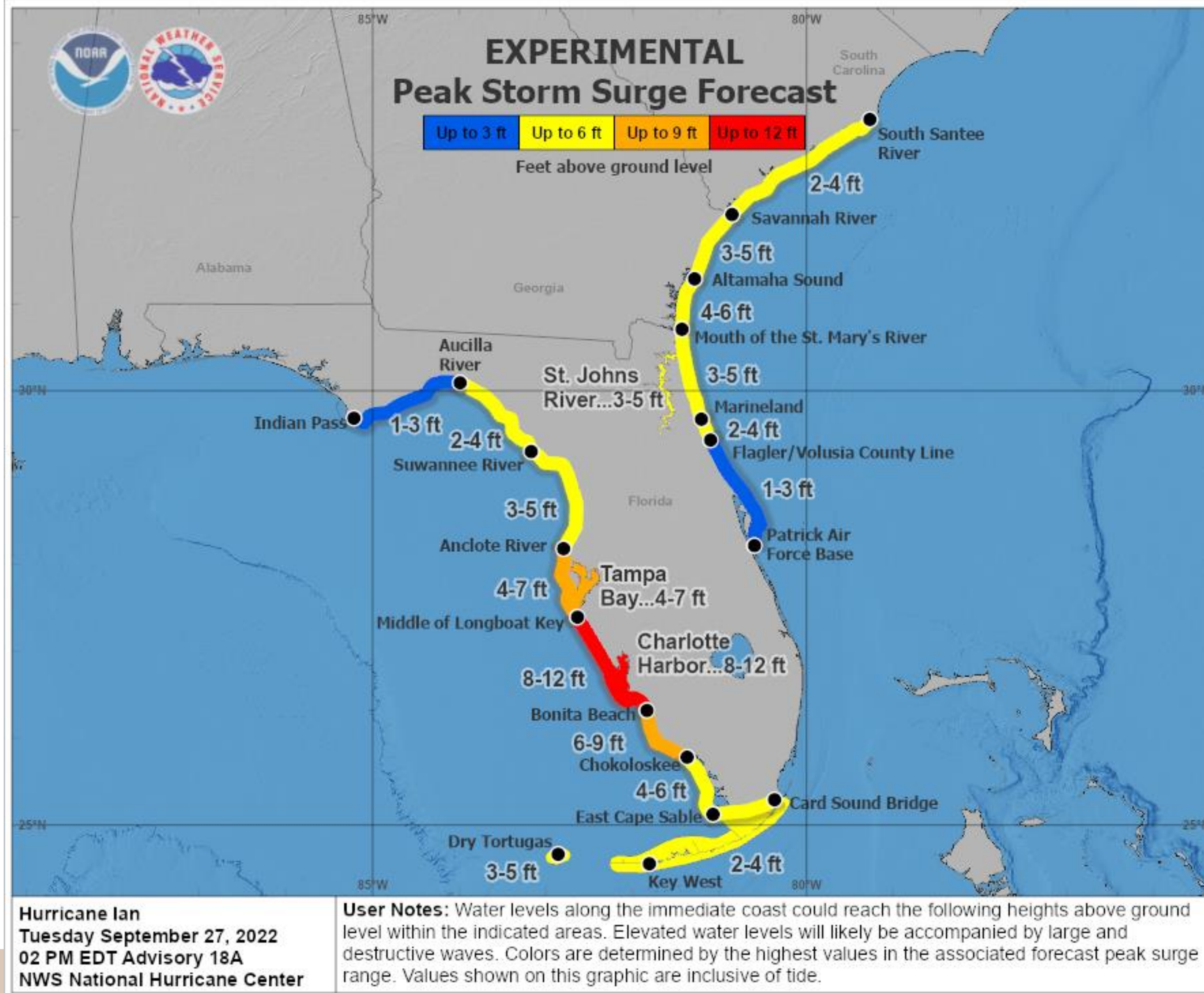
- \* Suwannee River southward to Flamingo including Tampa Bay and Charlotte Harbor
- \* Dry Tortugas
- \* Marineland to the mouth of the St. Mary's River including the St. Johns River

# Potential Peak Storm Surge

Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- Potential storm surge is represented in feet above the ground at any given point.
- The values shown represent the peak storm surge at the immediate coast line.

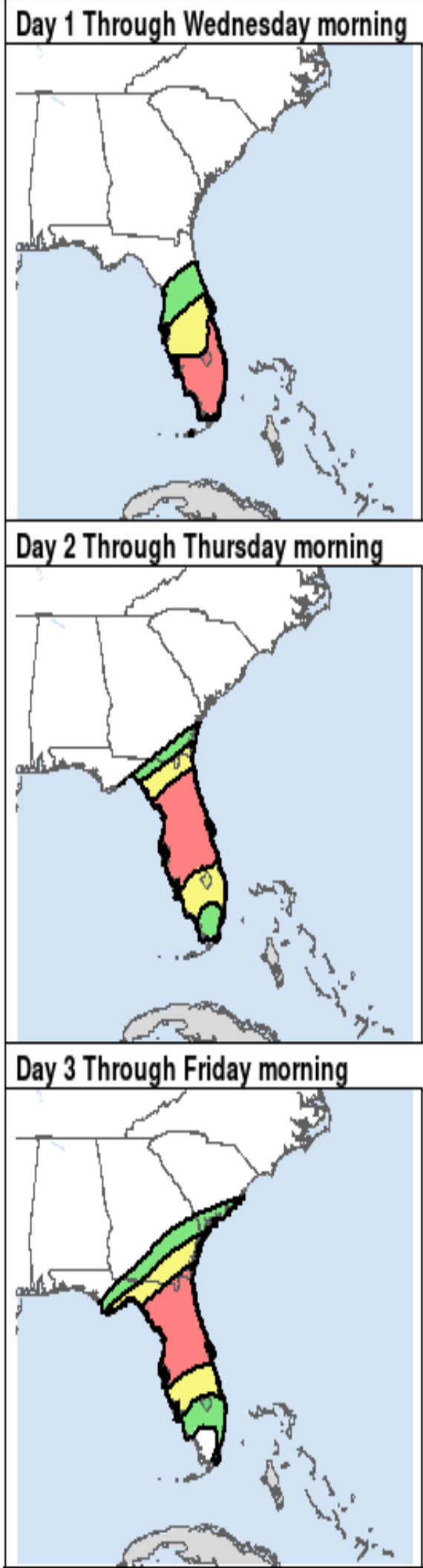
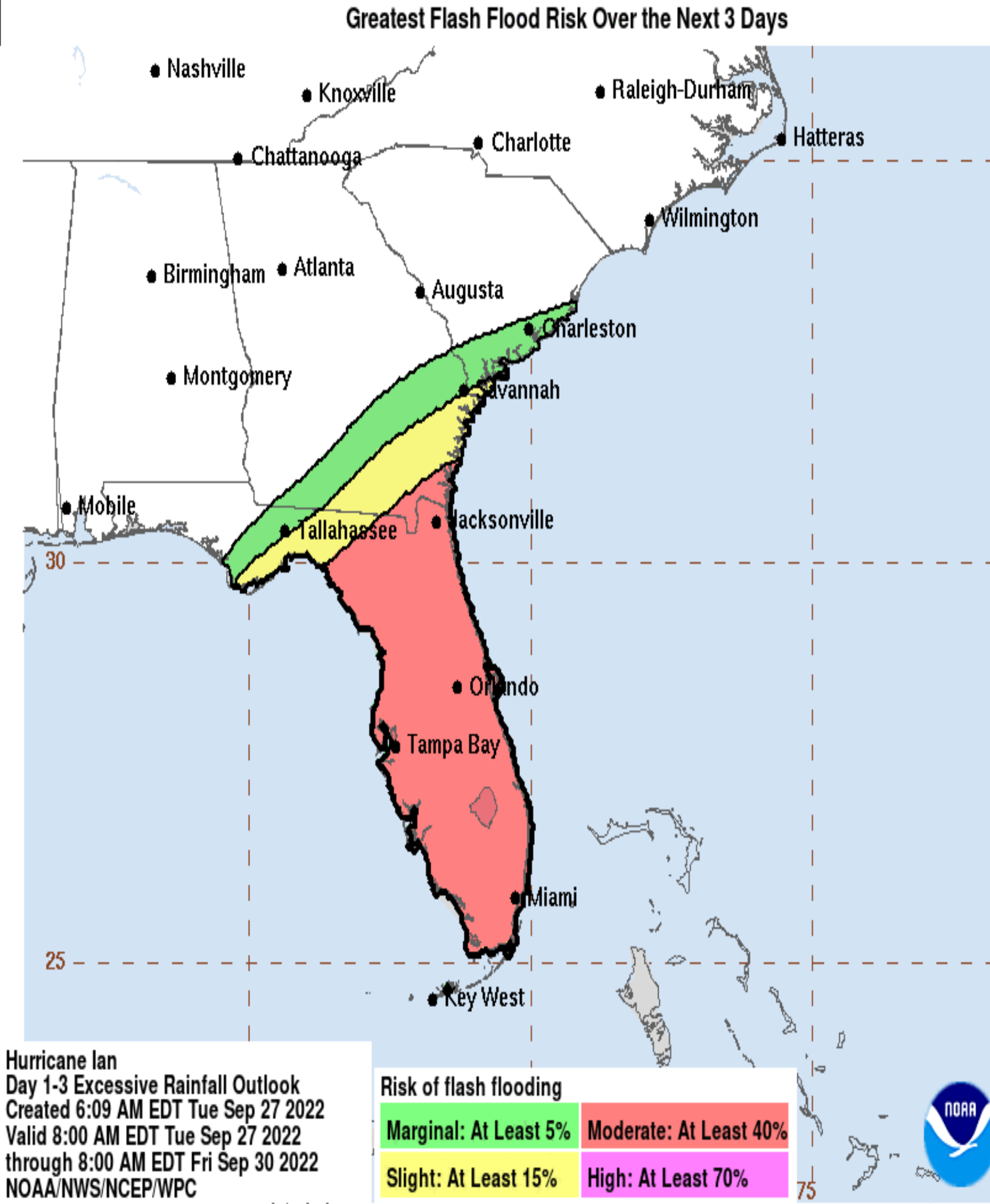
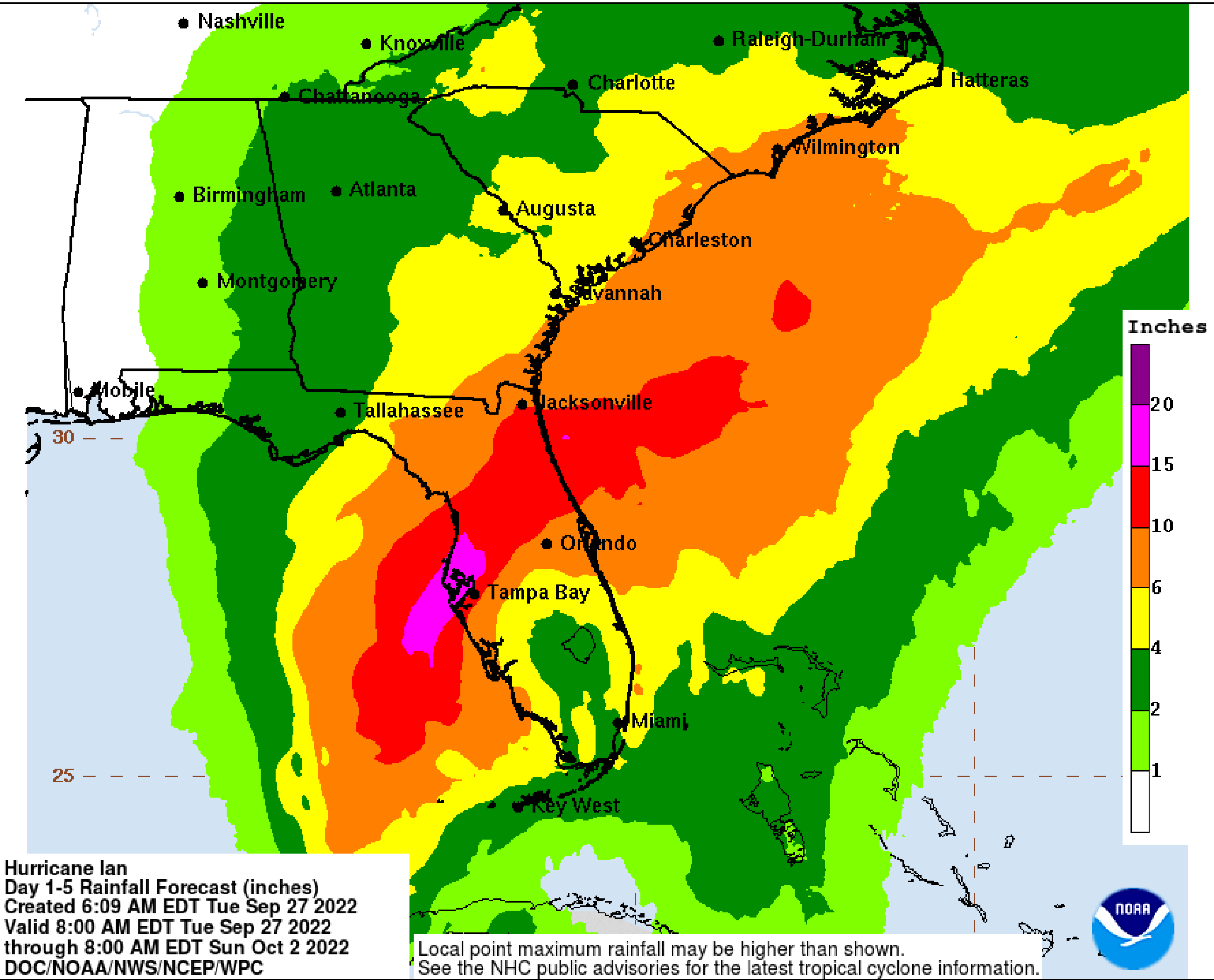
# Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Hurricane Ian

Images from NWS Weather Prediction Center



Valid through Sunday morning

Valid through Friday morning

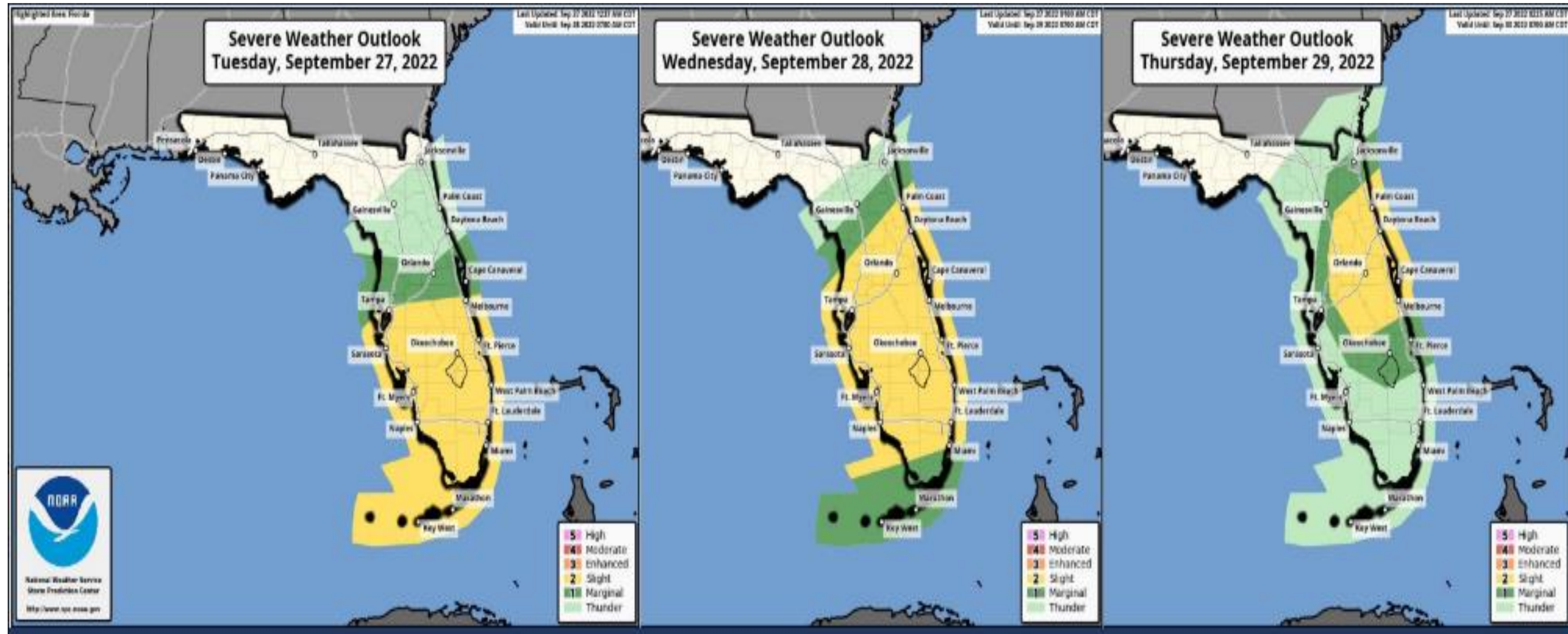
# Tornado Outlook

Hurricane Ian

Image from NWS Storm Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center





Potential for Several Tornadoes in the area in yellow

# Key Messages

## Hurricane Ian



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center




### Key Messages for Hurricane Ian

Advisory 18: 11:00 AM EDT Tue Sep 27, 2022

1. Life-threatening storm surge, hurricane-force winds, flash floods and possible mudslides are expected to continue in portions of western Cuba today. Devastating wind damage is expected near the core of Ian.
2. Life-threatening storm surge looks increasingly likely along much of the Florida west coast where a storm surge warning is in effect, with the highest risk from Fort Myers to the Tampa Bay region. Residents in these areas should listen to advice given by local officials and follow evacuation orders if made for your area.
3. Hurricane-force winds are expected in the hurricane warning area in southwest and west-central Florida beginning Wednesday morning with tropical storm conditions expected by this evening. Residents should rush all preparations to completion today.
4. Heavy rainfall will increase across the Florida Keys and south Florida today, spreading into central and northern Florida tonight and Wednesday, into the Southeast U.S. by Thursday and Friday, likely causing flash, urban, and small stream flooding. Considerable flooding is expected across central Florida into southern Georgia and coastal South Carolina, with widespread, prolonged moderate to major river flooding expected across central Florida.

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



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.


**Hurricane Ian**  
Tuesday September 27, 2022  
11 AM EDT Advisory 18  
NWS National Hurricane Center

**Current information: x**  
Center location 23.0 N 83.5 W  
Maximum sustained wind 115 mph  
Movement N 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**



**Hurricane Ian**  
Tue. Sep. 27, 2022 11 am EDT  
Advisory 18

Storm Location ○ = 34 kt (39 mph)  
● = 54-63 kt (39-73 mph)  
● = 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds  
5 10 20 30 40 50 60 70 80 90 100 %

Wind Speed

All Times EDT

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

**Winds – Extreme**

**Storm Surge – Extreme**

**Rainfall/Flash Flooding – Extreme**

**Tornadoes – Medium**

**Waves - Extreme**

- **Marine Key Messages:**
- Seas in SE Gulf will build to 30-35 ft by tomorrow morning, but diminish Friday night and Saturday morning
- Seas in Atlantic offshore of Georgia/South Carolina will build to 15 ft on Thursday



# HURRICANE IAN 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)*



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