

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

**Winds – High**

**Storm Surge – Moderate**

**Rainfall/Flash Flooding – Moderate**

**Tornadoes – Moderate**

**Waves - High**

# TROPICAL STORM NICOLE BRIEFING



4:00 PM EST

Wednesday, November 9, 2022

Prepared by:

**Scott Stripling**

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*





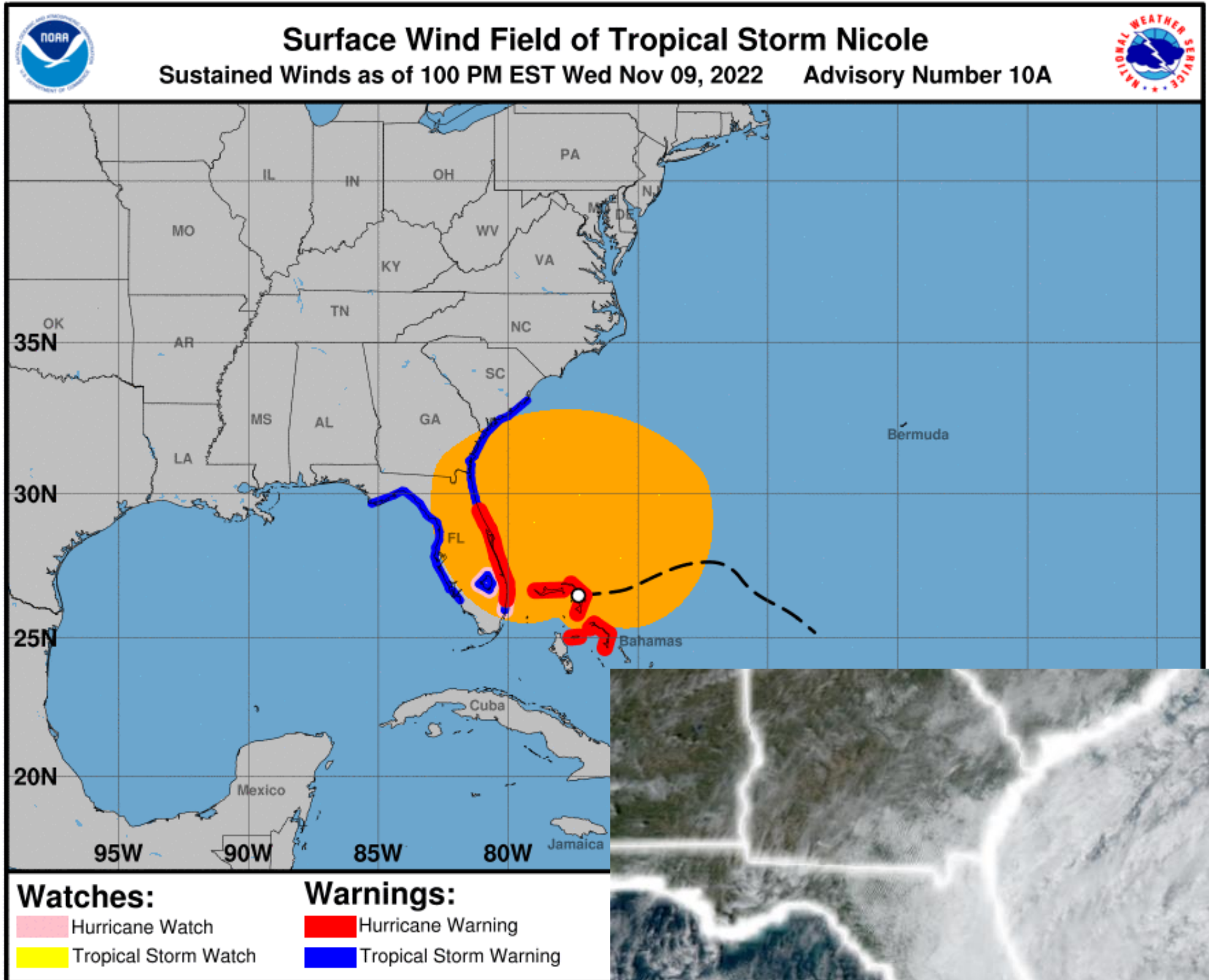
360NE 90SE 60SW 400NW  
600NE 180SE 210SW 390NW

# Situation Overview



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## Tropical Storm Nicole

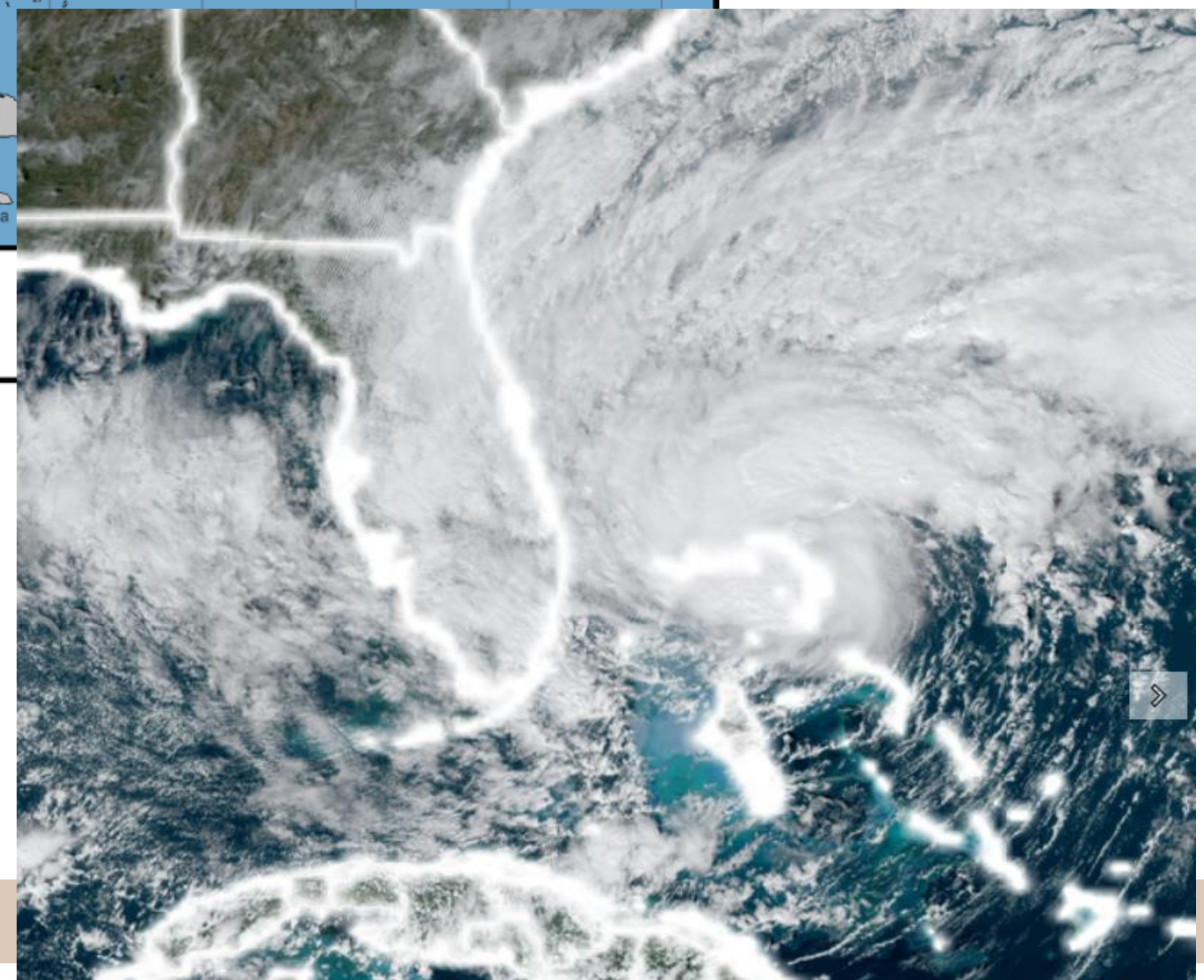


**...CENTER OF NICOLE PASSES OVER GREAT ABACO...**

Summary Information as of 1:00 PM EST...

LOCATION...26.5N 77.3W  
 ABOUT 150 NM E OF WEST PALM BEACH FL  
 MAXIMUM SUSTAINED WINDS...60 KT  
 PEAK SEAS...33 FT  
 PRESENT MOVEMENT...WSW OR 265 DEGREES AT 10 KT  
 MINIMUM CENTRAL PRESSURE...985 MB

SIZE:  
 34 KT WIND RADII: 360NE 90SE 60SW 390NW  
 12 FT SEA RADII: 600NE 180SE 210SW 390NW



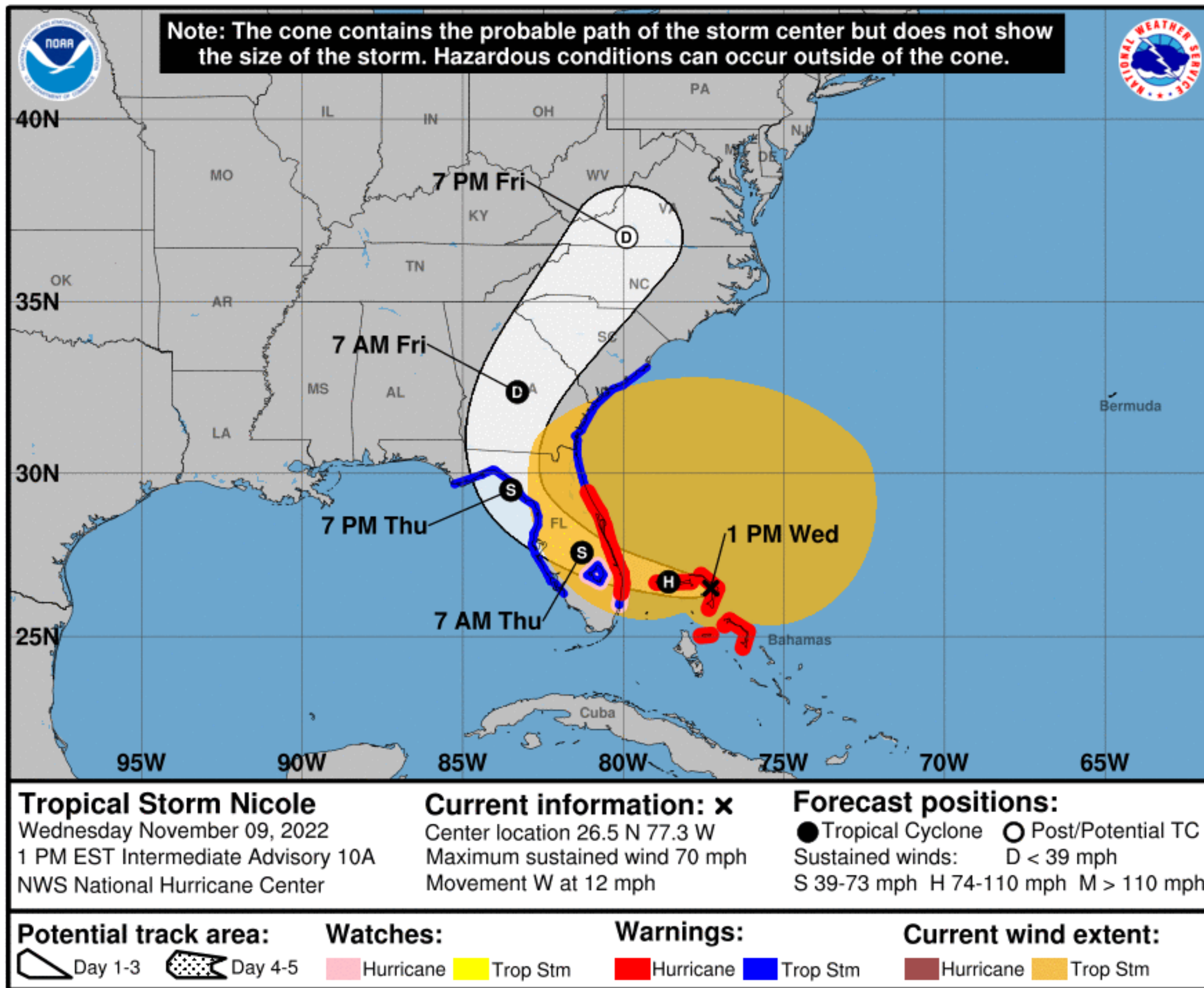


# Forecast Information



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NWS National Hurricane Center

## Tropical Storm Nicole



- Tropical Storm Nicole is forecast to move WNW tonight and gradually turn to the N across the Florida Big Bend by Thu night.
- Nicole will make landfall as a high end tropical storm or Cat I hurricane tonight in the Ft Pierce-Palm Beach area.
- However, wind, surge, and wave impacts will extend far to the N of the landfall location.
- Nicole will weaken over land on Thursday, however tropical storm conditions are still possible over much of the Florida Gulf coast.
- Current center forecast positions through the next 3 days illustrated by dots
- White swath of potential track error added to each side of the forecast track through day 3

\*\* 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.

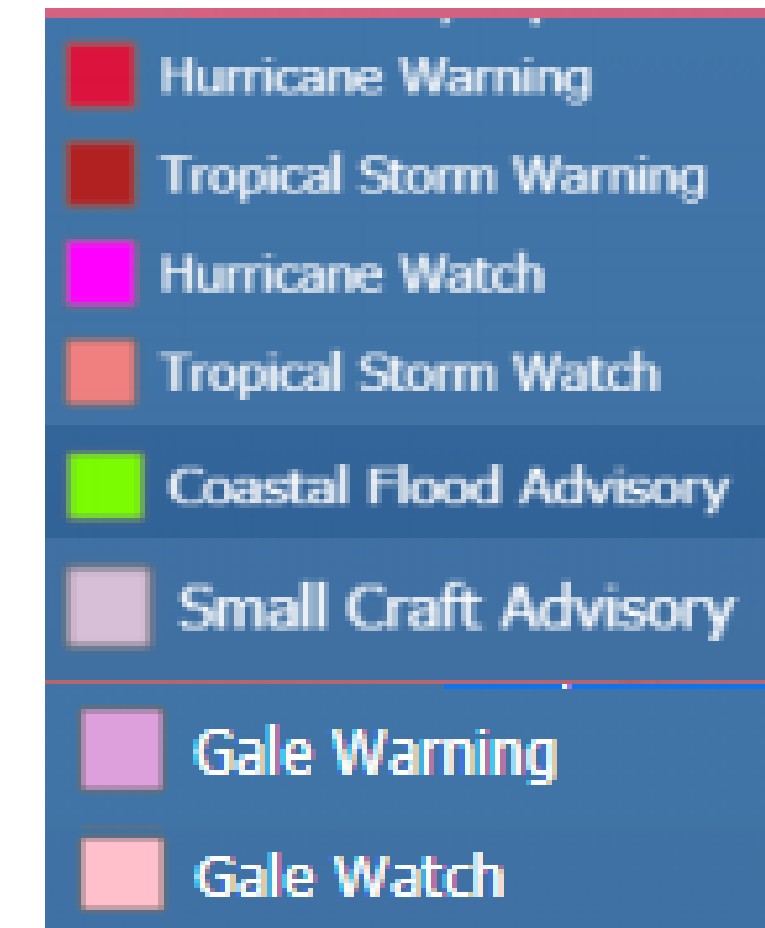
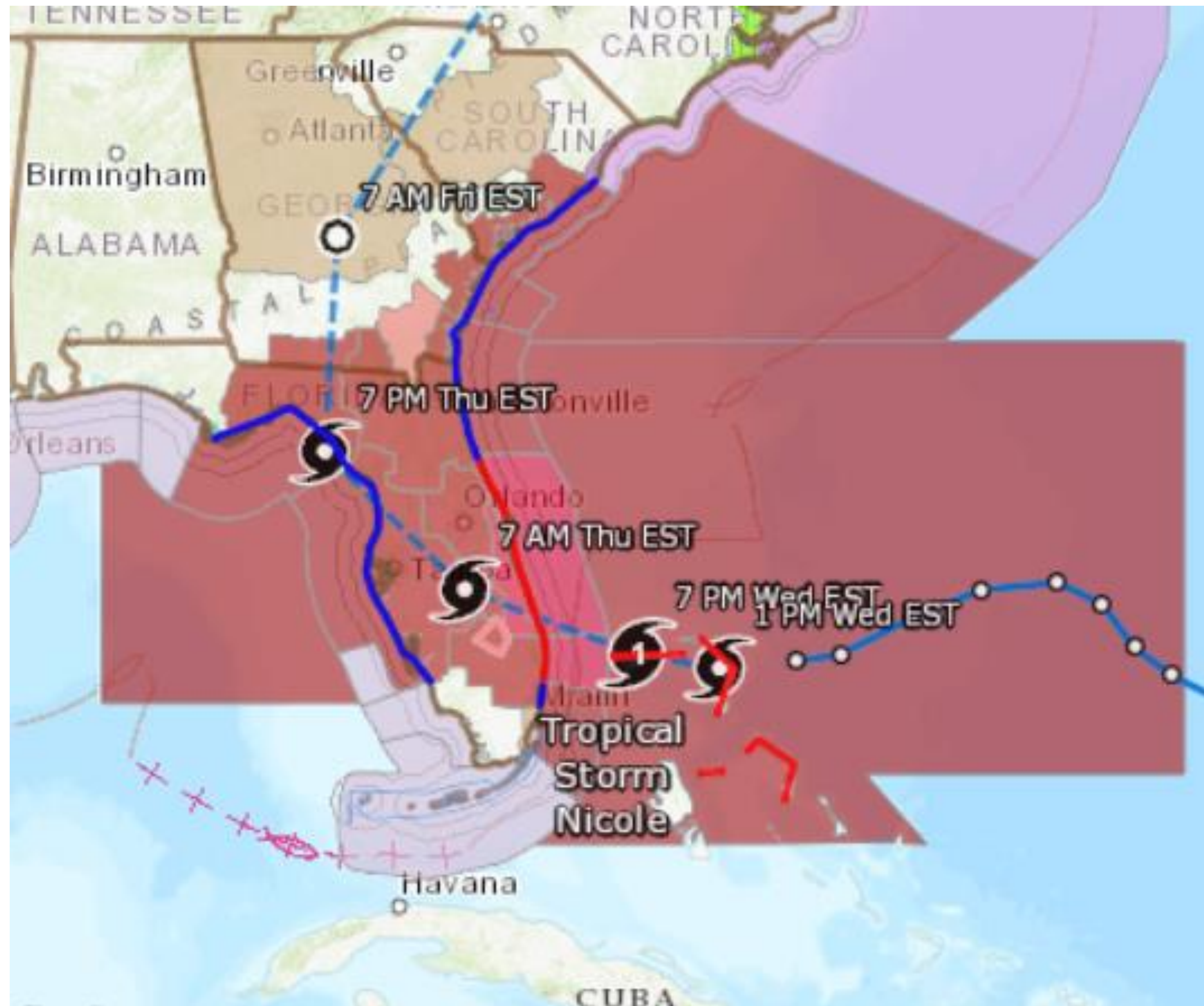


# Hazards Map

## Tropical Storm Nicole



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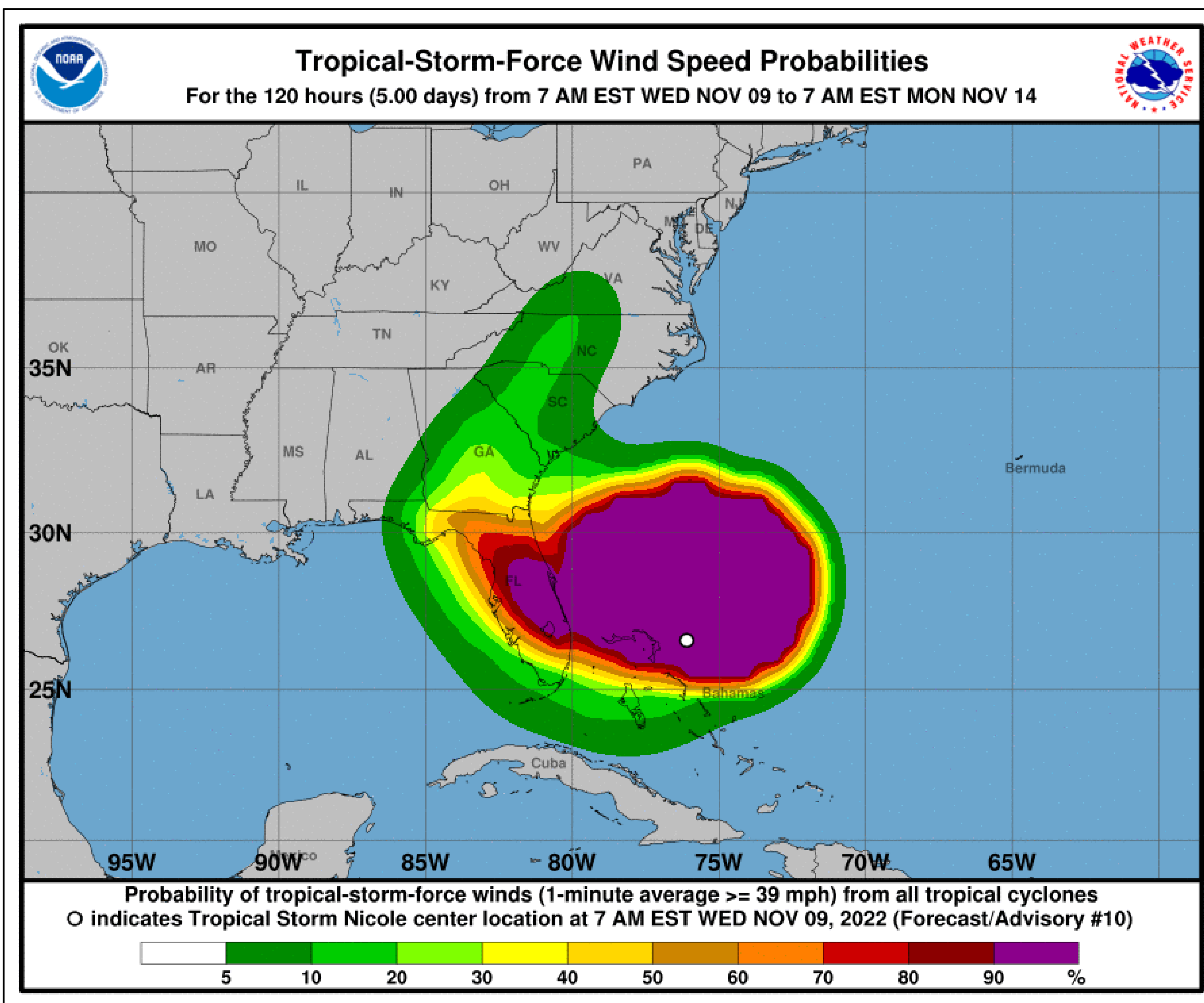
- <https://nowcoast.noaa.gov/>

# T.S. Wind Speed Probabilities

## Tropical Storm Nicole



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- Miami – 30%
- Ft. Lauderdale – 50%
- Palm Beach – 80%
- Ft. Pierce – 100%
- Patrick AFB – 95%
- Cocoa Beach – 95%
- Daytona Beach – 95%
- Jacksonville – 50%
- Mayport – 45%
- Kings Bay – 40%

- St. Marks – 55%
- Cedar Key – 70%
- Tampa – 65%
- Venice – 35%
- Ft. Myers – 35%
- Naples – 25%

- 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.

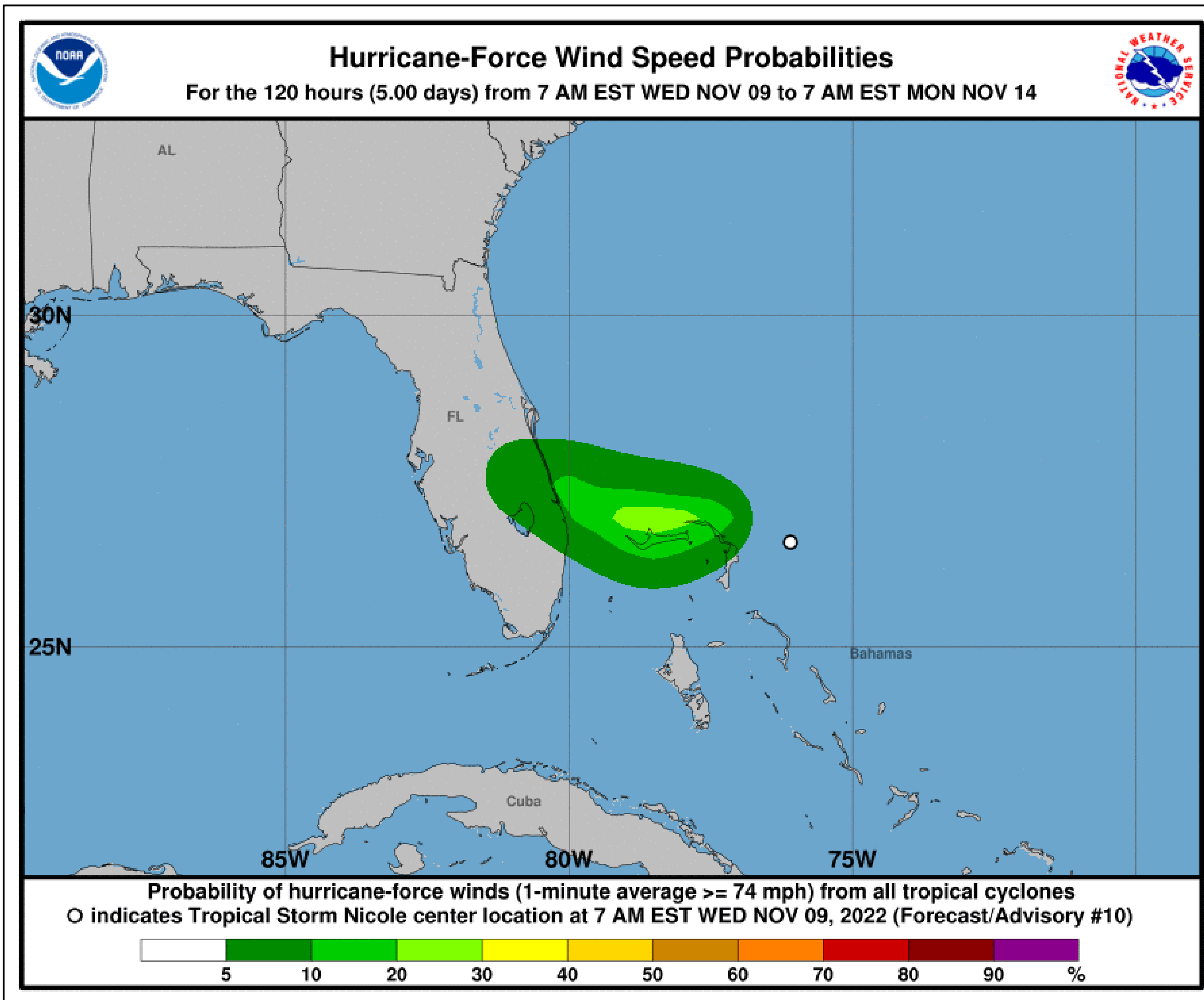


# Hurricane Wind Speed Probabilities



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

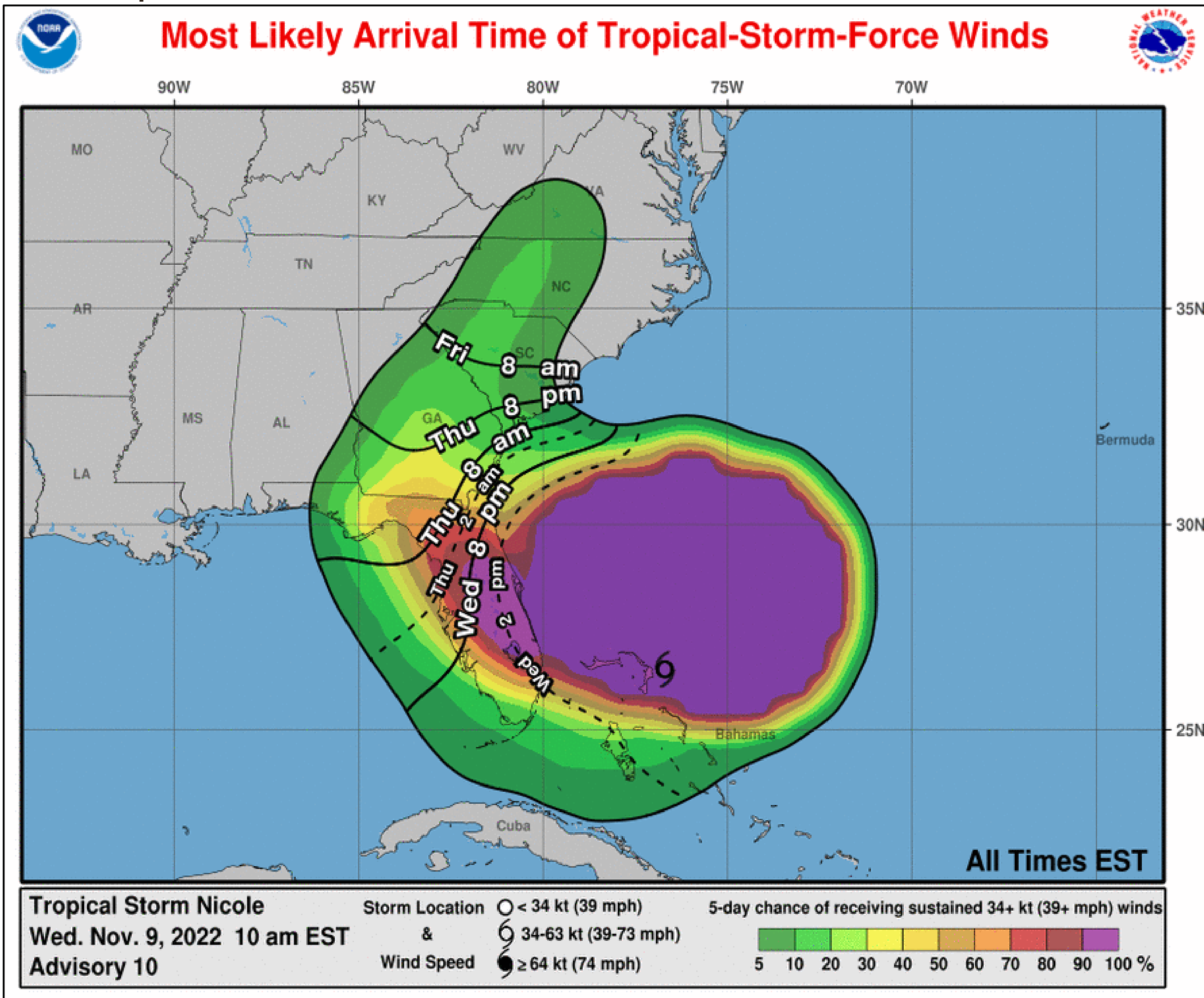
Tropical Storm Nicole



- **Ft. Pierce – 10%**
- 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 Nicole



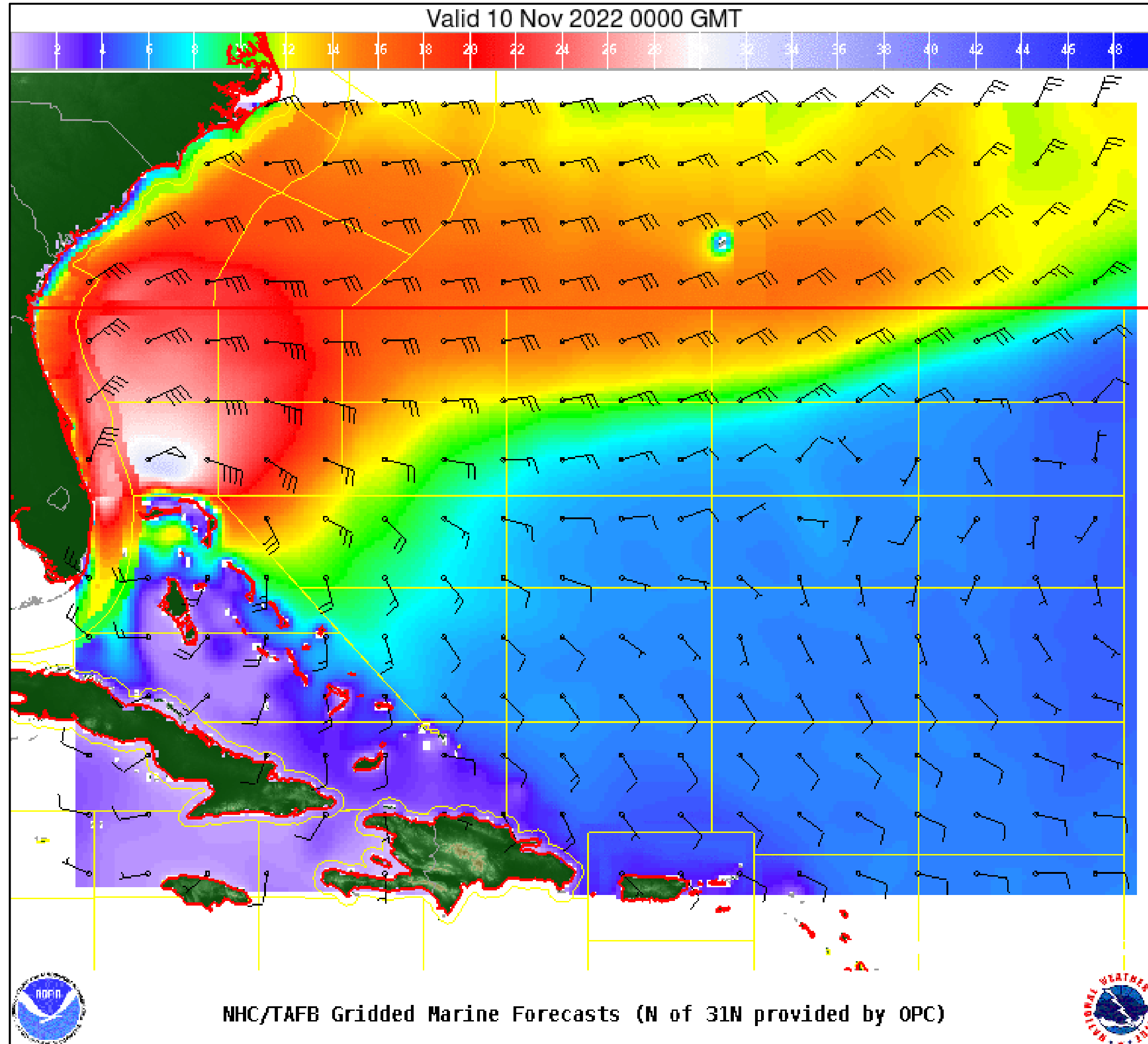
- SE and East Central Florida – presently
- West Florida and NE Florida – tonight
- Georgia – tonight around midnight
- Florida Big Bend – Thu morning
- The most likely time of arrival of Tropical Storm Force Winds (34kt to 63 kt) for this cyclone based off the current track and wind radii.
- Clear or 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 Nicole



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



Nowcast

7 PM Wed Nov 9

Peak Winds: 65 kt

Peak Seas: 33 ft

■ Wave heights are in feet



Significant Wave Height (ft)

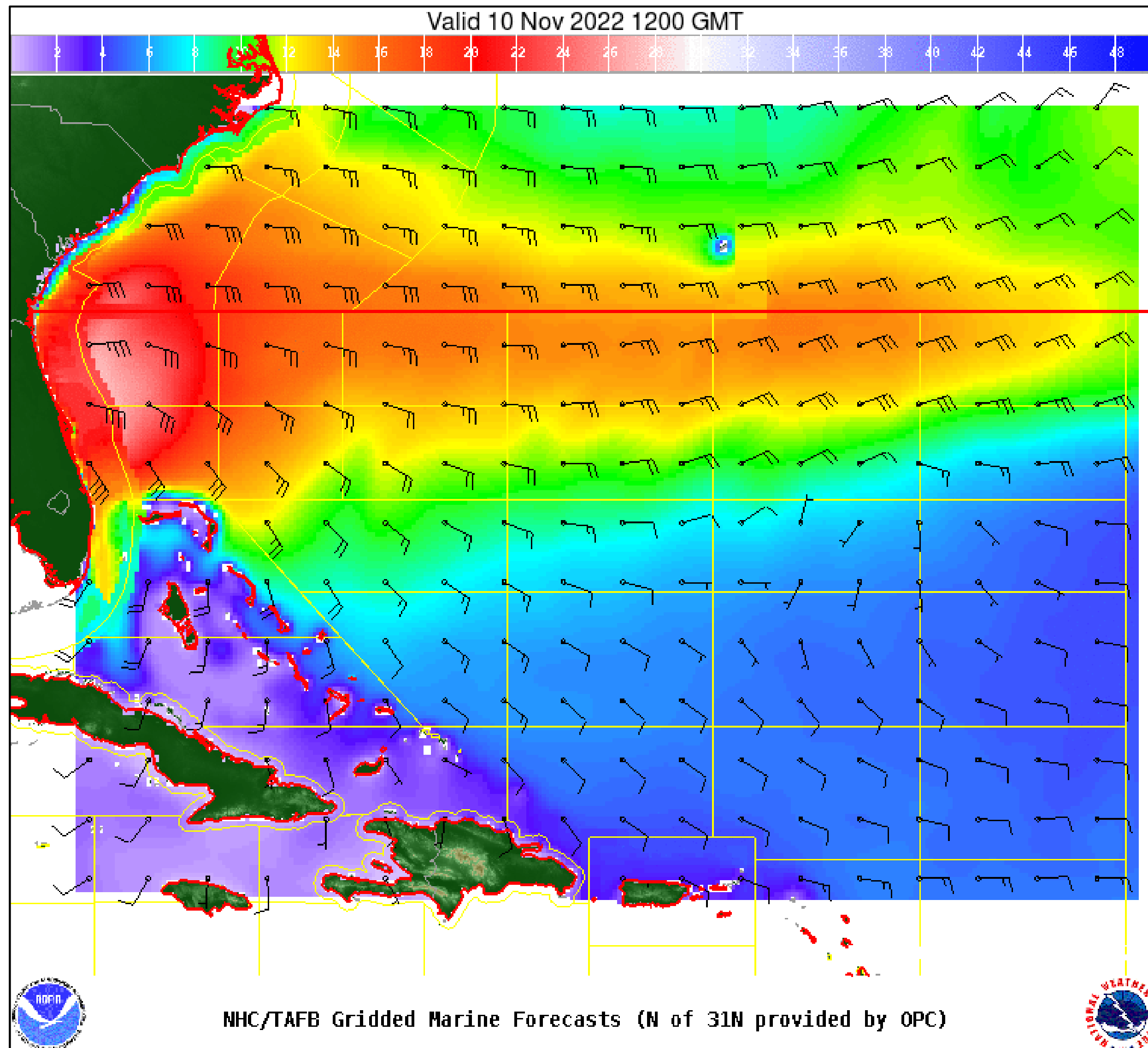


# Wind And Waves

Tropical Storm Nicole



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



18 Hour Forecast  
**7 AM Thu Nov 10**  
Peak Winds: 55 kt  
Peak Seas: 25 ft

■ Wave heights are in feet



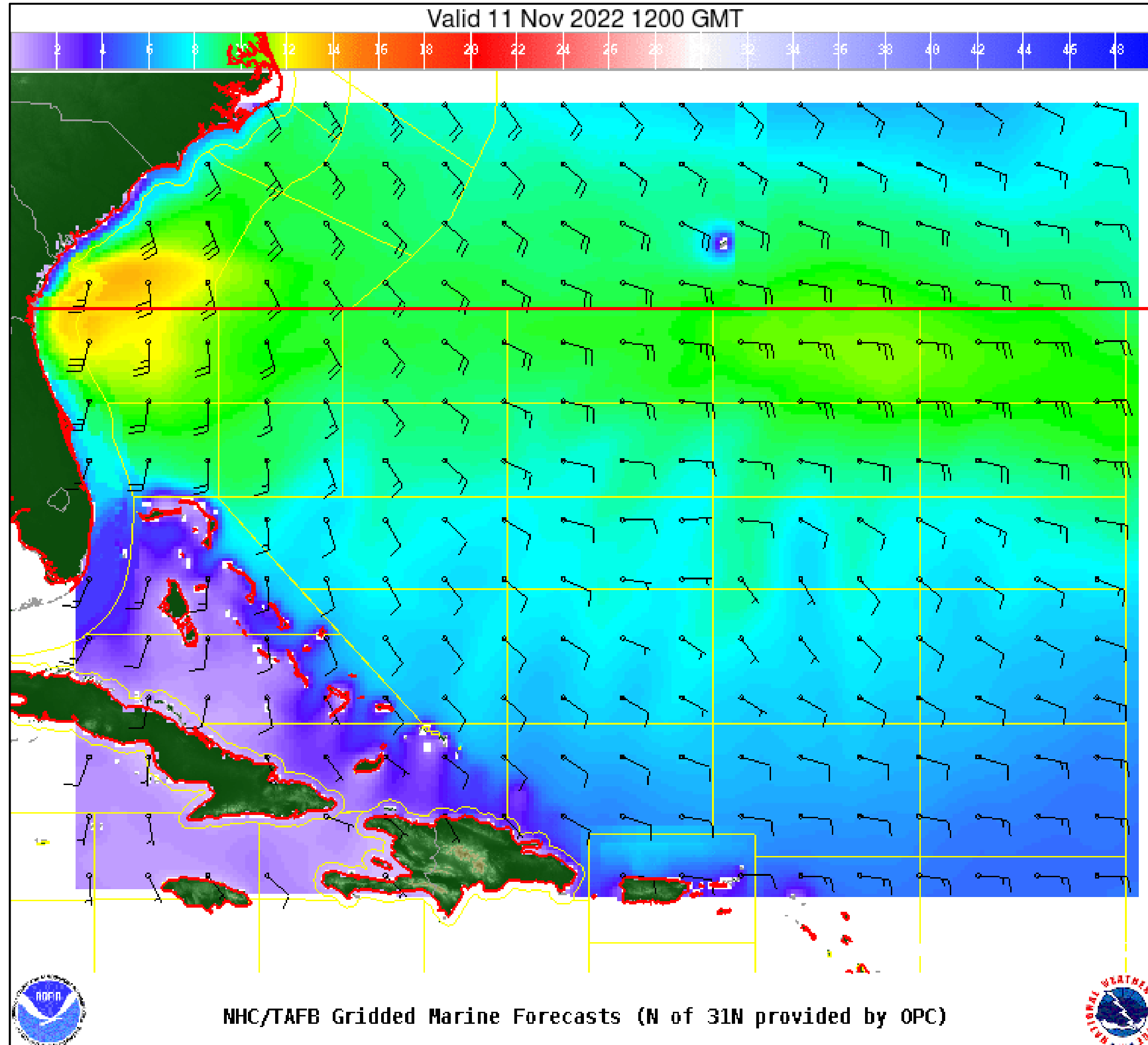
Significant Wave Height (ft)

# Wind And Waves

Tropical Storm Nicole



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



42 Hour Forecast

7 AM Fri Nov 11

Peak Winds: 30 kt

Peak Seas: 14 ft

■ Wave heights are in feet



Significant Wave Height (ft)

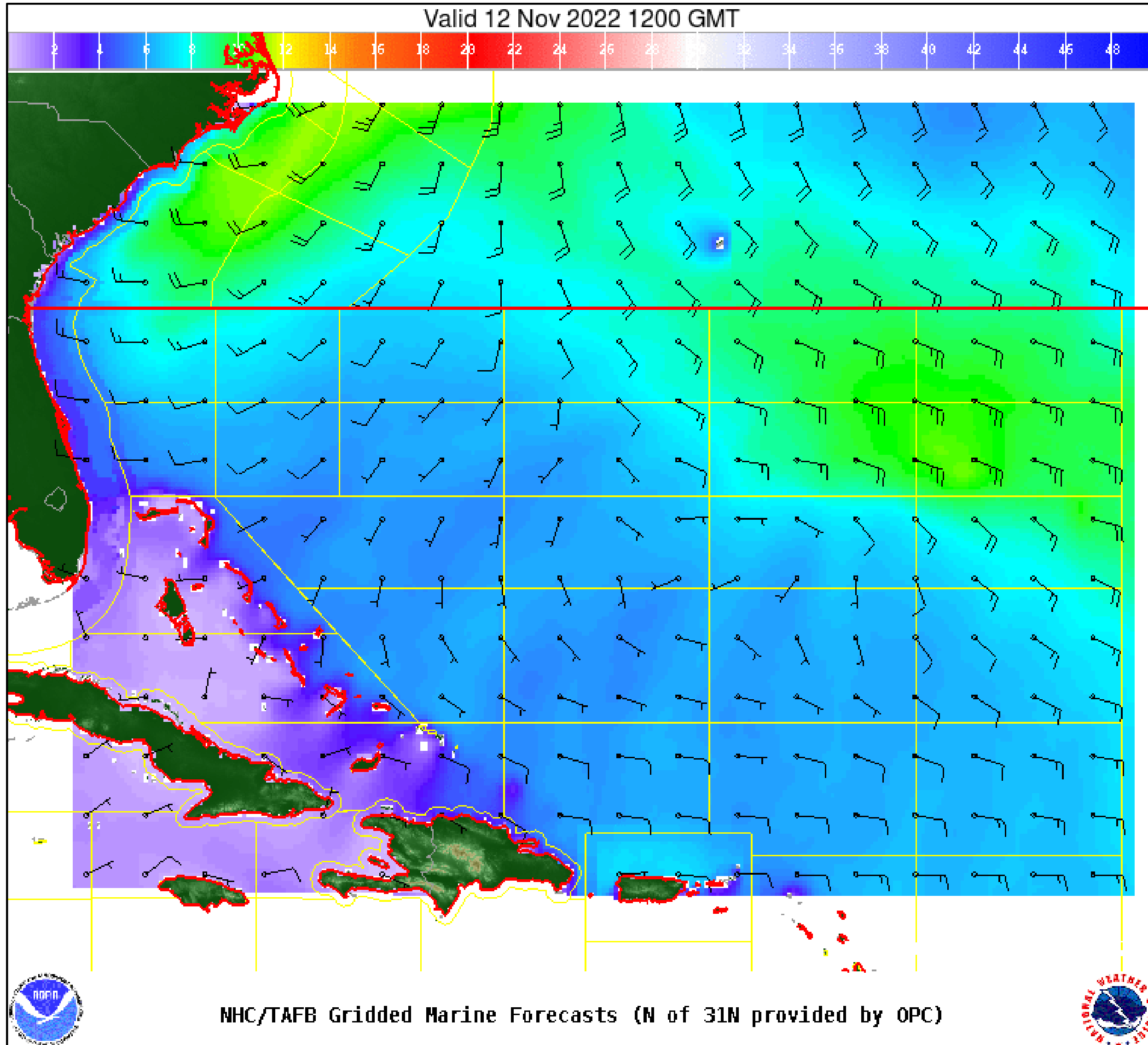


# Wind And Waves

Tropical Storm Nicole



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NWS National Hurricane Center



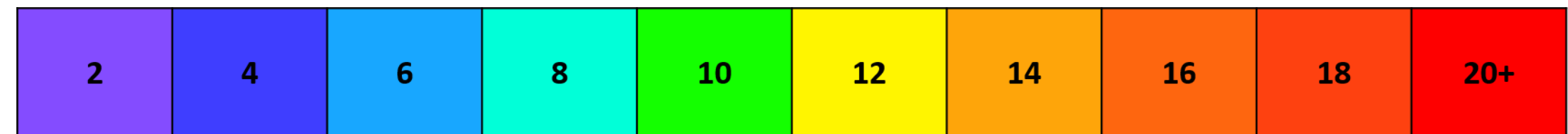
66 Hour Forecast

7 AM Sat Nov 12

Peak Winds: 30 kt

Peak Seas: 10 ft

■ Wave heights are in feet



Significant Wave Height (ft)

# Time of Departure

Tropical Storm Nicole



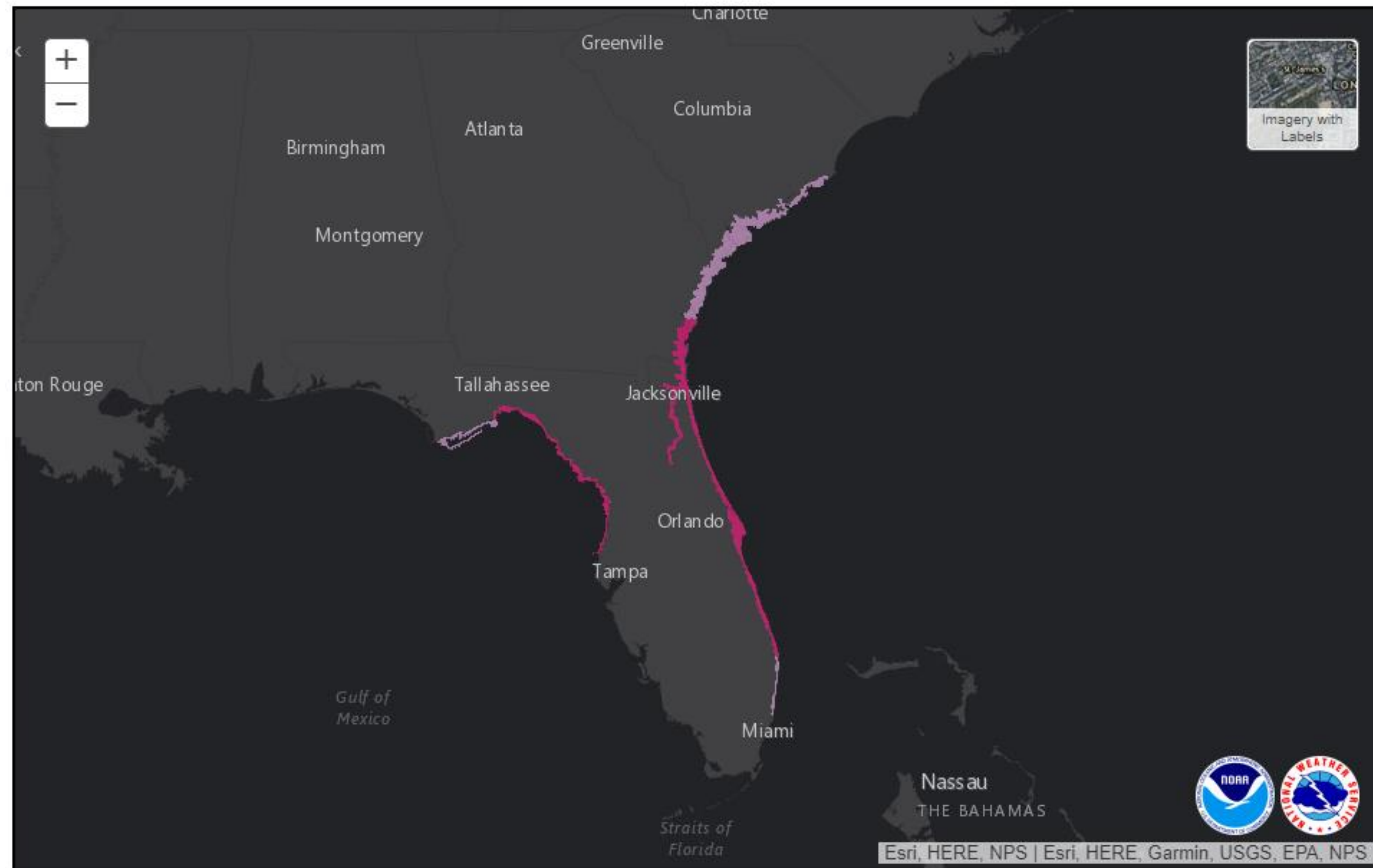
Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

- **St. Marks – Thursday night**
- **Cedar Key – Thursday afternoon**
- **Tampa – Thursday afternoon**
- **Ft. Lauderdale – Thursday morning**
- **Palm Beach – Thursday morning**
- **Ft. Pierce – Thursday morning**
- **Patrick AFB – Thursday noon**
- **Cocoa Beach – Thursday noon**
- **Daytona Beach – Thursday afternoon**
- **Jacksonville – Thursday evening**





## Tropical Storm Nicole



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

- Anclote River Florida to Ochlockonee River Florida
- North Palm Beach Florida to Altamaha Sound Georgia
- Mouth of the St. Johns River to Georgetown Florida

A Storm Surge Warning means there is a **danger of life-threatening inundation** from rising water moving inland from the coastline in the indicated locations.

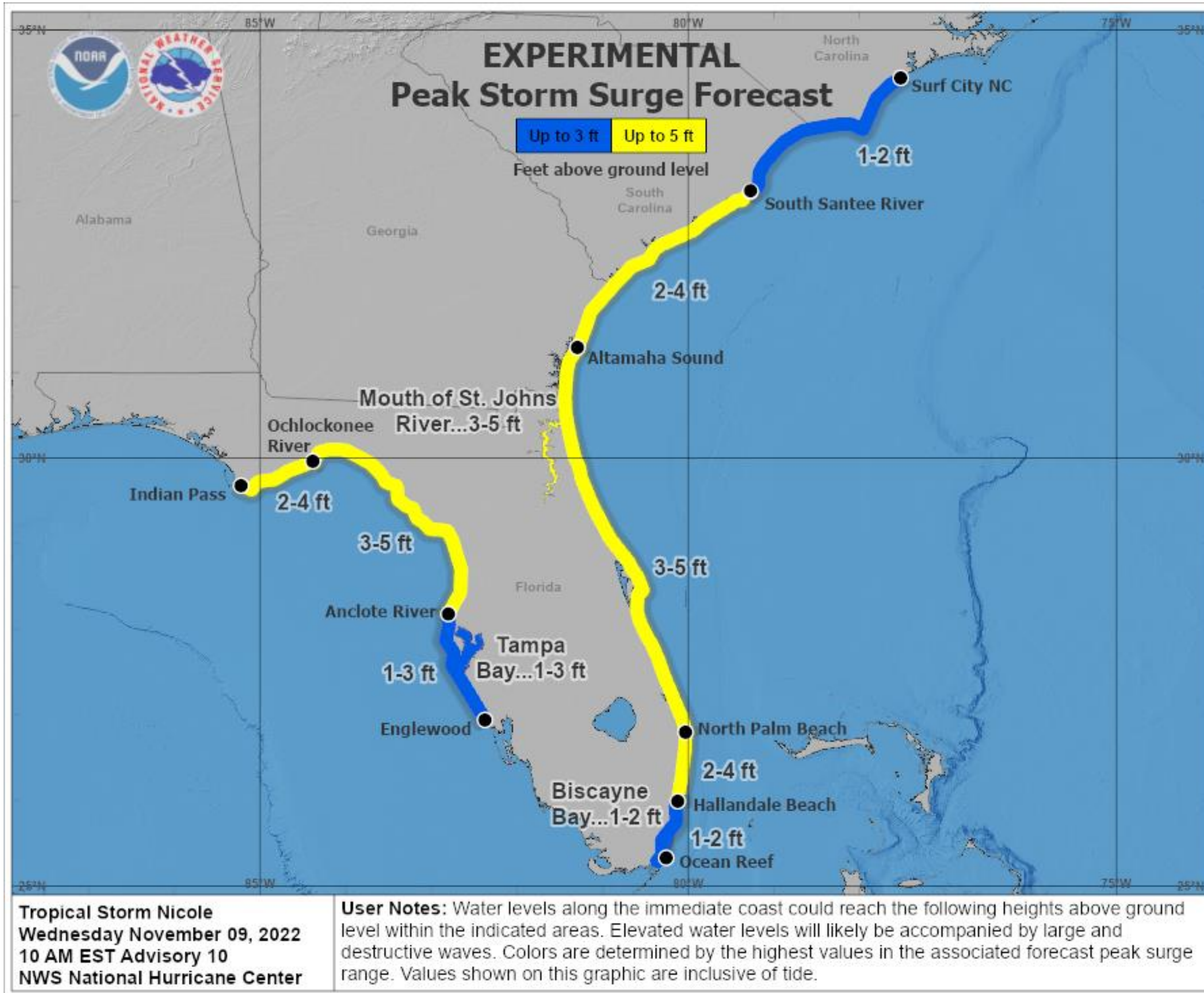


# Potential Peak Storm Surge



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NWS National Hurricane Center

## Tropical Storm Nicole



- Potential storm surge is represented **in feet above normally dry ground** at any given point along the coast.
- Elevated water levels will likely be accompanied by large and destructive waves.



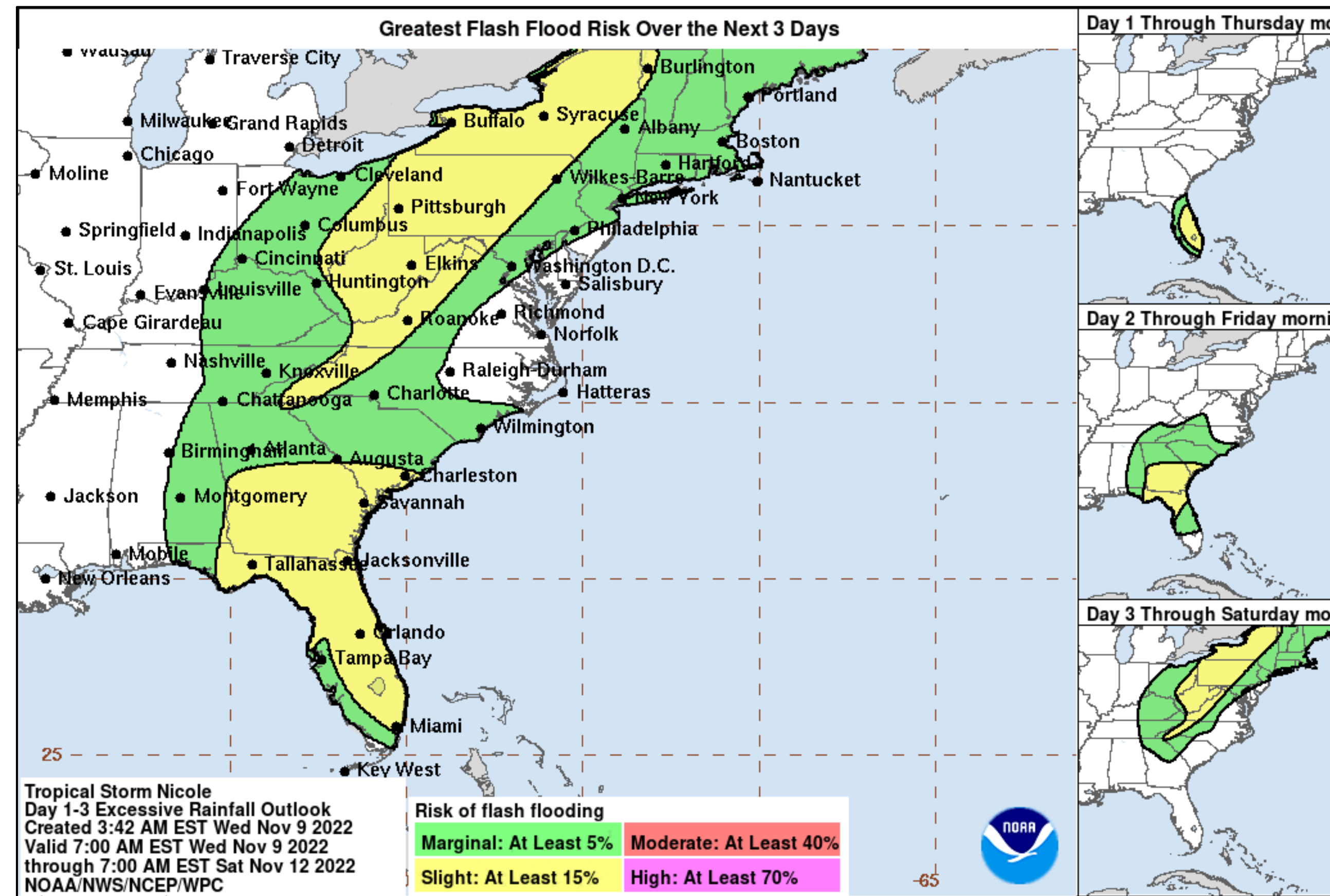
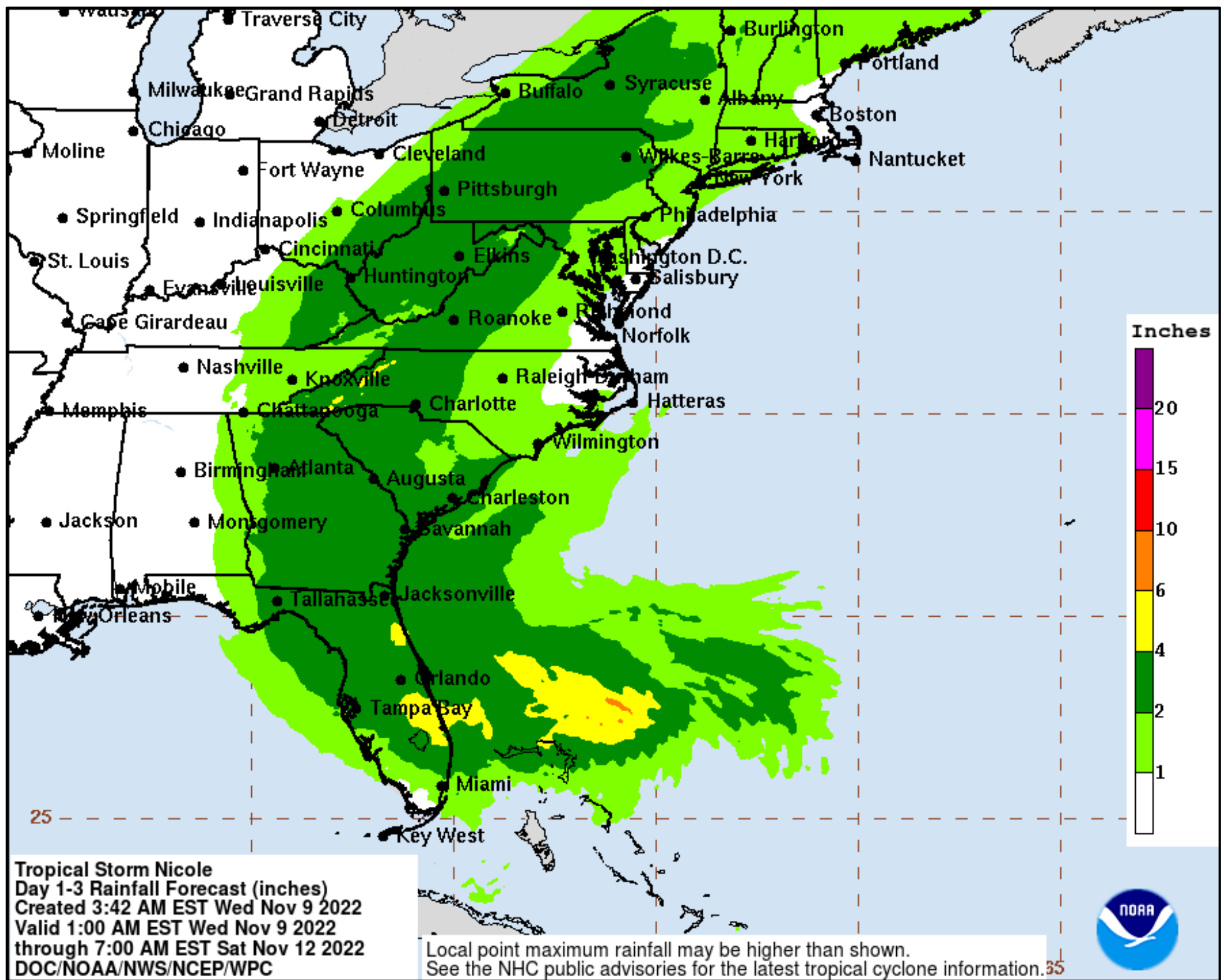
# Expected Storm Total Rainfall and Chance of Rainfall Flooding



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

Tropical Storm Nicole

Images from NWS Weather Prediction Center



Valid through 7 AM Sat Nov 12

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 7 AM Sat Nov 12



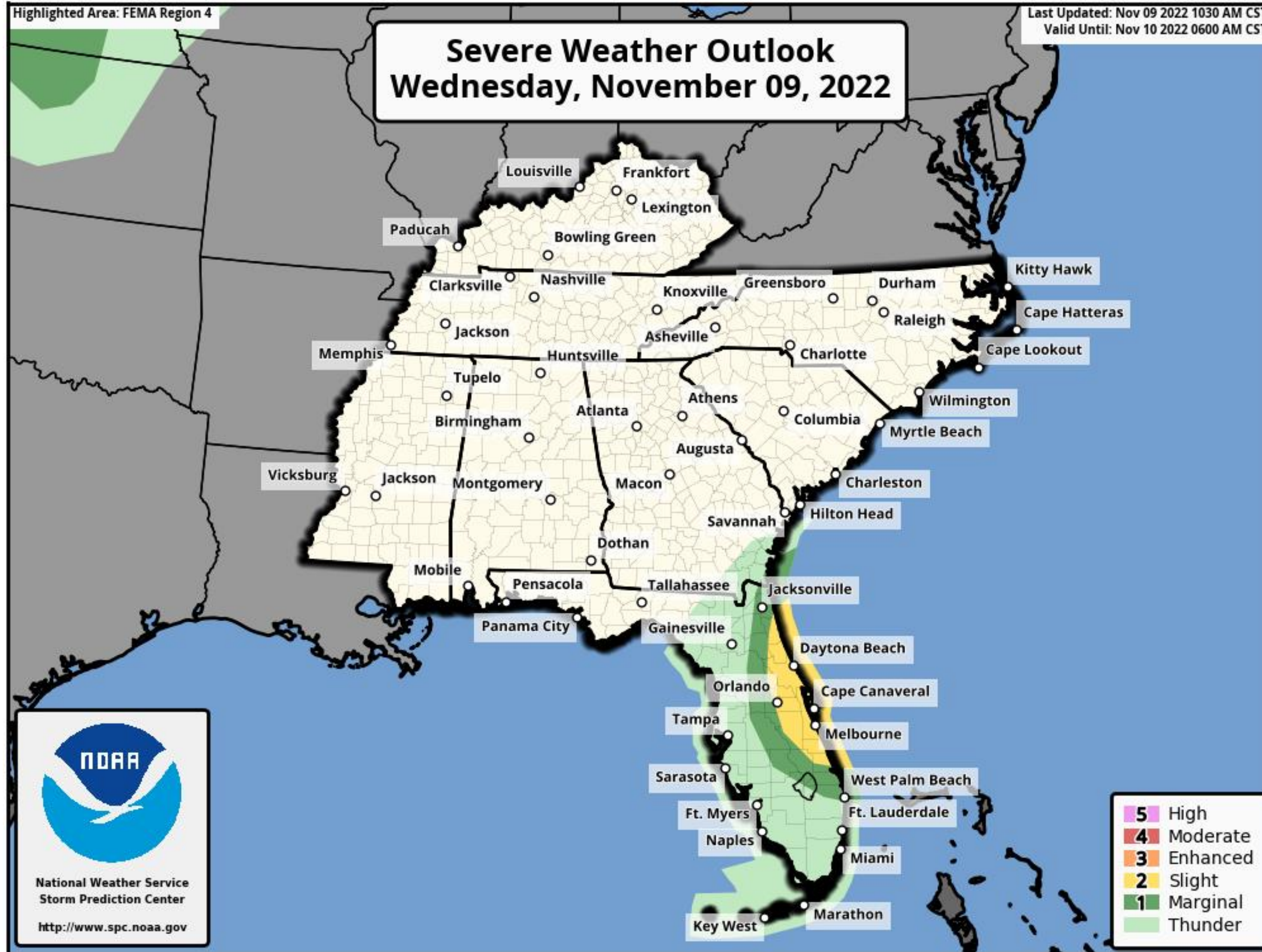
# Tornado Outlook – Day 1

Tropical Storm Nicole

Image from NWS Storm Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center





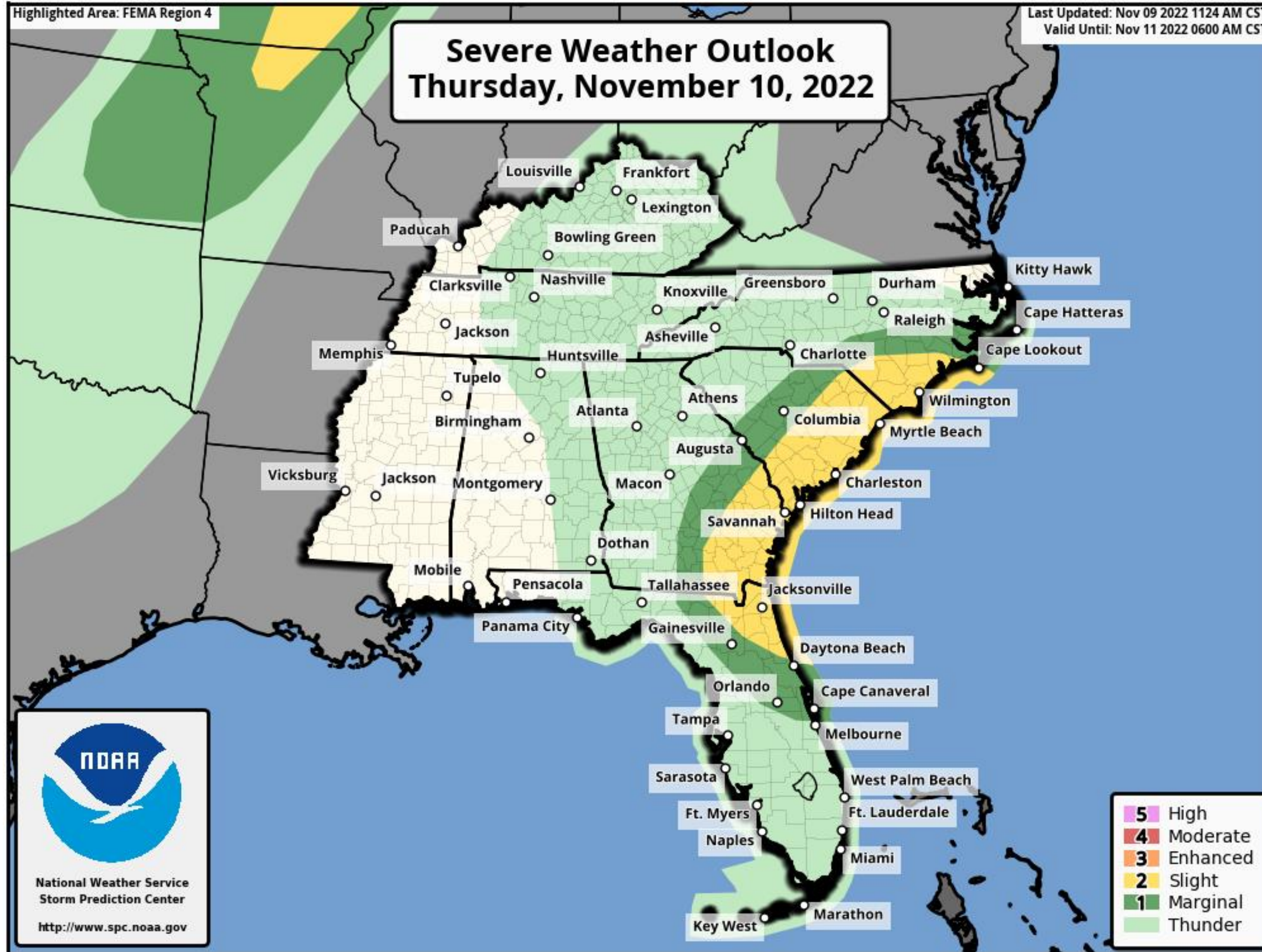
# Tornado Outlook – Day 2

Tropical Storm Nicole

Image from NWS Storm Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center






# Key Messages

## Tropical Storm Nicole



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center





### Key Messages for Tropical Storm Nicole

Advisory 10: 10:00 AM EST Wed Nov 09, 2022

- Hurricane conditions and a dangerous storm surge are expected in portions of the northwestern Bahamas today, where a Hurricane Warning is in effect.
- Hurricane conditions are expected across portions of the coast of southeast and east-central Florida beginning this evening or tonight, where a Hurricane Warning is in effect. Tropical storm conditions have begun along the east coast of Florida in the warning areas and will spread northward to Georgia and South Carolina later today. Tropical storm conditions are expected to begin along the west coast of Florida within the warning area this evening or tonight.
- A dangerous storm surge is expected along much of the east coast of Florida, portions of coastal Georgia, and the Florida Big Bend along the Gulf coast. The storm surge will be accompanied by large and damaging waves along the Atlantic coast. Residents in the warning area should listen to advice given by local officials.
- Do not focus on the exact track of Nicole since it is a large storm with hazards extending well to the north of the center, outside of the forecast cone. These hazards will affect much of the Florida peninsula and portions of the southeast United States.
- Nicole will produce heavy rainfall today into Thursday across the Florida Peninsula. Flash and urban flooding will be possible across portions of the Florida Peninsula along with river rises on the St. Johns River. Isolated flash, urban, and small stream flooding will also be possible on Friday in the Southeast through the southern and central Appalachians, including the Blue Ridge Mountains, and extending northward through west central Pennsylvania into western New York by Friday night.

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.

**Tropical Storm Nicole**  
Wednesday November 09, 2022  
10 AM EST Advisory 10  
NWS National Hurricane Center

**Current information: x**  
Center location 26.5 N 76.7 W  
Maximum sustained wind 70 mph  
Movement W at 12 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



**Tropical-Storm-Force Wind Speed Probabilities (Preliminary)**  
For the 120 hours (5.0 days) from 7 AM EST WED NOV 09 to 7 AM EST MON NOV 14

Probability of tropical-storm-force winds (1-minute average  $\geq 39$  mph) from Tropical Storm Nicole  
○ indicates Tropical Storm Nicole center location at 7 AM EST WED NOV 09, 2022 (Forecast Advisory #10)

5 10 20 30 40 50 60 70 80 90 %

## IMPACTS FOR D7 (through next 5 days)

Winds – **High**

Storm Surge – **Moderate**

Rainfall/Flash Flooding – **Moderate**

Tornadoes – **Moderate**

Waves - **High**

- Expect tropical storm conditions across a large area of the western Atlantic
- Hurricane conditions will be localized.
- Seas currently 33 ft, expected to subside by Saturday





# TROPICAL STORM NICOLE BRIEFING

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

*The Next Briefing Will Be:  
Thursday 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)*

