

**IMPACTS FOR D8**

**Winds/US Coast – Extreme**

**Winds/SRR – Extreme**

**Waves/US Coastal – Extreme**

**Waves/SRR – Extreme**

through next 5 days

**US Storm Surge – Extreme**

**US Rainfall/Flash Flooding – Extreme**

**US Tornadoes – Low**

# HURRICANE HELENE BRIEFING



11:00 AM CDT  
Thursday, September 26, 2024

Prepared by:

**Keren Rosado-Vázquez**

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*



NHC\_TAFB

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



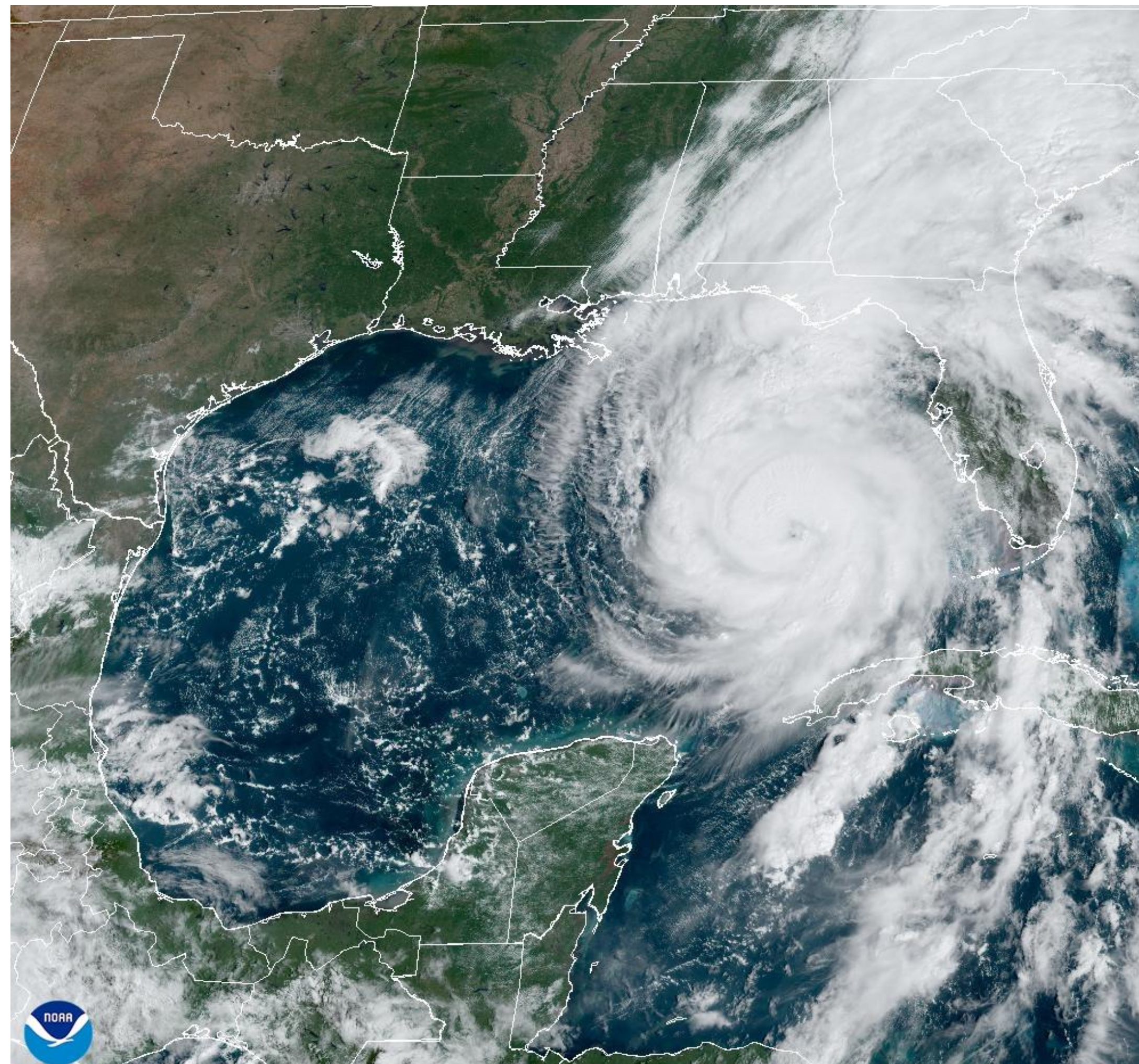
# Changes Since The Last Briefing

## Hurricane Helene



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

- Helene is now a Category 2 hurricane.
- Helene will likely rapidly intensify and be Category 3 or 4 at the time of landfall.
- Storm Surge peak values were raised and extended westward.
- Flooding Rain threat has increased for portions of the Florida Panhandle.



26 Sep 2024 15:11Z - NOAA/NESDIS/STAR - GOES-East - GEOCOLOR Composite - GM

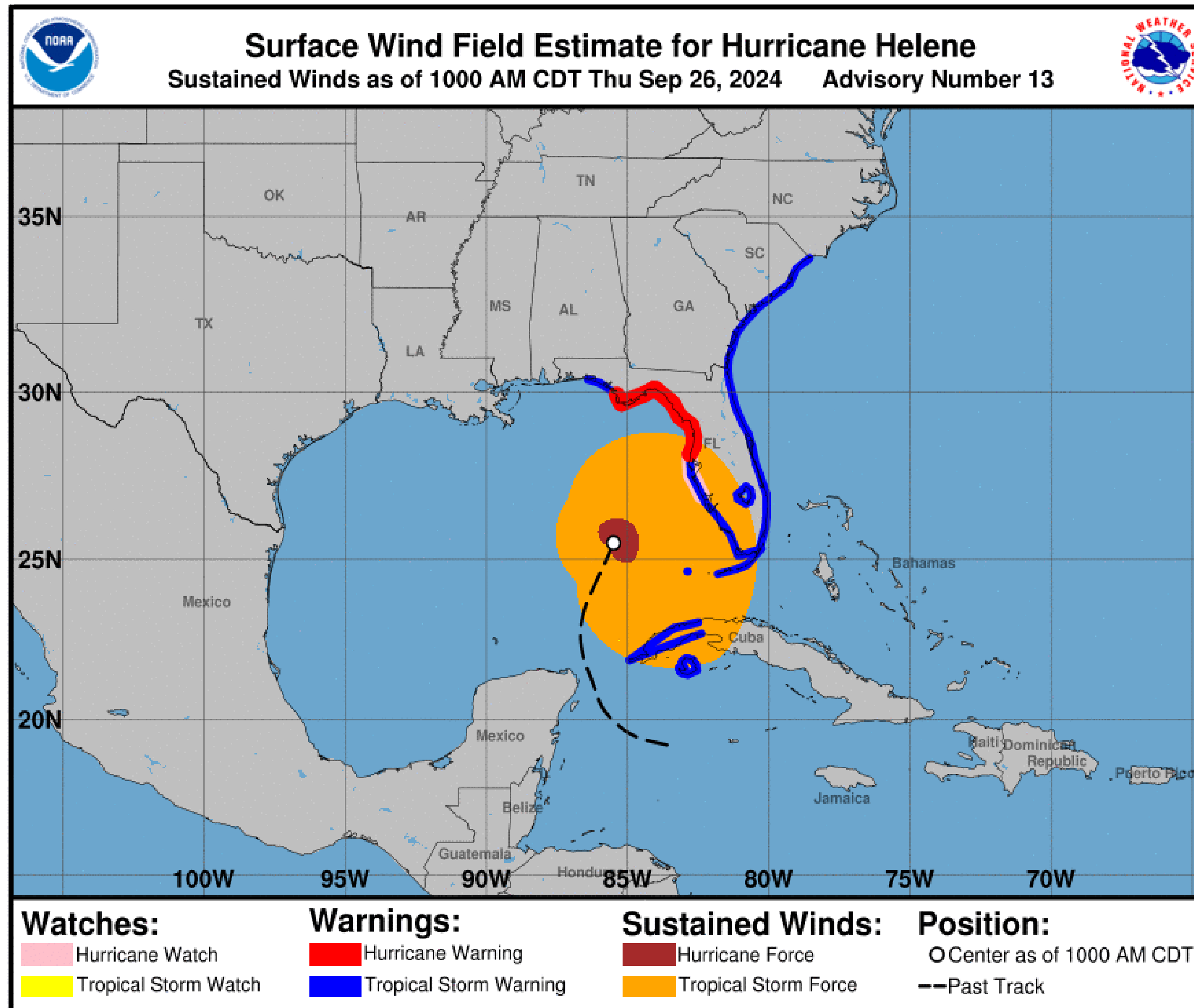


# Situation Overview

## Hurricane Helene



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**...HELENE STRENGTHENING AND EXPECTED TO MAKE LANDFALL IN THE FLORIDA BIG BEND THIS EVENING AS A MAJOR HURRICANE...  
...PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE RUSHED TO COMPLETION...**

### SUMMARY OF 1000 AM CDT... INFORMATION

LOCATION...25.5N 85.5W  
ABOUT 225 NM... SW OF TAMPA FLORIDA  
ABOUT 250 NM... S OF APALACHICOLA FLORIDA  
MAXIMUM SUSTAINED WINDS...90 KT  
PRESENT MOVEMENT...NNE AT 12 KT

### SIZE

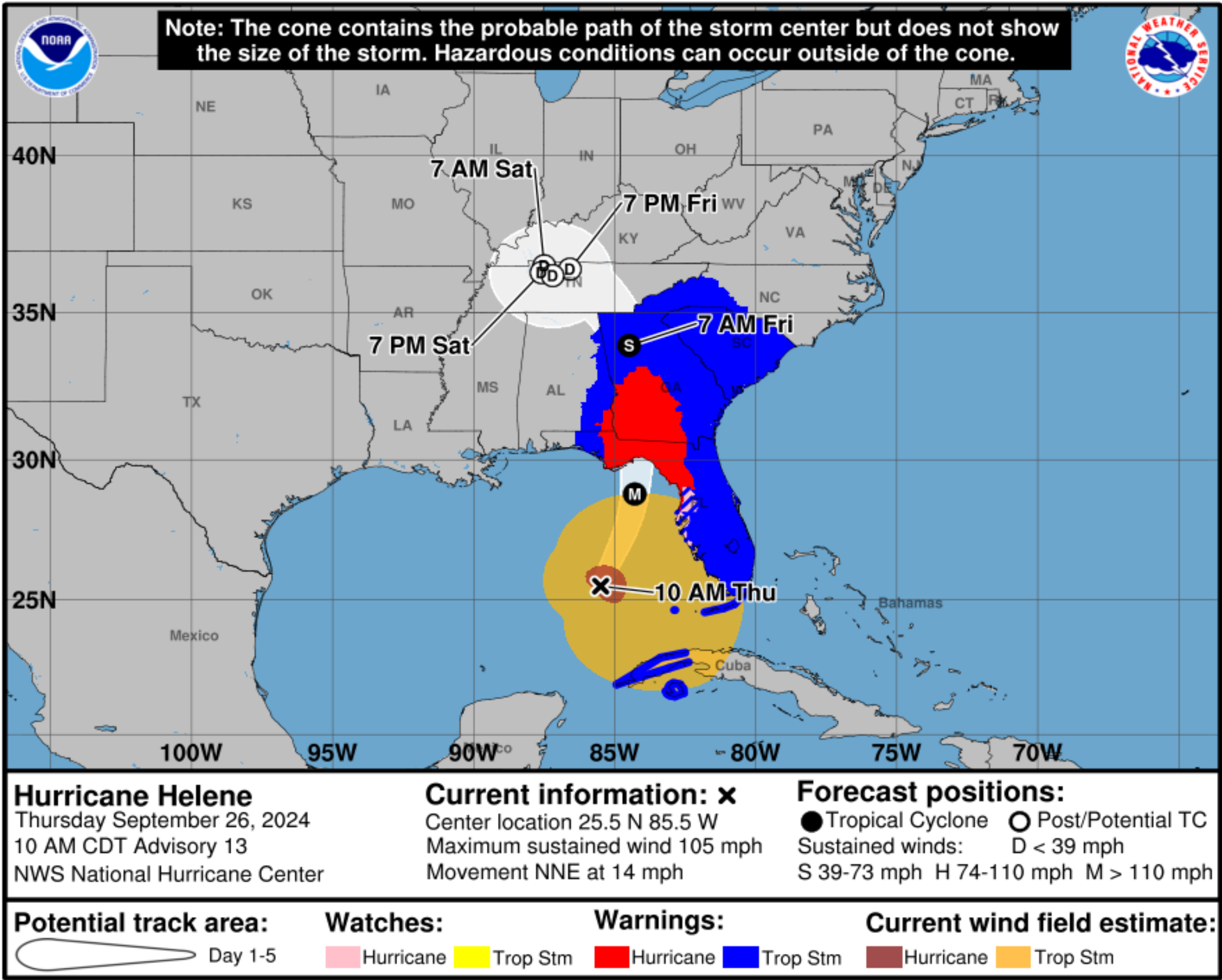
64 KT..... 50NE 50SE 0SW 40NW.  
50 KT..... 80NE 80SE 50SW 50NW.  
34 KT.....250NE 300SE 100SW 120NW.  
12 FT SEAS..210NE 210SE 240SW 210NW.

# Forecast Information

## Hurricane Helene



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- A significant increase in forward speed toward the north is expected during the next 24 hours.
- On the forecast track, Helene will make landfall in the Florida Big Bend region this evening as a hurricane Category 3 or 4.
- Weakening is expected after landfall, but Helene's fast forward speed will allow strong, damaging winds, especially in gusts, to penetrate well inland across the southeastern United States, including over the higher terrain of the southern Appalachians.
- After landfall, Helene is expected to turn northwestward and slow down over the Tennessee Valley on Friday and Saturday.

- 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.

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

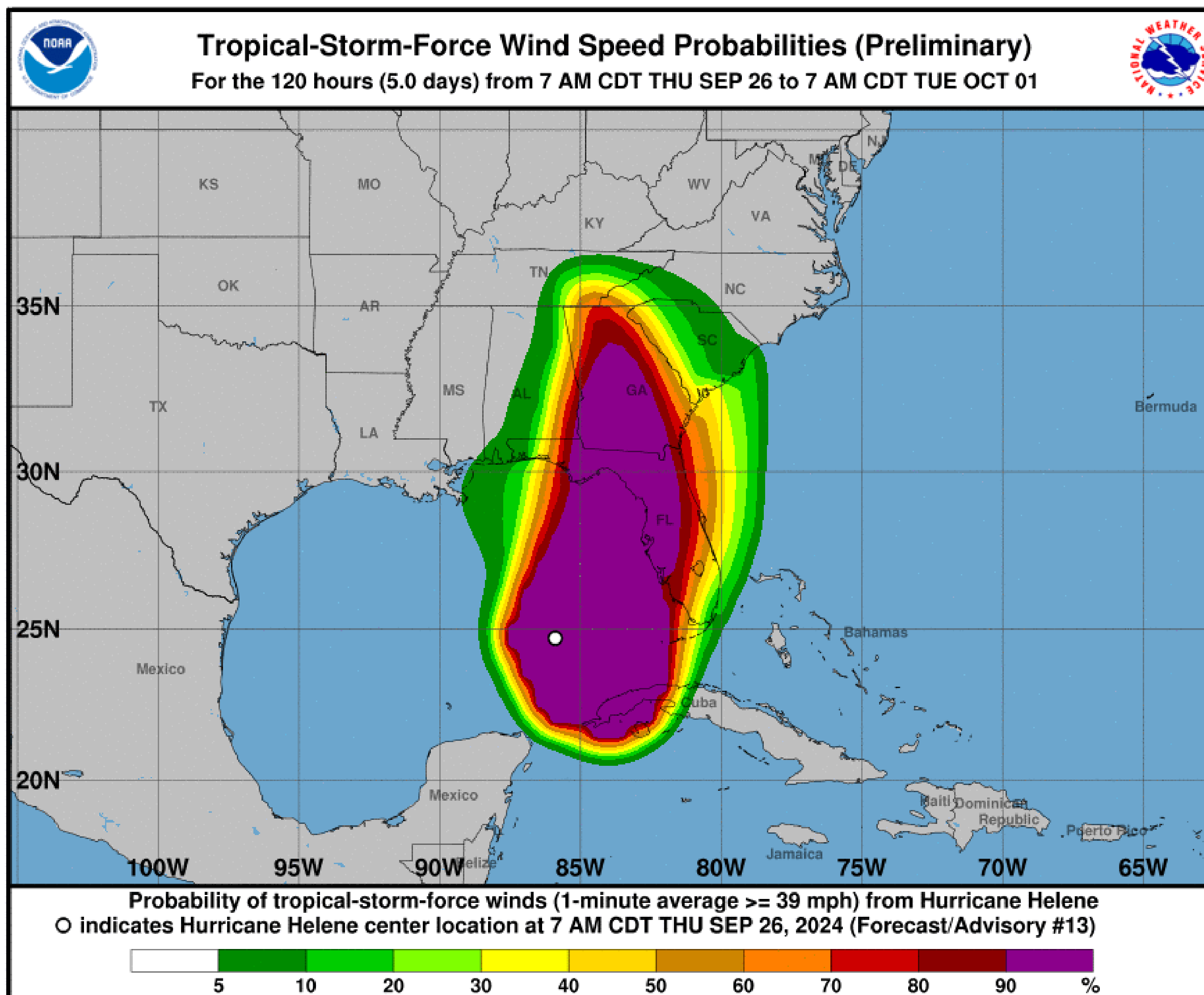


# T.S. Wind Speed Probabilities

Hurricane Helene



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- **CEDAR KEY FL 99%**
- **PENSACOLA FL 7%**
- **WHITING FLD FL 8%**
- **PANAMA CITY FL 82%**
- **APALACHICOLA 96%**
- **ST MARKS FL 99%**
- **TALLAHASSEE FL 99%**

**GREEN** - Probabilities have decreased

**RED** - Probabilities have gone up

**BLACK** - Probabilities unchanged

**Locations** boldfaced & underlined - At least 50% chance of TS Winds

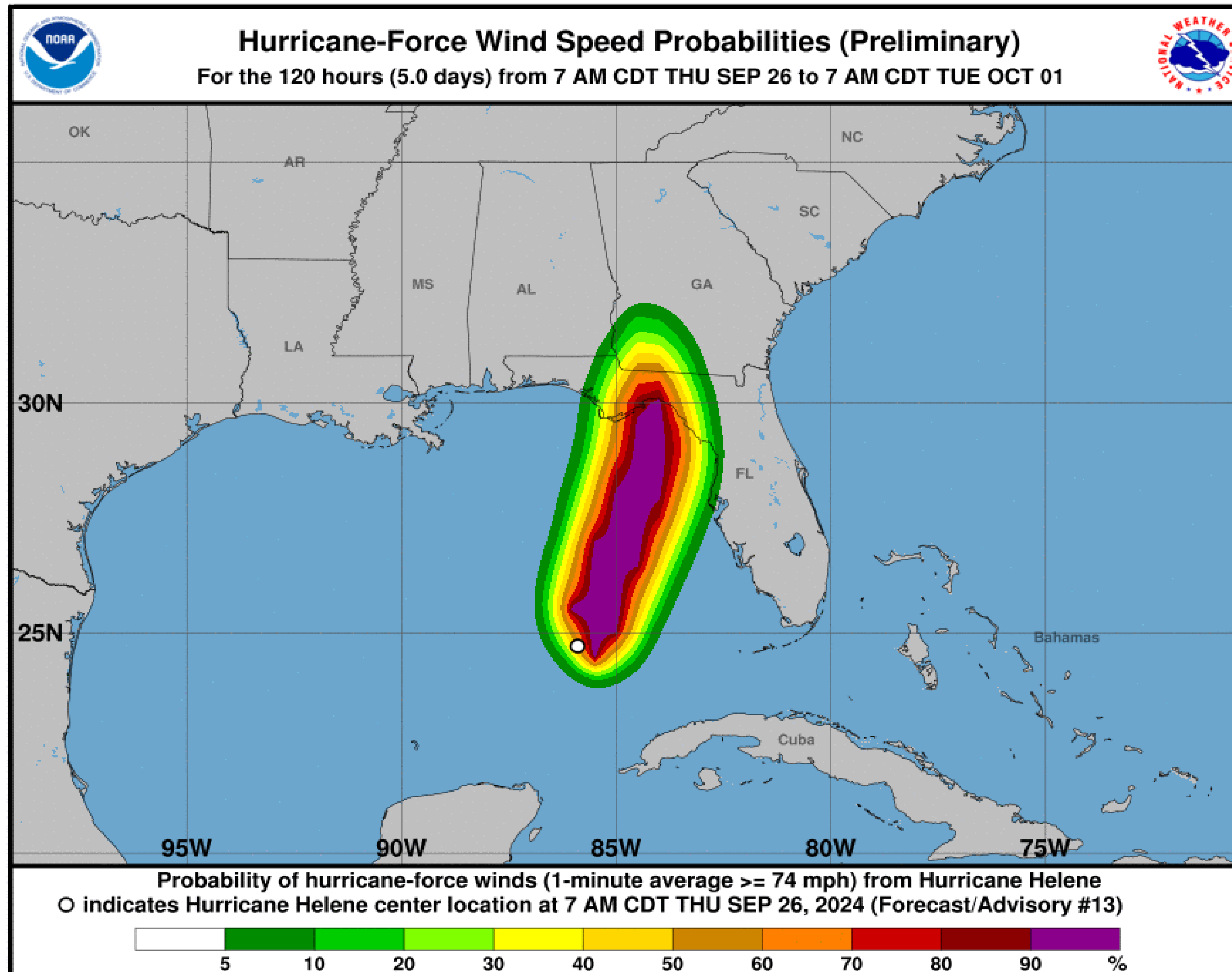
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.

# Hurricane Wind Speed Probabilities

Hurricane Helene



Tropical Analysis and Forecast Branch  
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- **PANAMA CITY FL 6%**
- **APALACHICOLA 46%**
- **TALLAHASSEE FL 68%**

**GREEN** - Probabilities have decreased  
**RED** - Probabilities have gone up  
**BLACK** - Probabilities unchanged  
**Locations** boldfaced & underlined - At least 50% chance of TS Winds

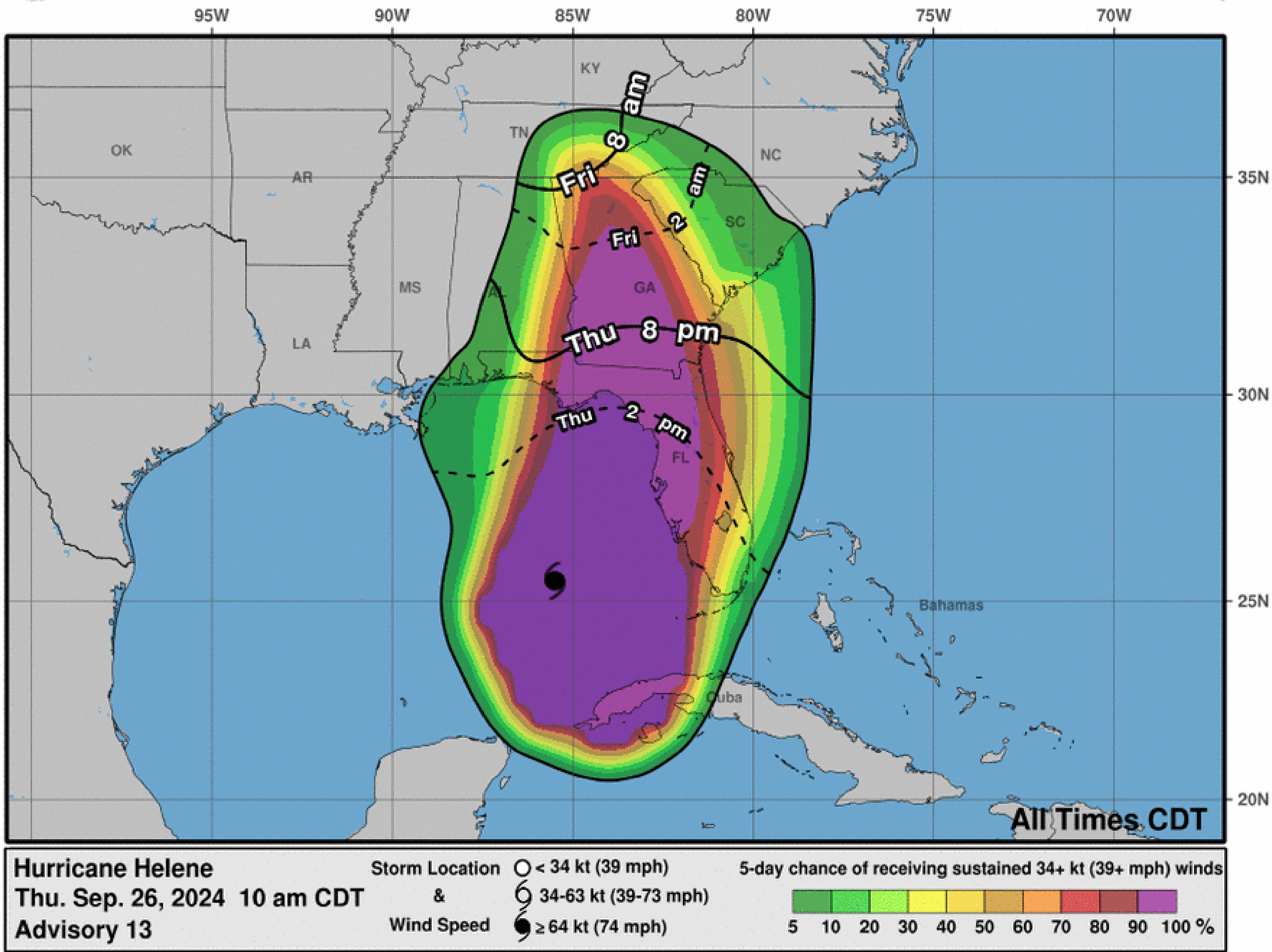
- Probabilities of sustained hurricane force winds (64 kt +) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
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Hurricane Helene



Most Likely Arrival Time of Tropical-Storm-Force Winds



- **FL Keys/SW Florida – On going.**
- **Tampa – On going.**
- **Big Bend/FL Panhandle – This afternoon.**
- 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.

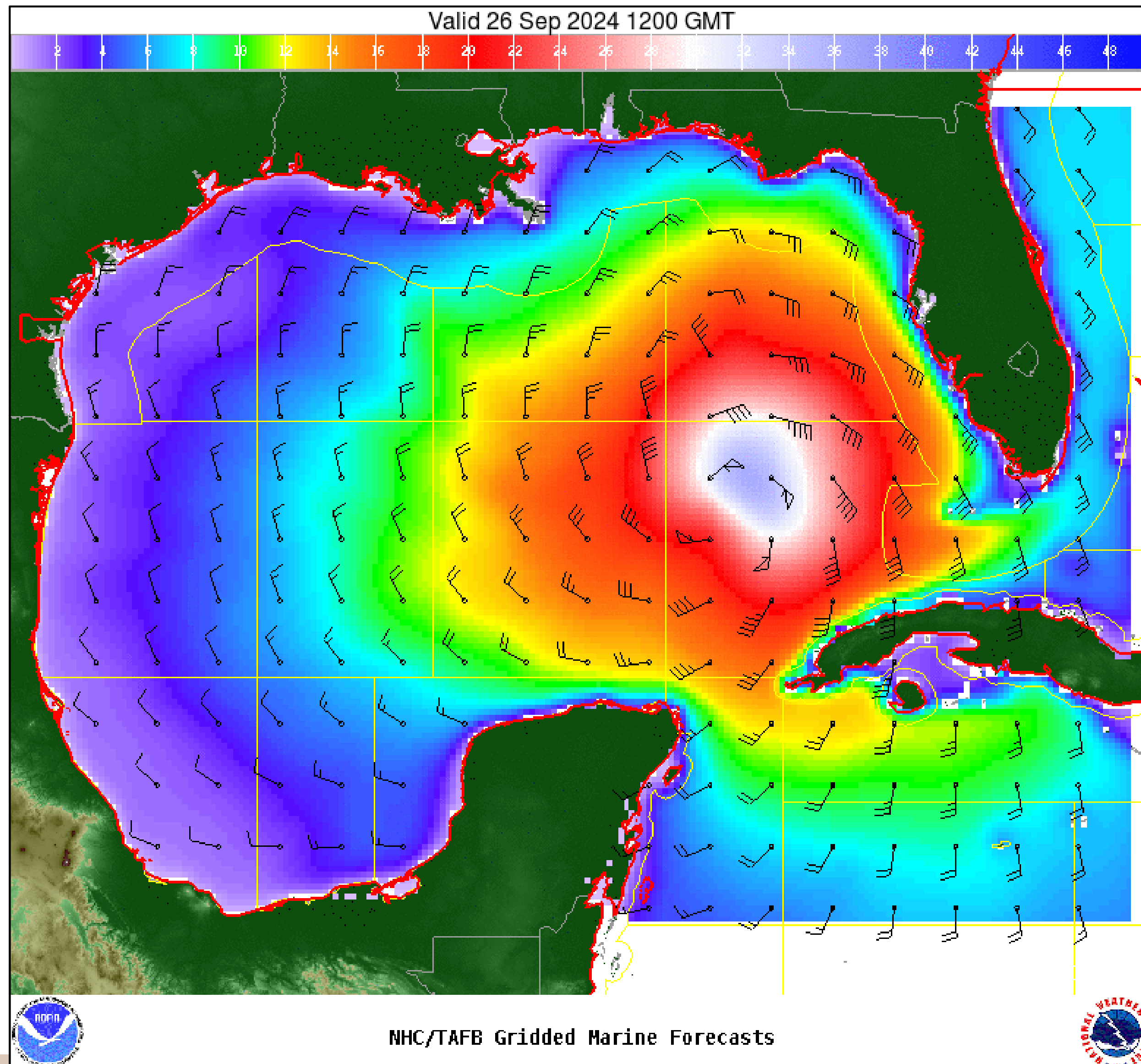


# Wind And Waves

## Hurricane Helene



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



### Current Conditions

Thursday, September 26 at 7:00 AM CDT

Peak Winds: 90 kt

Peak Seas: 35 ft

- Wave heights are in feet



Significant Wave Height (ft)

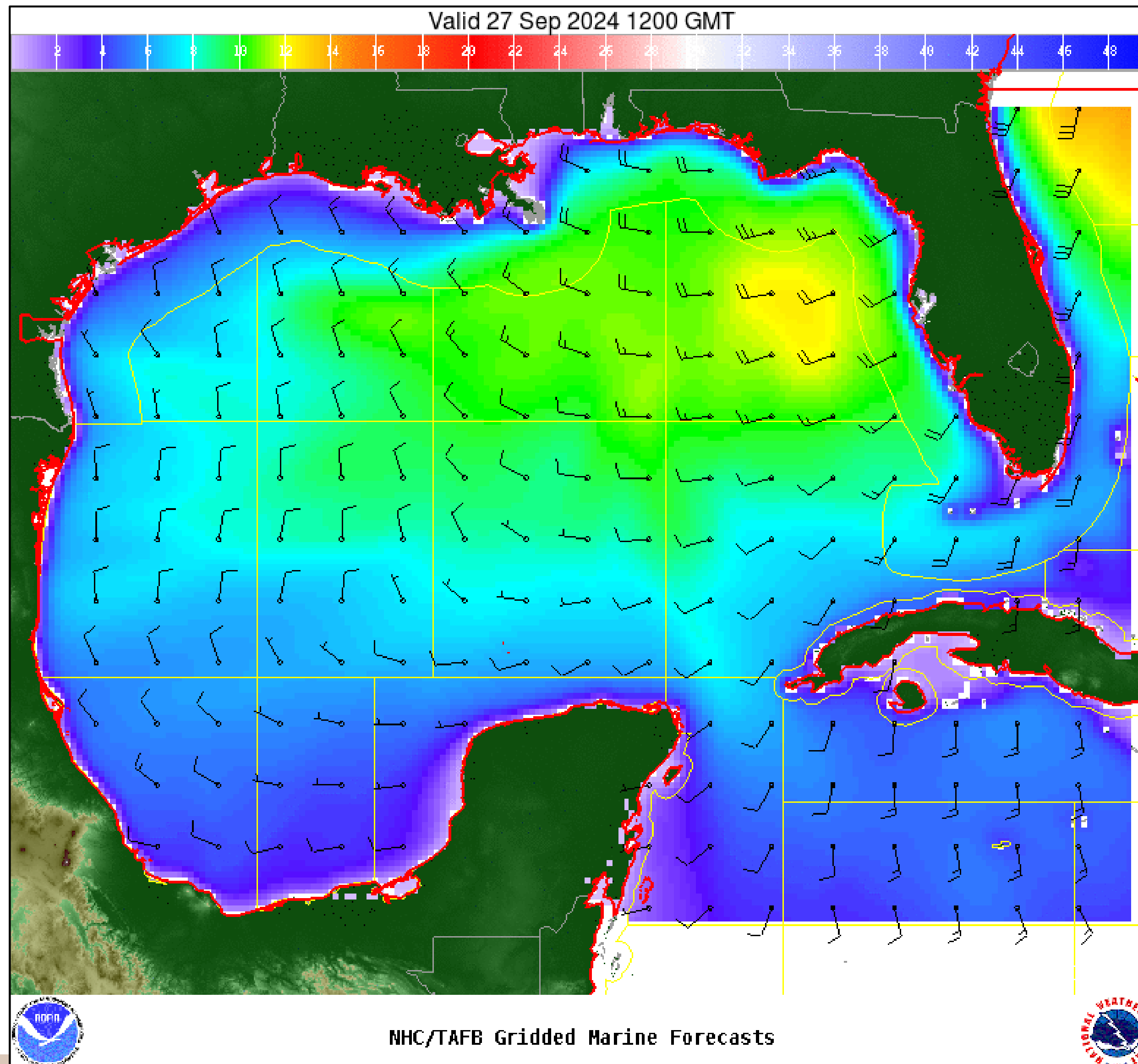


# Wind And Waves

## Hurricane Helene



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NWS National Hurricane Center



## 24 Hour Forecast

Friday, September 27 at 7:00 AM CDT

Peak Winds: 20 kt

Peak Seas: 12 ft

- Wave heights are in feet



Significant Wave Height (ft)

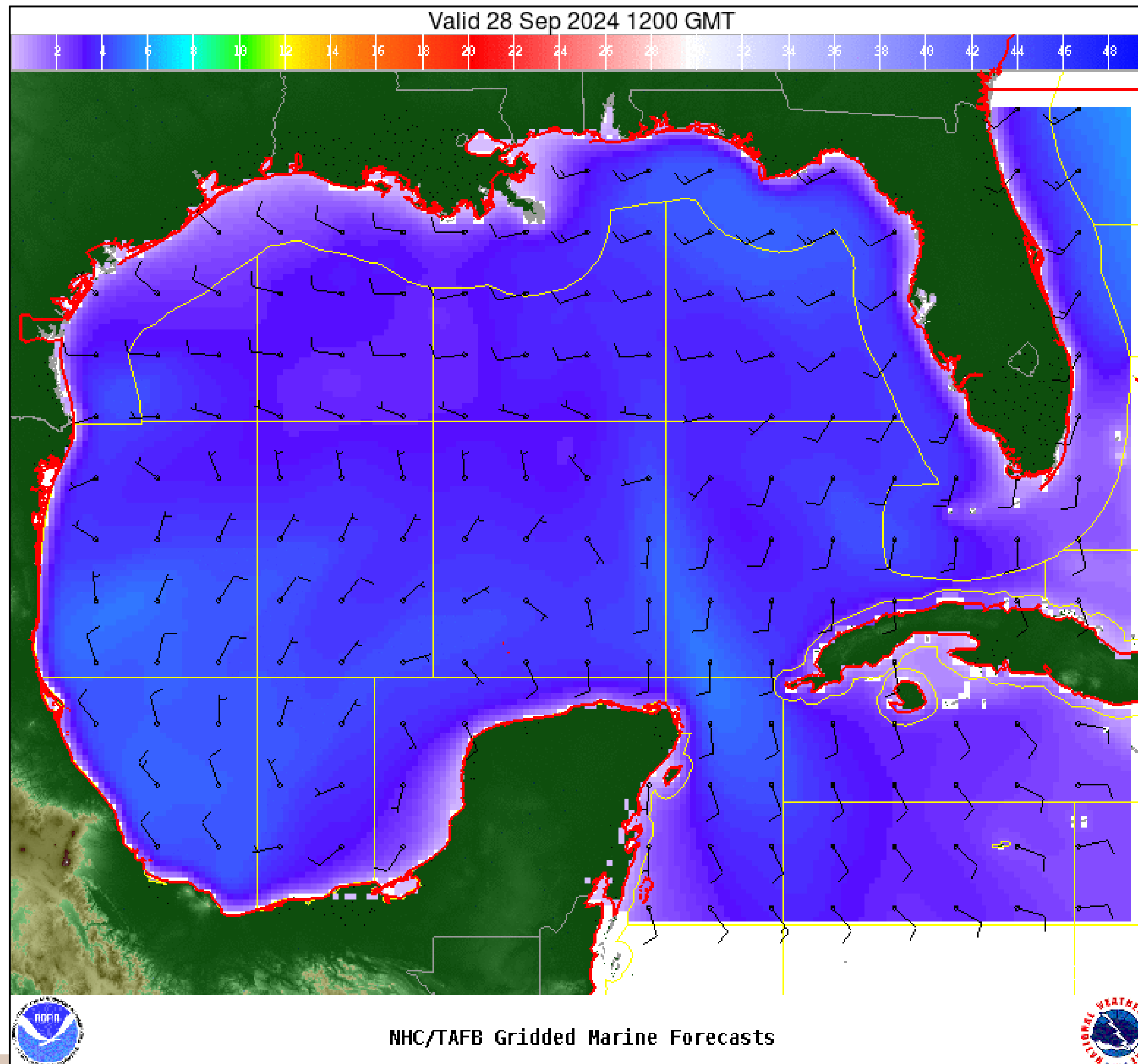


# Wind And Waves

Hurricane Helene



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NWS National Hurricane Center



48 Hour Forecast

Saturday, September 28 at 7:00 AM CDT

Peak Winds: 15 kt

Peak Seas: 5 ft

■ Wave heights are in feet



Significant Wave Height (ft)

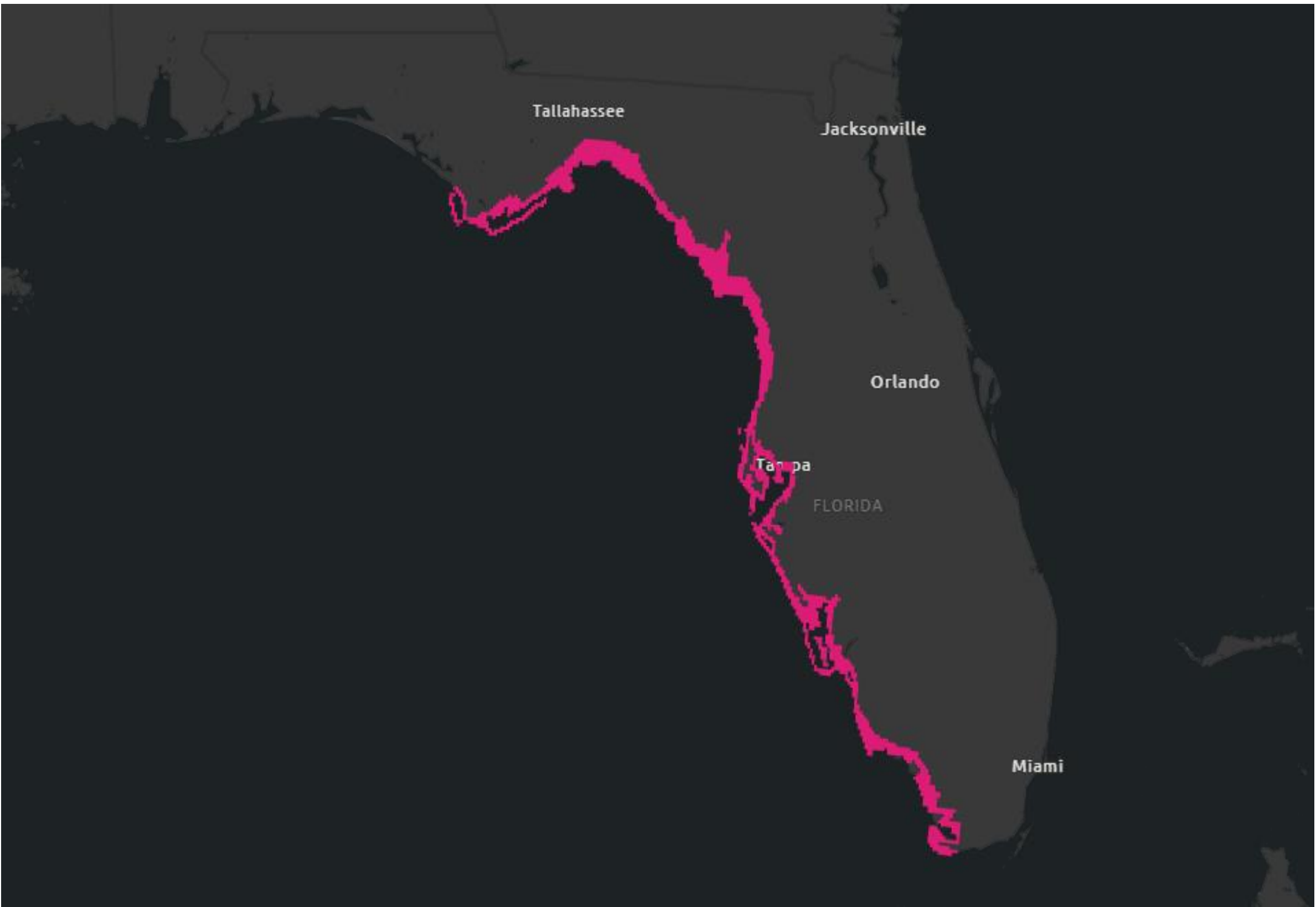
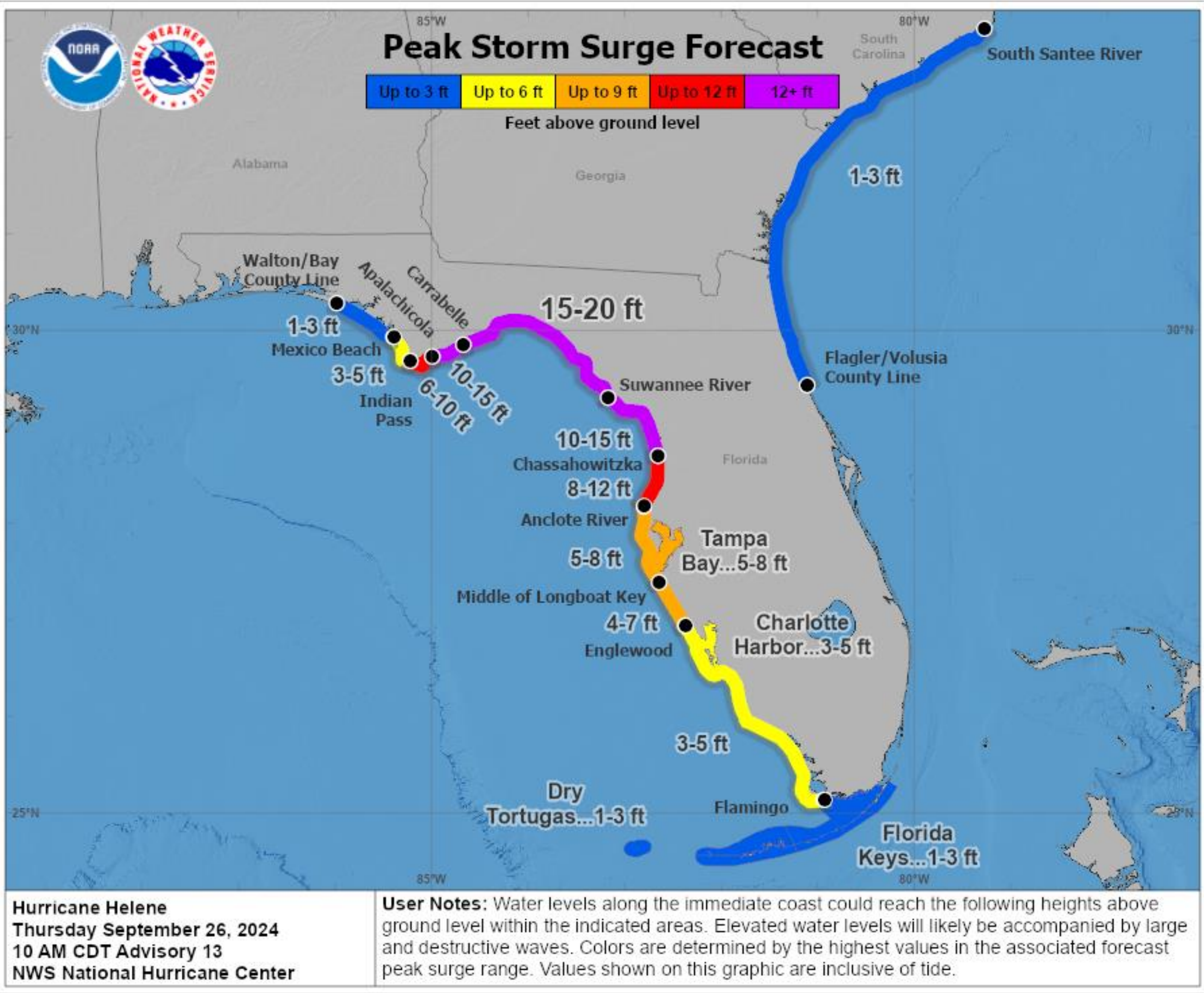


# Potential Peak Storm Surge / Watches and Warnings

## Hurricane Helene



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NWS National Hurricane Center





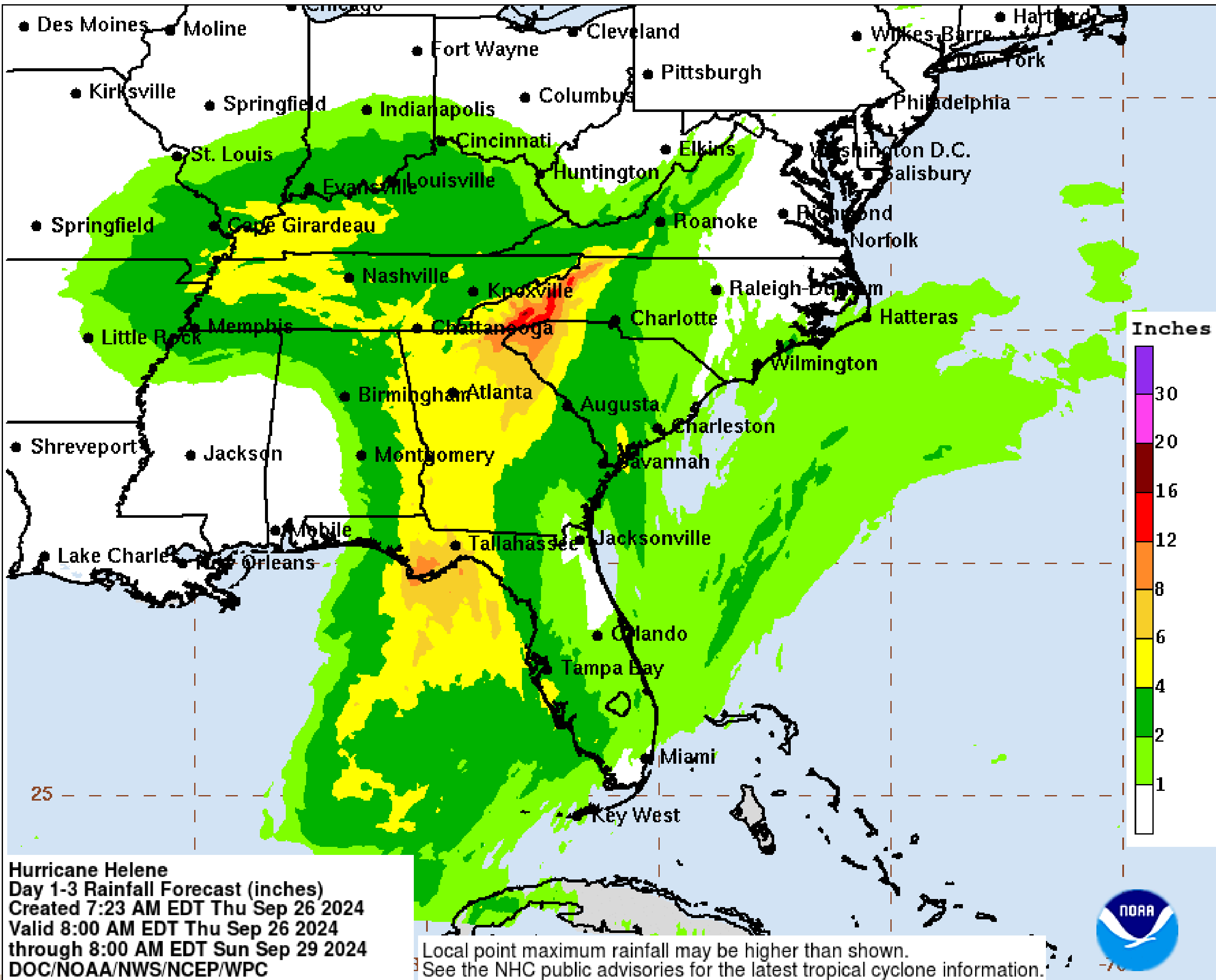
# Expected Storm Total Rainfall

Hurricane Helene

Images from NWS Weather Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center





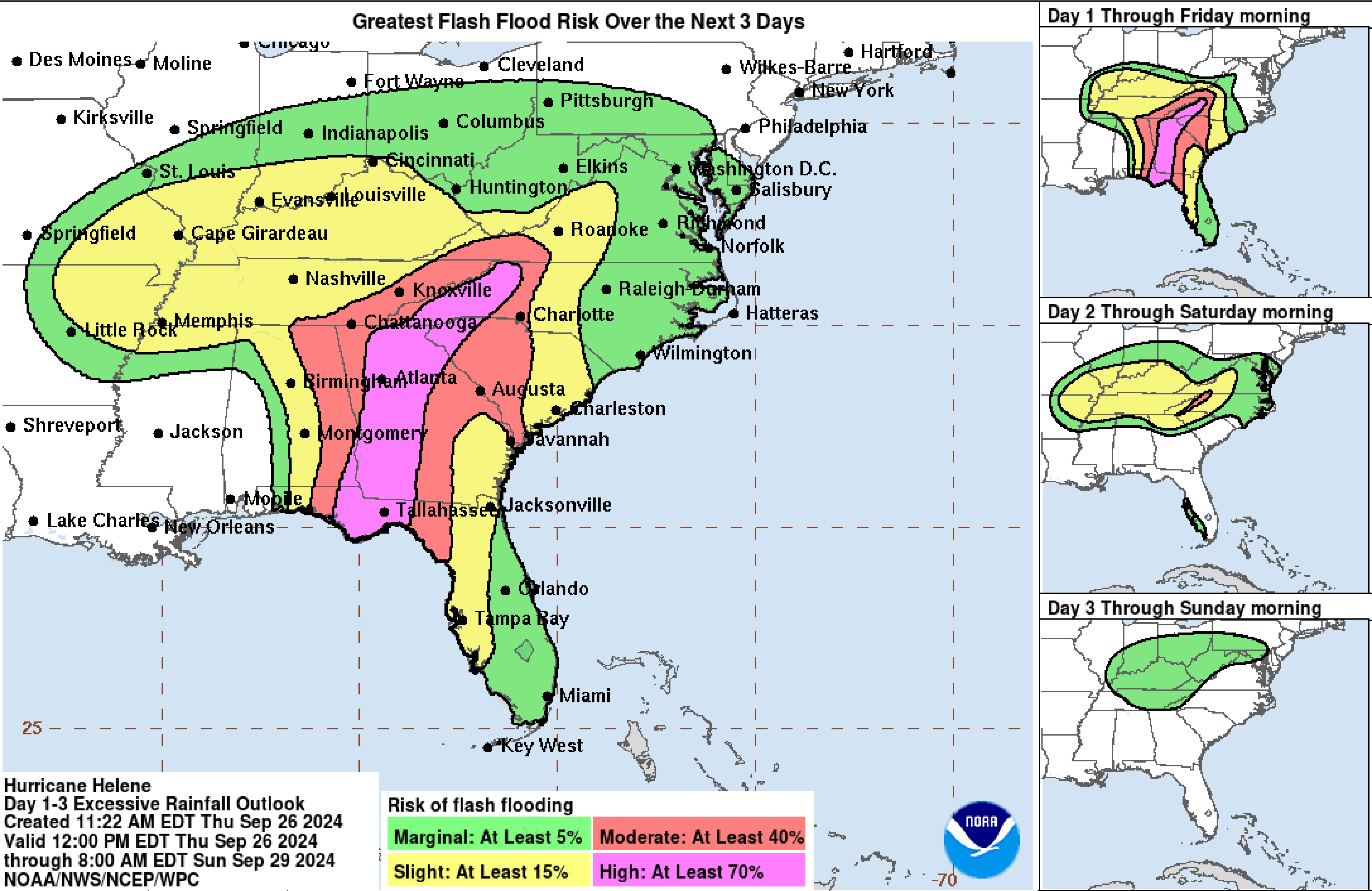
# Chance of Rainfall Flooding

Hurricane Helene

Images from NWS Weather Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane 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%**

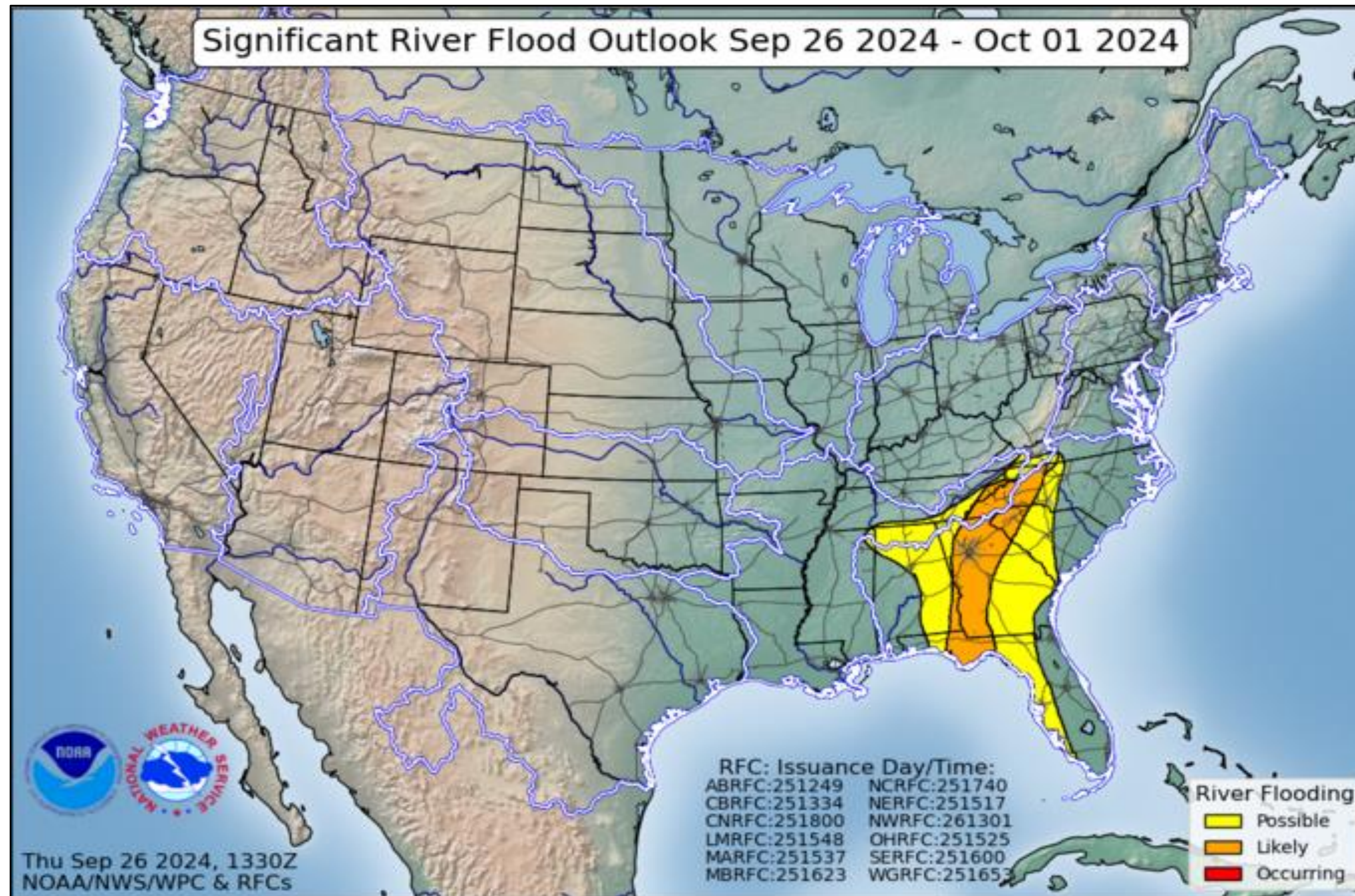


# Flood Outlook

Hurricane Helene



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**Possible river flooding in FL, GA, AL, and SC after Helene passes through.**

**Likely river flooding for parts of the Panhandle of FL, GA, AL, and SC.**



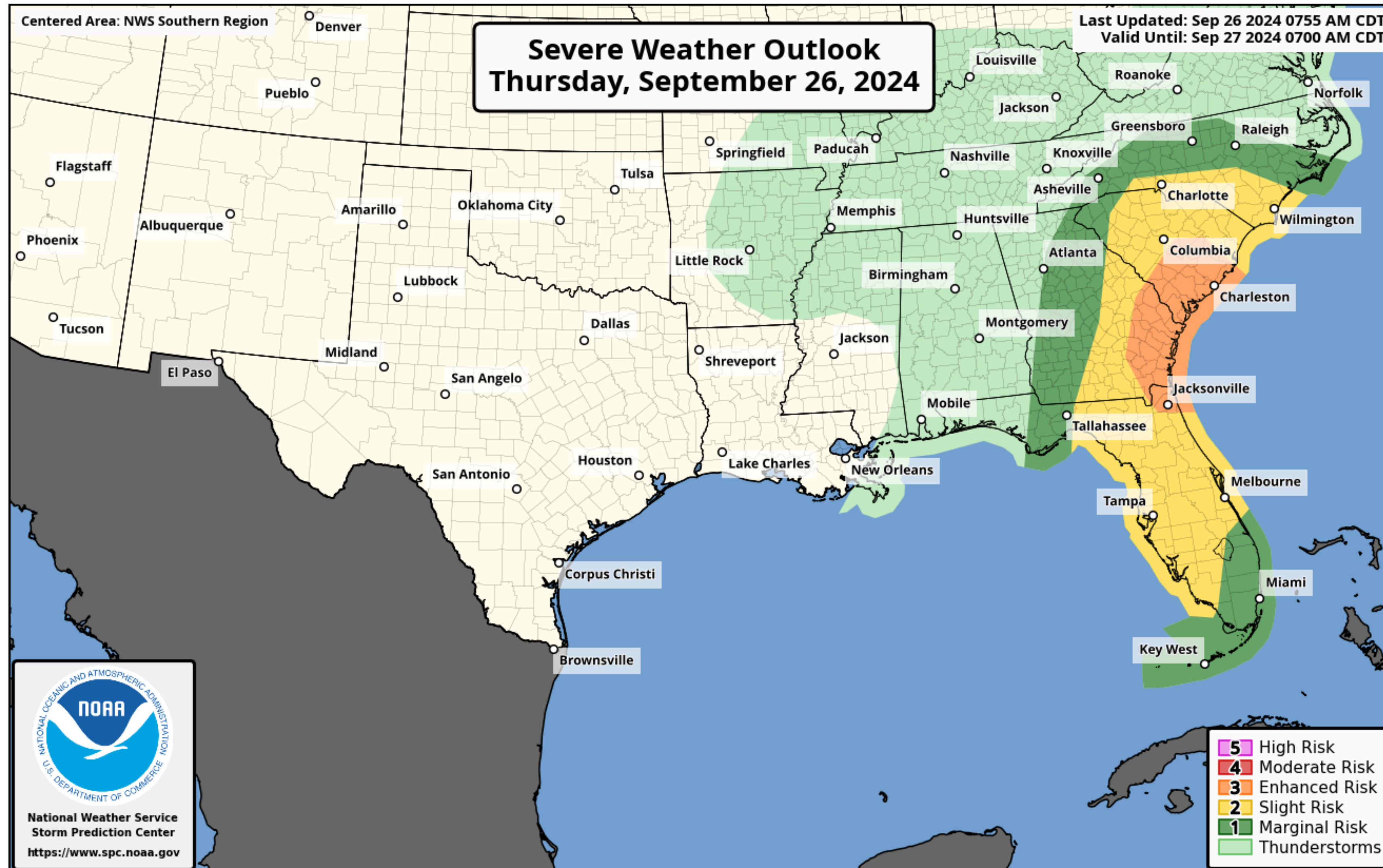
# Tornado Outlook – Day 1

Hurricane Helene

Image from NWS Storm Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



**Today:**

**Marginal Risk of Tornadoes**  
in parts of **FL, GA, SC, & NC**

**Slight Risk of Tornadoes**  
for parts **FL, GA, & SC.**



# Key Messages

## Hurricane Helene



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



### Key Messages for Hurricane Helene Advisory 12: 4:00 AM CDT Thu Sep 26, 2024

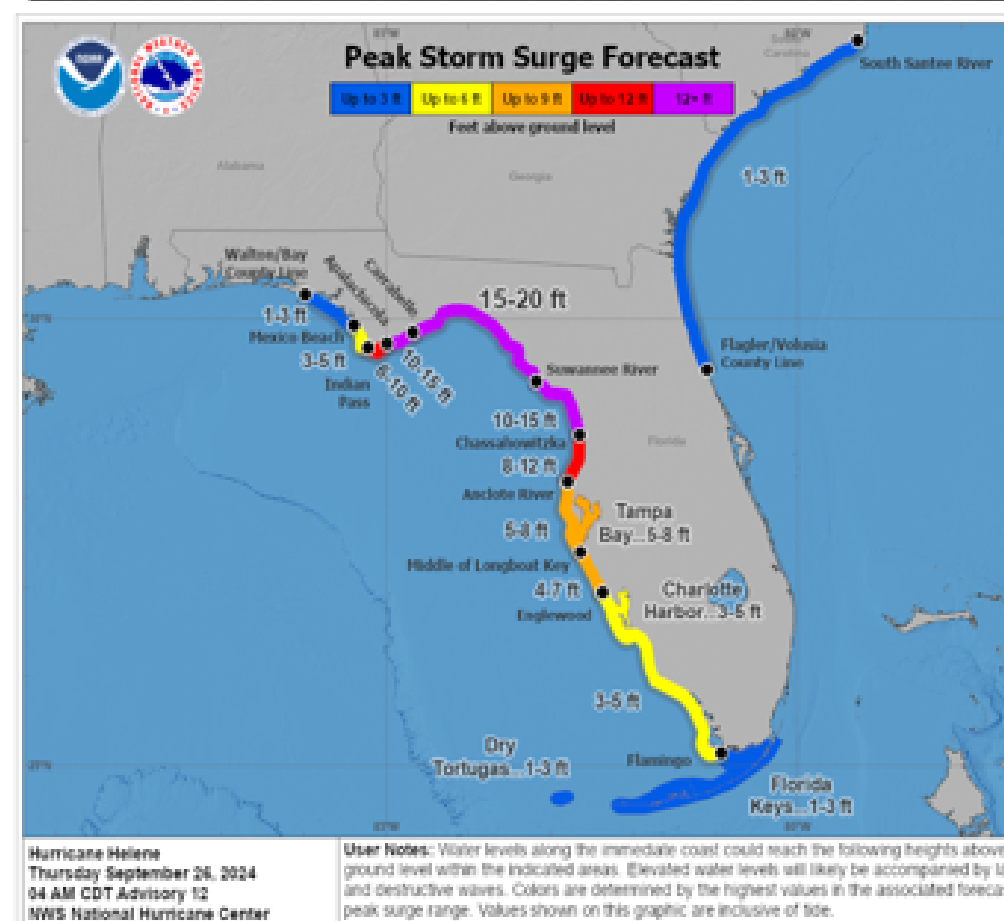
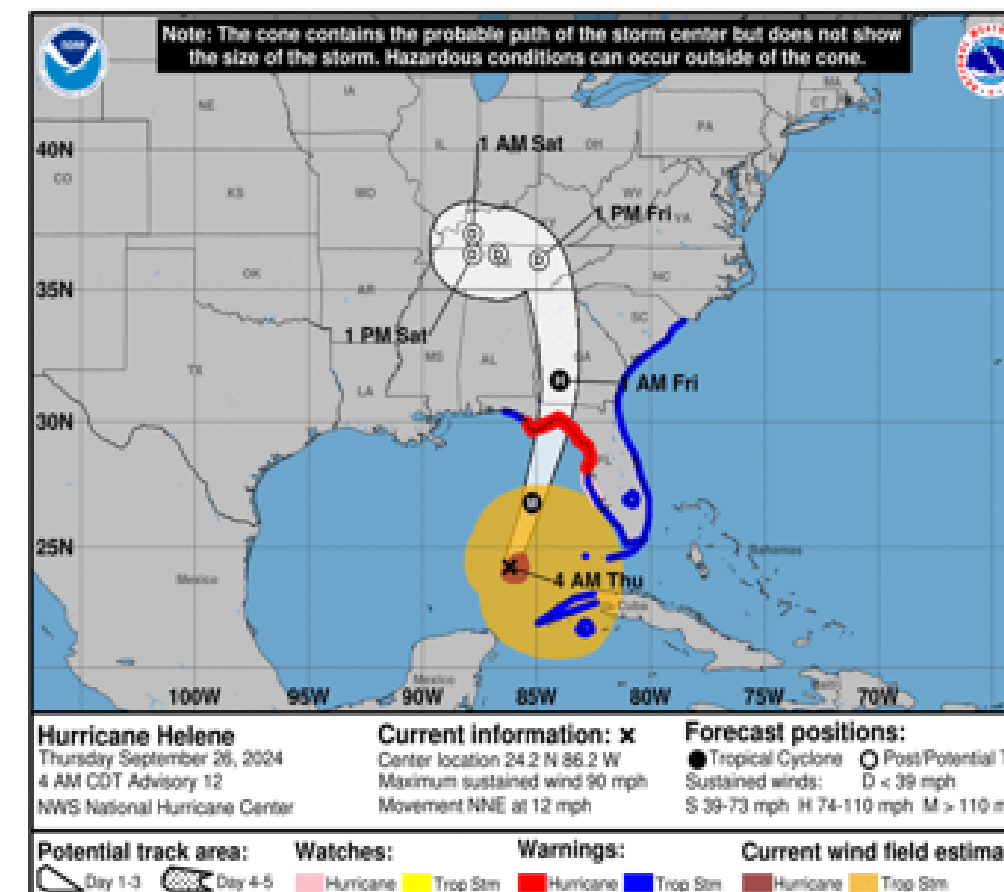


1. A catastrophic and deadly storm surge is likely along portions of the Florida Big Bend coast, where inundation could reach as high as 20 feet above ground level, along with destructive waves. There is also a danger of life-threatening storm surge along the remainder of the west coast of the Florida Peninsula. Residents in those areas should follow advice given by local officials and evacuate if told to do so.

2. Potentially catastrophic hurricane-force winds are expected within the eyewall of Helene when it makes landfall in the Florida Big Bend region later today. Preparations to protect life and property should be completed this morning before tropical storm conditions arrive. Damaging and life-threatening hurricane-force winds, especially in gusts, will penetrate well inland over portions of northern Florida and southern Georgia later today and tonight where Hurricane Warnings are in effect. Strong wind gusts are also likely farther north across portions of northern Georgia and the Carolinas, particularly over the higher terrain of the southern Appalachians.

3. Catastrophic and life-threatening flash and urban flooding, including numerous significant landslides, is expected across portions of the southern Appalachians through Friday. Considerable to locally catastrophic flash and urban flooding is likely for northwestern and northern Florida and the Southeast through Friday. Widespread significant river flooding and isolated major river flooding are likely.

4. Tropical storm conditions are expected over portions of western Cuba within the Tropical Storm Warning area. Hurricane Helene will bring heavy rain to portions of the western Caribbean with potentially significant flooding across western Cuba and the northeastern Yucatan Peninsula through this morning.



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

### IMPACTS FOR D8 through next 5days

Winds/US Coast – **Extreme**

Winds/SRR – **Extreme**

Waves/US Coastal – **Extreme**

Waves/SRR – **Extreme**

US Storm Surge – **Extreme**

US Rainfall/Flash Flooding – **Extreme**

US Tornadoes – **Low**

### Key Messages:

- Conditions will continue to rapidly deteriorate in the N-NE Gulf.
- This afternoon NE Gulf:
  - Peak winds of 110-115 kt are likely.
  - Peak seas near 37 ft are likely.
- While Gulf will quickly return to normal on Fri, the Atlantic waters off of NE Florida/Georgia will build on Fri before diminishing Sat.



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



# HURRICANE HELENE BRIEFING

**TIME of NEXT NHC Advisory:**

**21 UTC: 4 PM CDT**

*The Next Briefing Will Be:  
Friday 1:00 AM CDT*

*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)