

IMPACTS FOR D7

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 – High

HURRICANE HELENE BRIEFING



4:00 PM EDT

Thursday, September 26, 2024

Prepared by:

Keren Rosado-Vázquez

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*



NHC_TAFB

www.nhc.noaa.gov

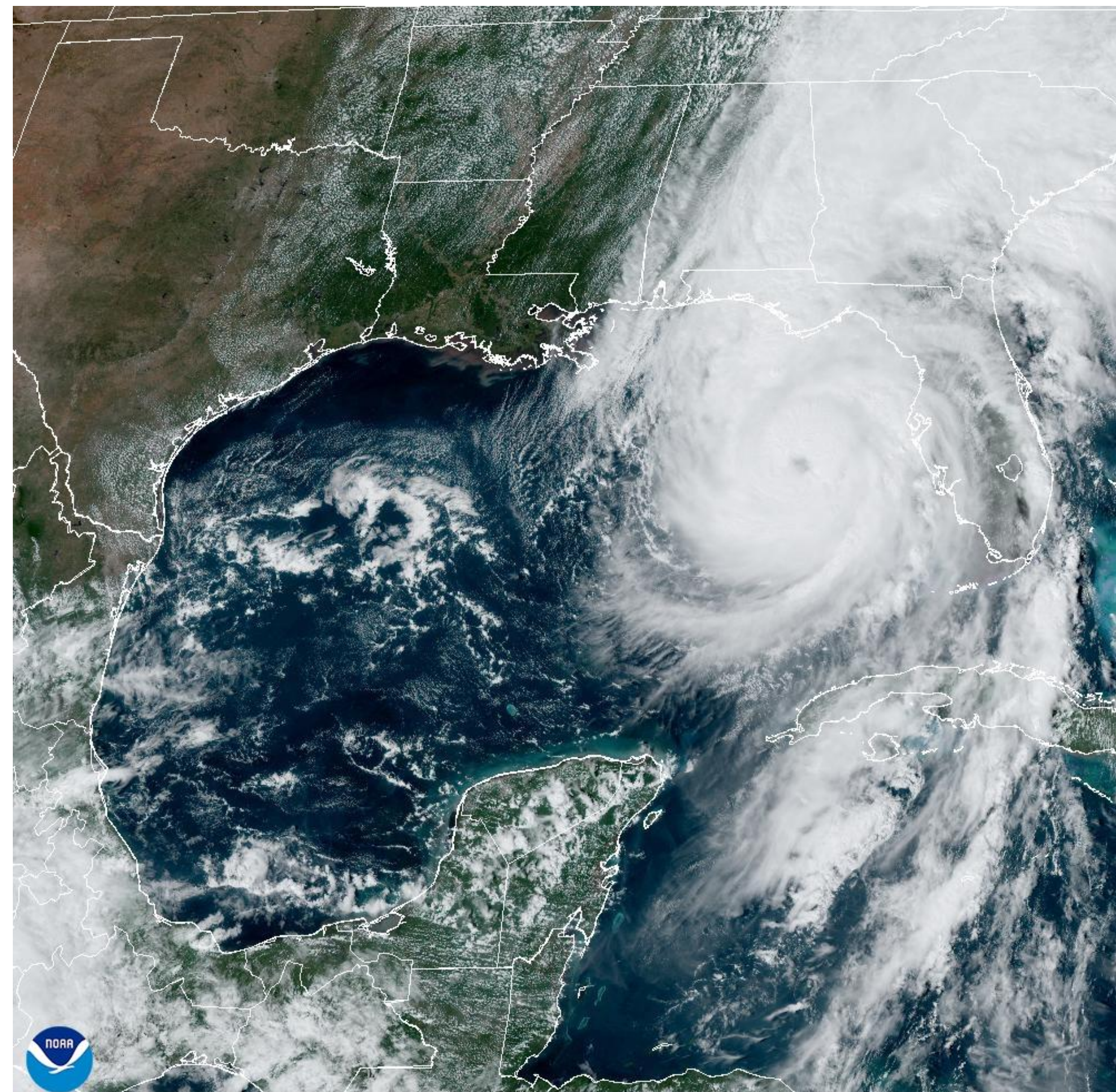
Changes Since The Last Briefing

Hurricane Helene



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- Helene is now a Category 3 hurricane.
- Flooding Rain threat has increased for portions of the Florida Panhandle, GA, and SC.



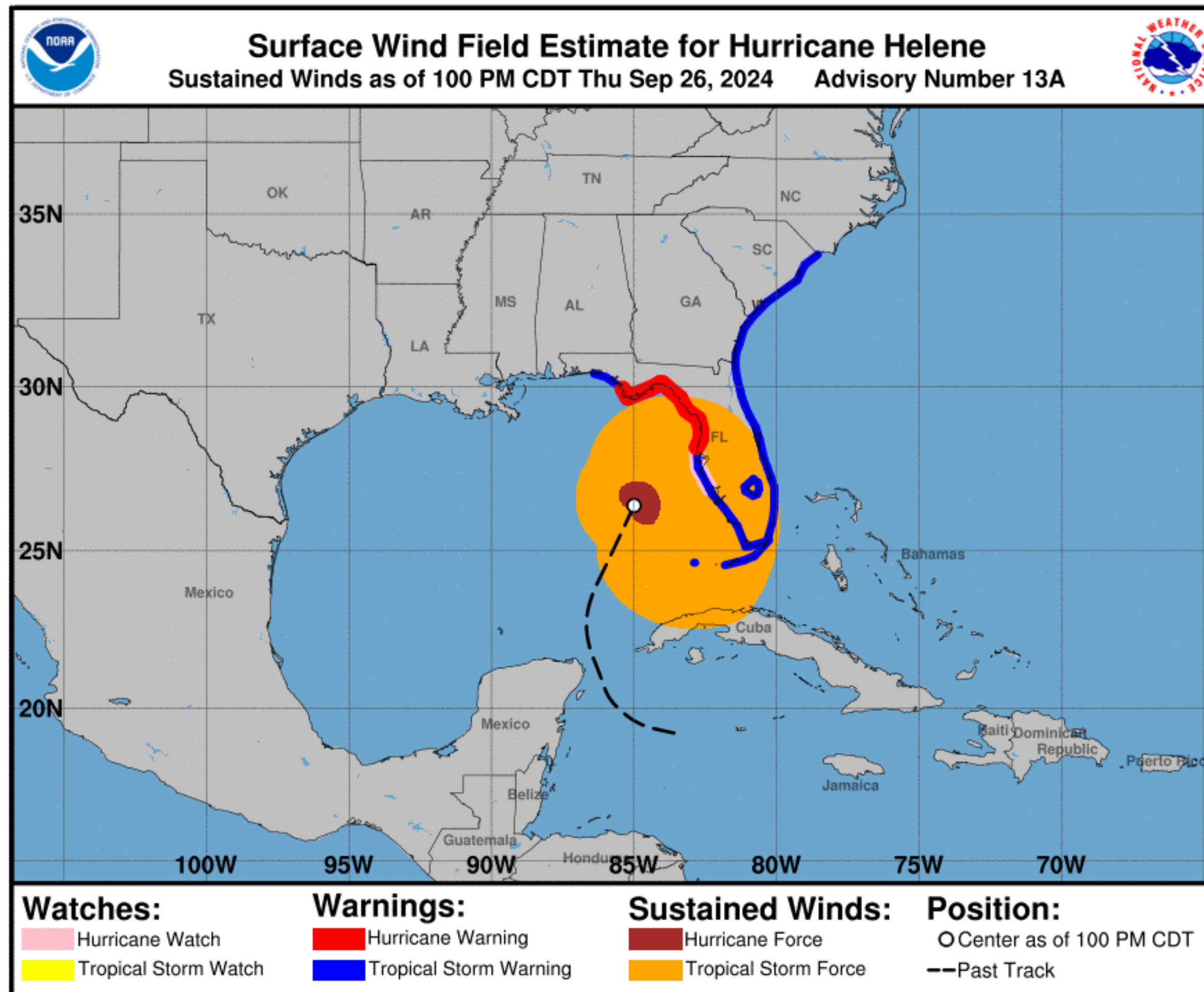
26 Sep 2024 19:16Z - NOAA/NESDIS/STAR - GOES-East - GEOCOLOR Composite - GM

Situation Overview

Hurricane Helene



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...HELENE ALMOST A MAJOR HURRICANE WITH
ADDITIONAL STRENGTHENING FORECAST
BEFORE LANDFALL IN THE FLORIDA BIG BEND...
...PREPARATIONS TO PROTECT LIFE AND
PROPERTY SHOULD BE RUSHED TO
COMPLETION...

SUMMARY OF 200 PM EDT...INFORMATION

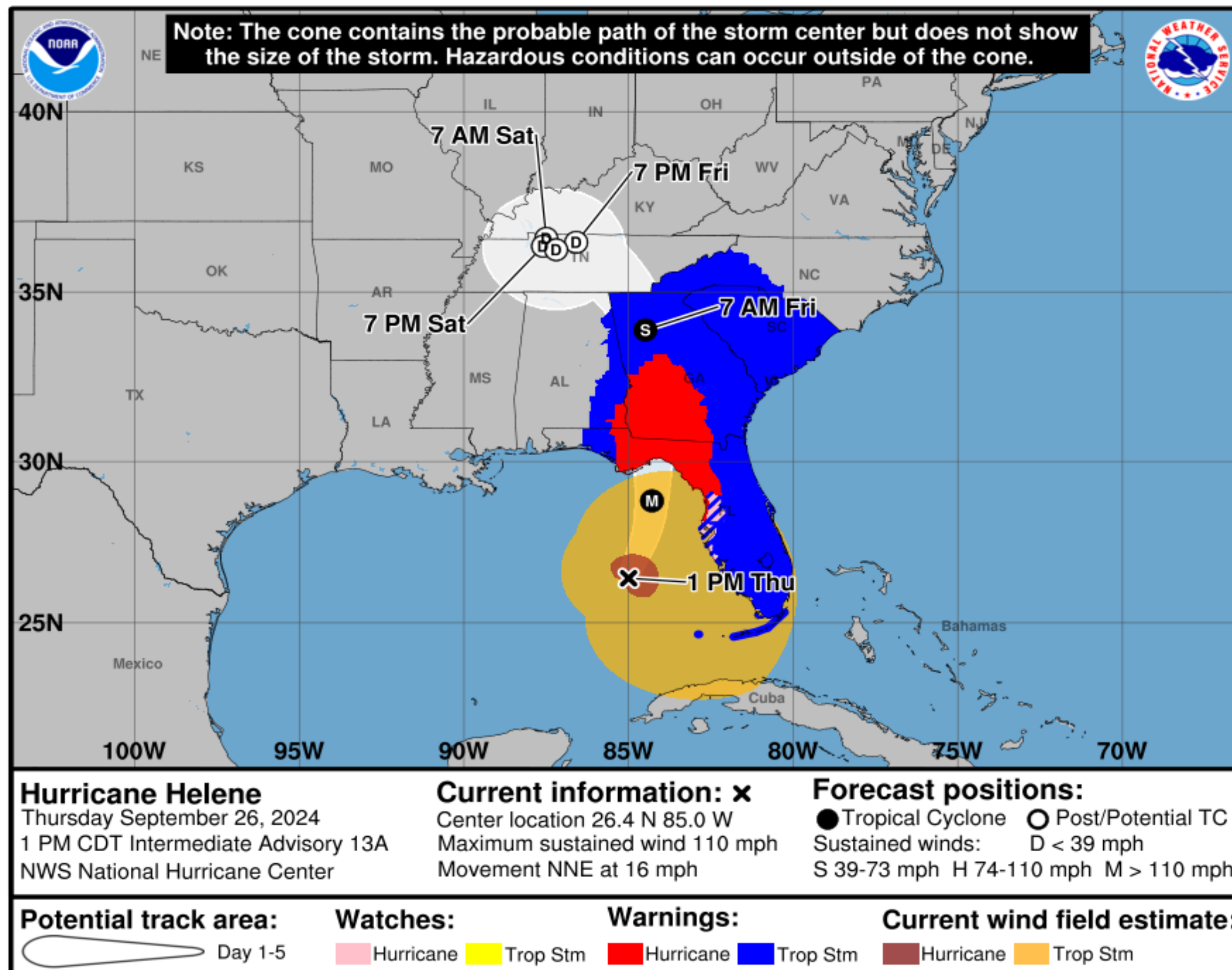
LOCATION...26.4N 85.0W
ABOUT 170 NM... SW OF TAMPA FLORIDA
ABOUT 200 NM... S OF APALACHICOLA
FLORIDA
MAXIMUM SUSTAINED WINDS...105 KT
PRESENT MOVEMENT...NNE 14 KT
SIZE
64 KT..... 50NE 50SE 0SW 40NW.
50 KT..... 80NE 80SE 50SW 50NW.
34 KT.....250NE 300SE 100SW 120NW.
12 FT SEAS..210NE 210SE 240SW 210NW.

Forecast Information

Hurricane Helene



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

- A significant increase in forward speed towards 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 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

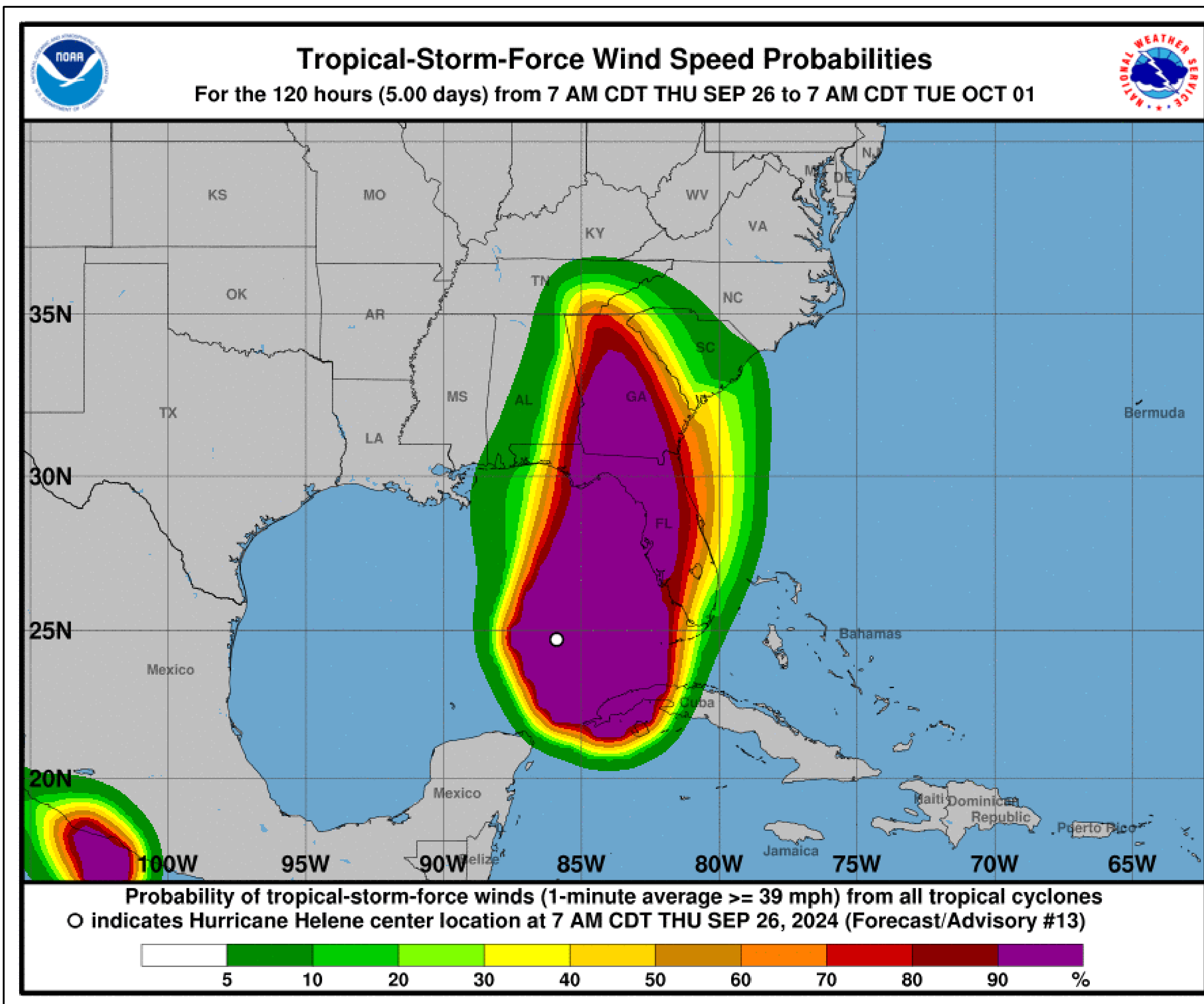
** Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

T.S. Wind Speed Probabilities

Hurricane Helene



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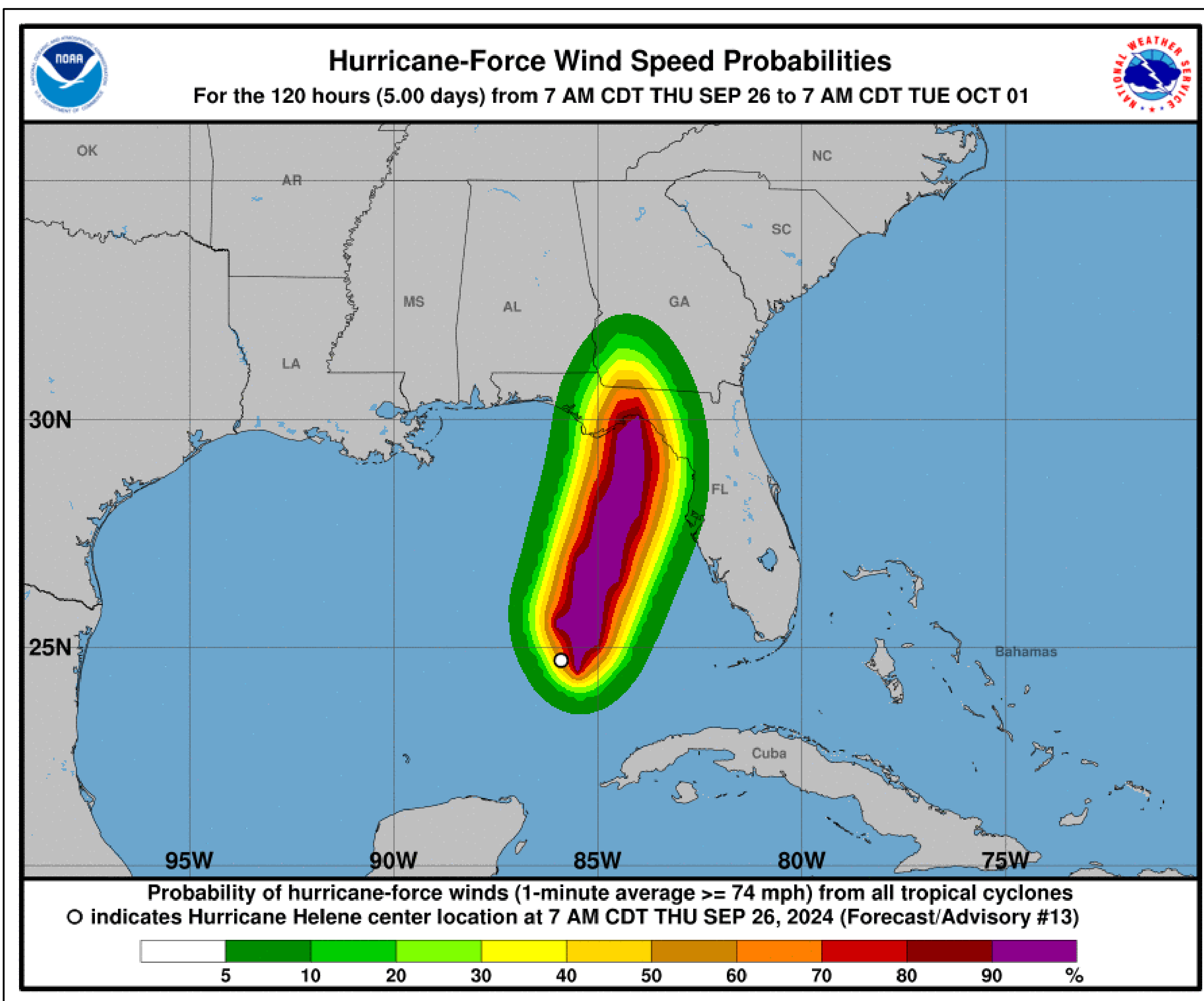
- MARATHON 30%
 - KEY WEST FL 99%
 - NAPLES 82%
 - FT MYERS 95%
 - VENICE 94%
 - TAMPA FL 95%
 - CEDAR KEY 99%
 - ST. MARKS 99%
 - FT LAUDERDALE 21%
 - W PALM BEACH 27%
 - FT PIERCE 45%
 - PATRICK AFB 62%
 - COCOA BEACH 62%
 - DAYTONA BEACH 81%
 - JACKSONVILLE 89%
 - MAYPORT 79%
 - KINGS BAY 79%
 - SAVANNAH 45%
 - CHARLESTON 28%
- 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%.

Hurricane Wind Speed Probabilities

Hurricane Helene



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■ ST MARKS 79%

GREEN - Probabilities have decreased

RED - Probabilities have gone up

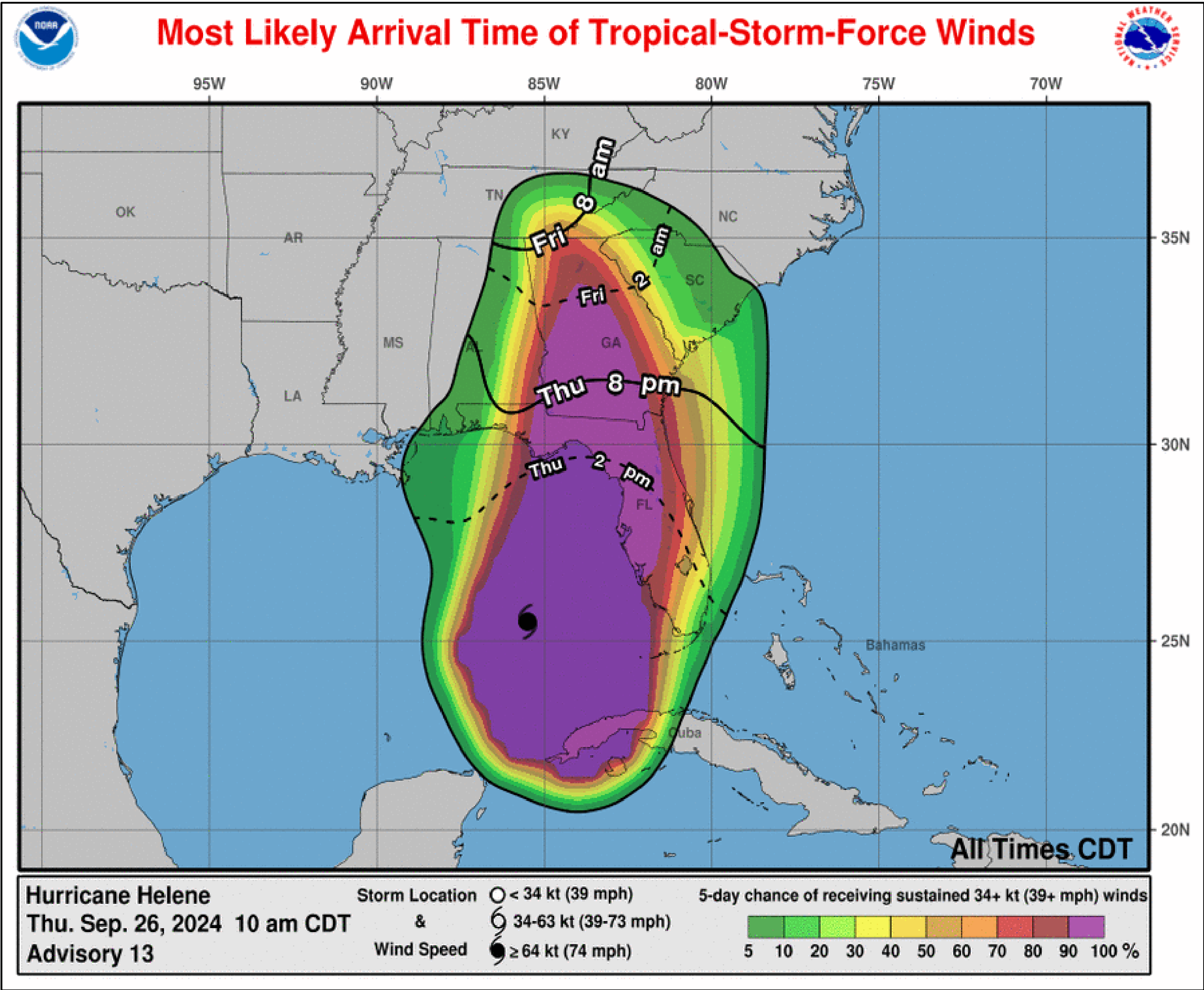
BLACK - Probabilities unchanged

Locations boldfaced & underlined - At least 50% chance of H 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%
- See the color bar below the image for more details.



Hurricane Helene



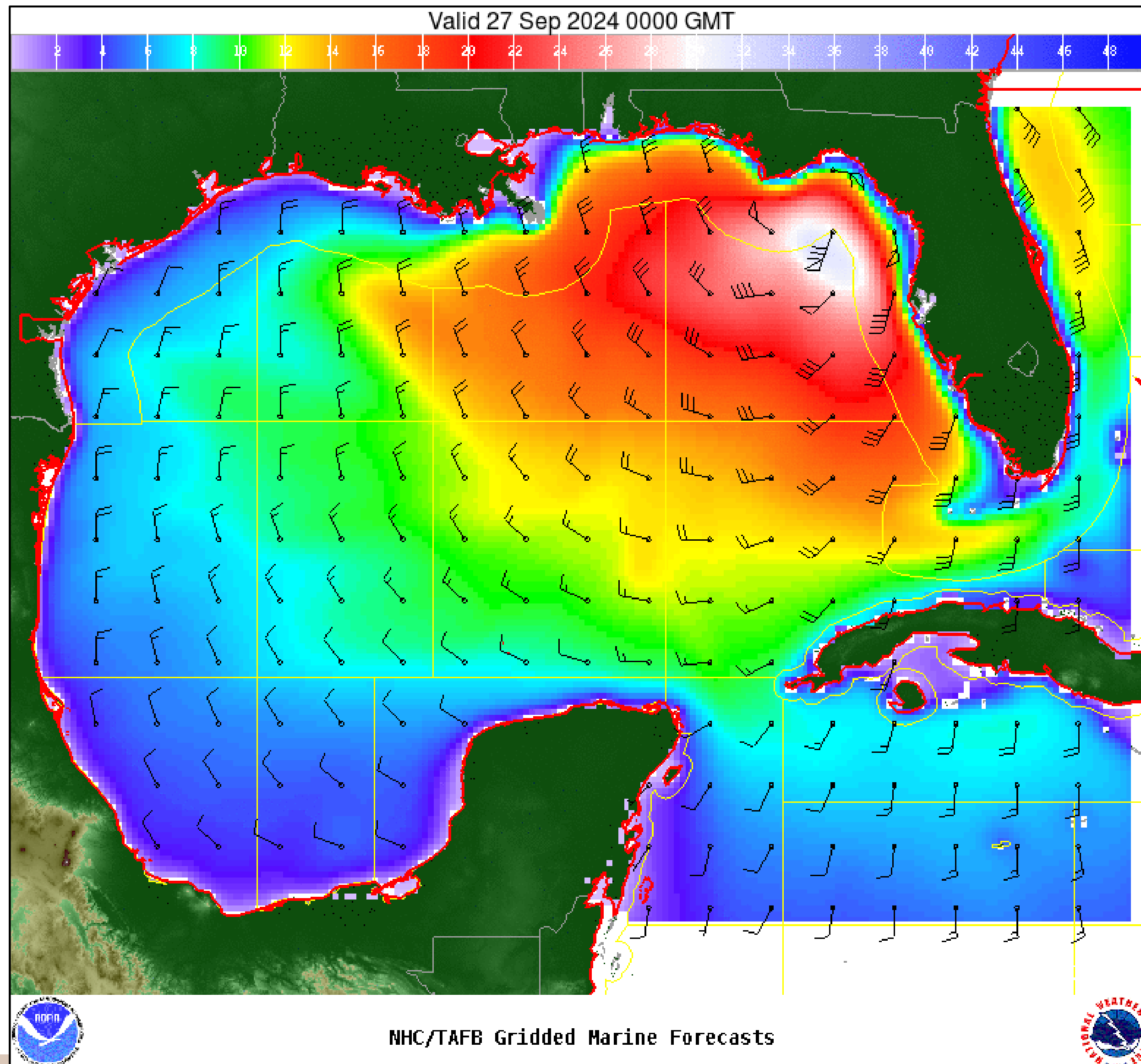
- **FL Keys/SW Florida/Tampa/Big Bend/FL Panhandle – On going.**
- **NE Florida/Georgia - Tonight.**
- The most likely time of arrival of Tropical Storm Force Winds (34kt to 63 kt) for this cyclone based off the current track and wind radii.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow 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



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Tonight

Thursday, September 26 at 8:00 PM EDT

Peak Winds: 100 kt

Peak Seas: 32 ft

■ Wave heights are in feet



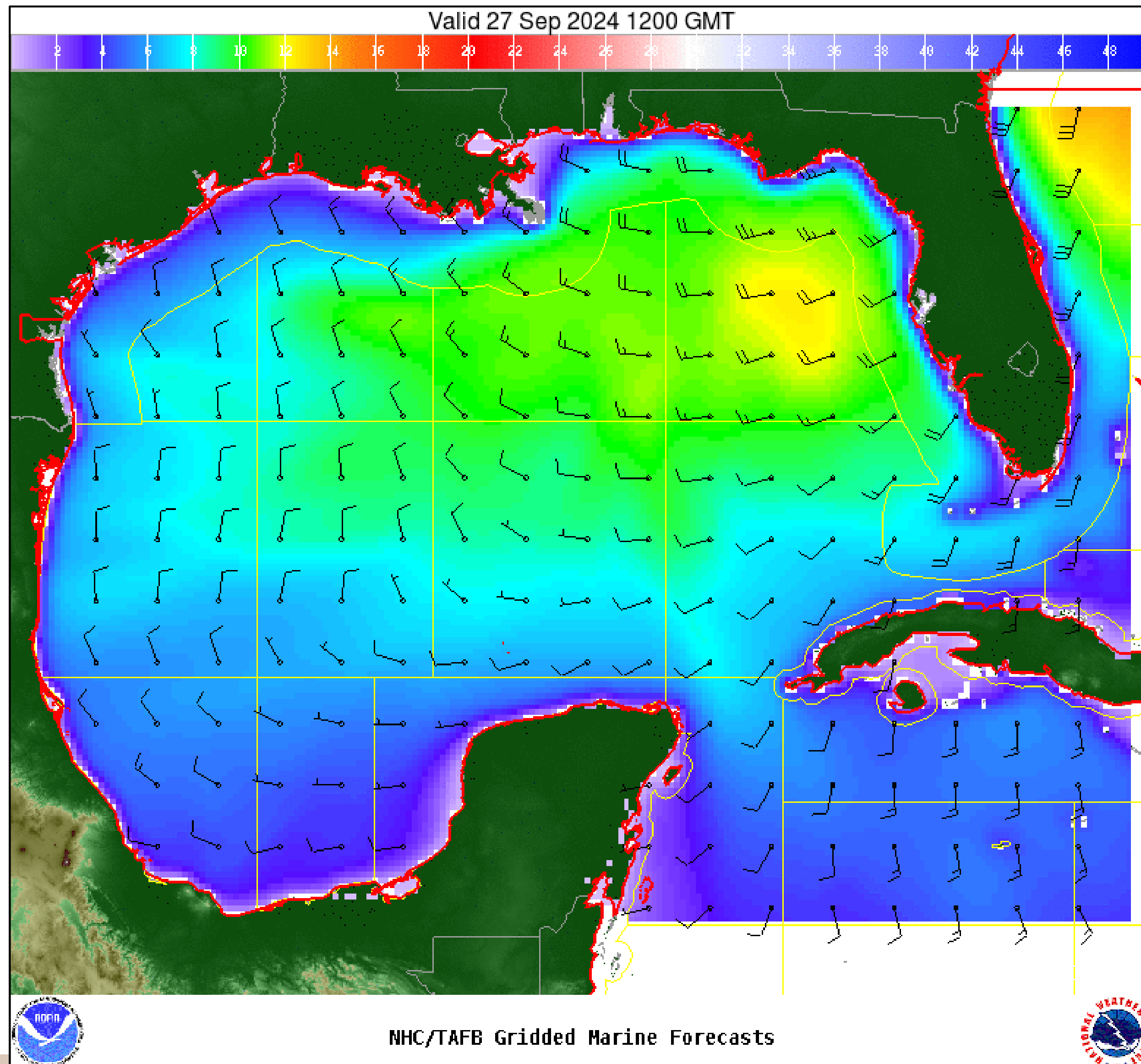
Significant Wave Height (ft)

Wind And Waves

Hurricane Helene



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12 Hour Forecast

Friday, September 26 at 8:00 AM EDT

Peak Winds: 25 kt

Peak Seas: 12 ft

- Wave heights are in feet



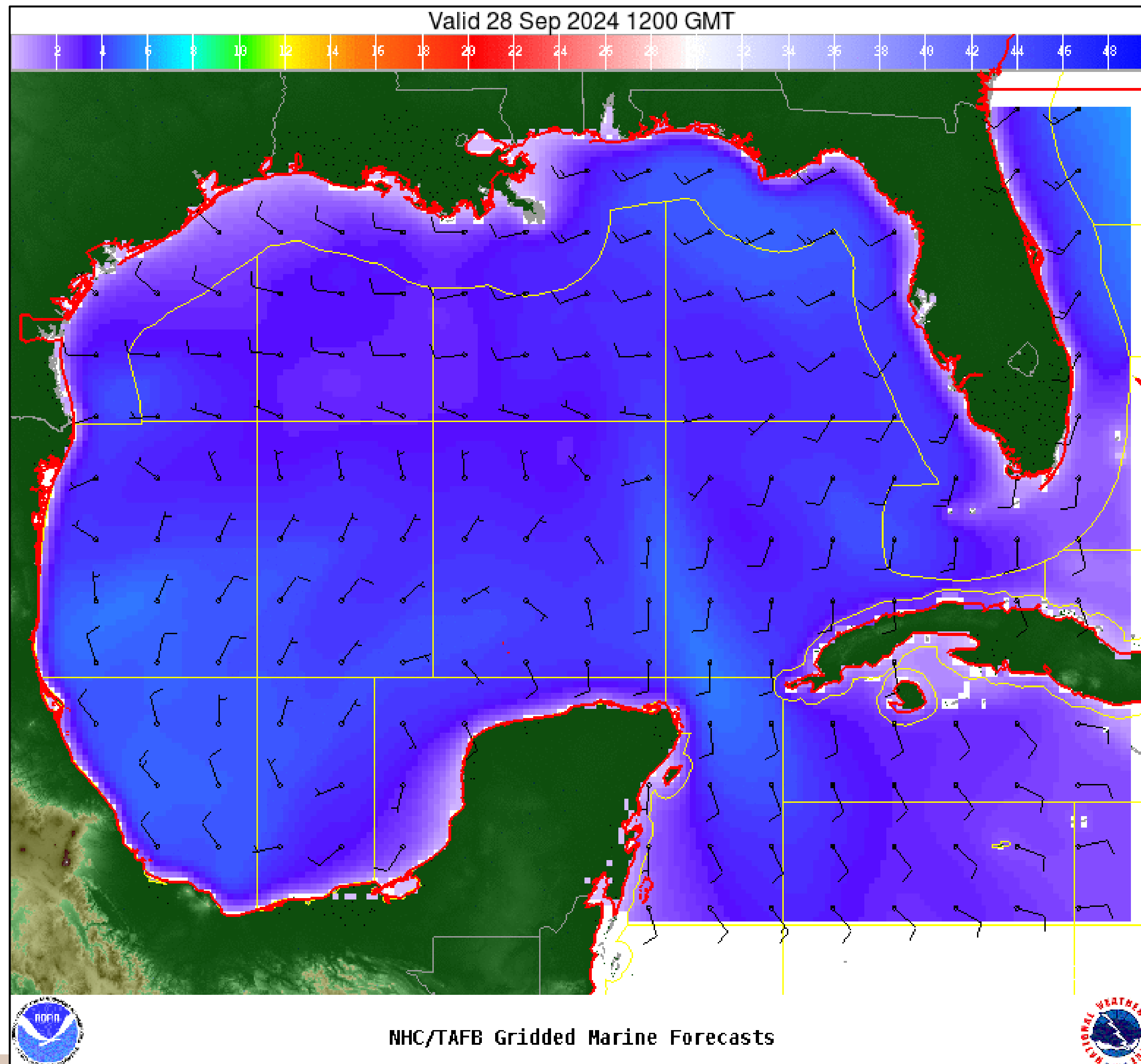
Significant Wave Height (ft)

Wind And Waves

Hurricane Helene



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36 Hour Forecast

Saturday, September 26 at 8:00 AM EDT

Peak Winds: 15 kt

Peak Seas: 5 ft

■ Wave heights are in feet



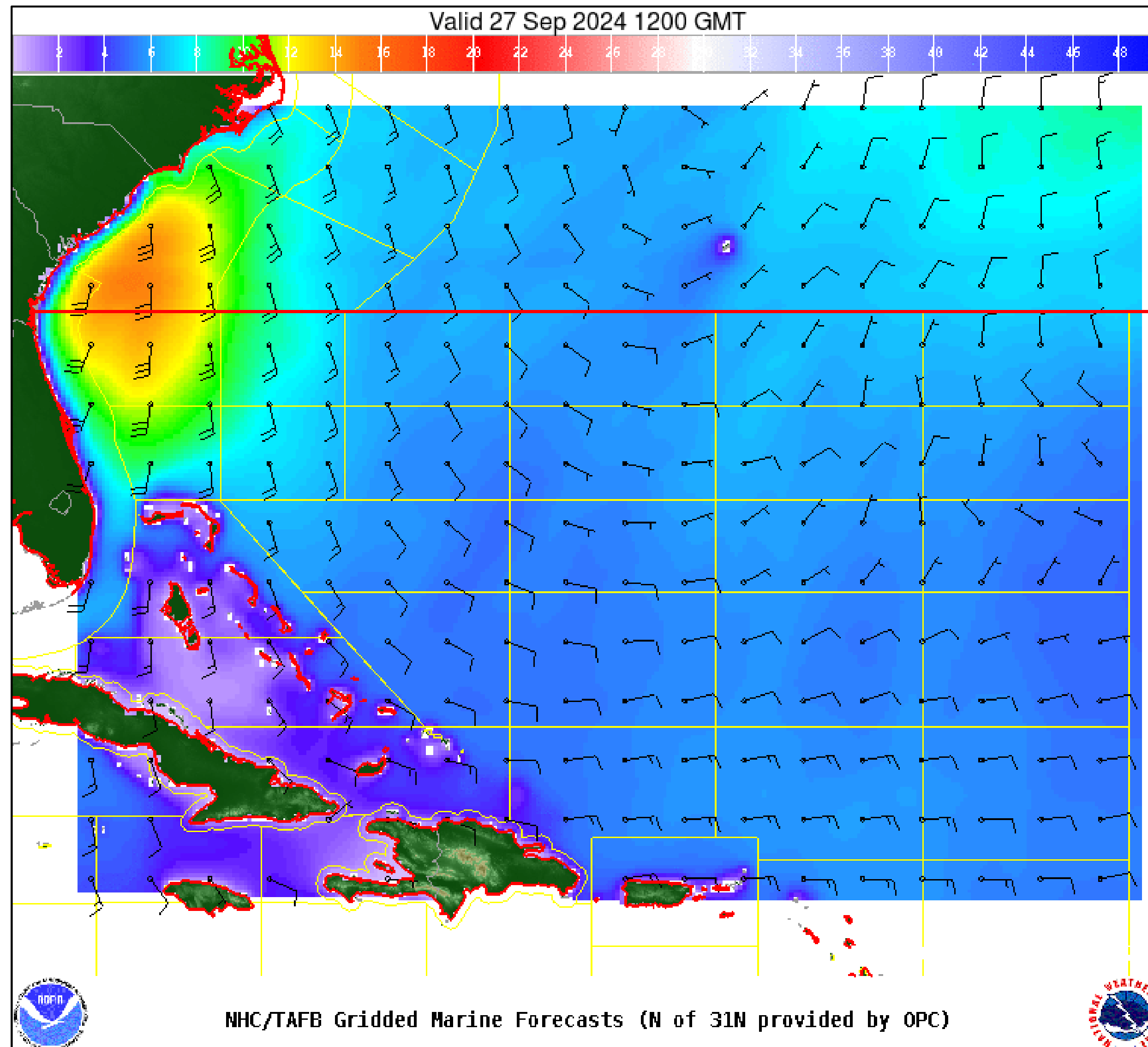
Significant Wave Height (ft)

Wind And Waves

Hurricane Helene



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NWS National Hurricane Center



12 Hour Forecast

Friday, September 27 at 8:00 AM EDT

Peak Winds: 35 kt

Peak Seas: 16 ft

- Wave heights are in feet



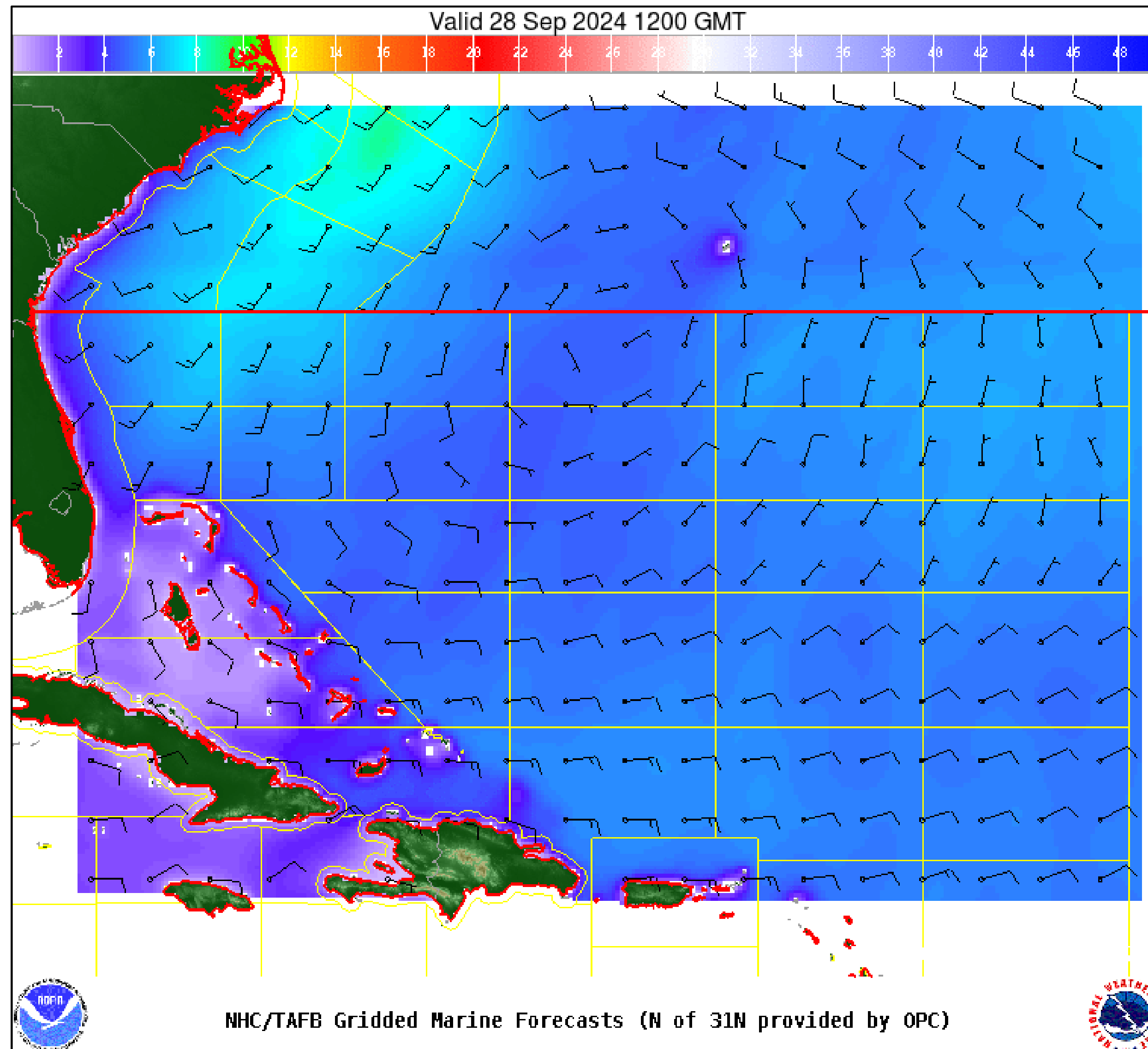
Significant Wave Height (ft)

Wind And Waves

Hurricane Helene



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NWS National Hurricane Center



36 Hour Forecast

Saturday, September 28 at 8:00 AM EDT

Peak Winds: 20 kt

Peak Seas: 9 ft

■ Wave heights are in feet



Significant Wave Height (ft)

Time of Departure for Tropical Storm Winds



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Hurricane Helene

- **KEY WEST** --Early this evening
- **NAPLES** --Tonight
- **FT MYERS** --Tonight
- **VENICE** --Tonight
- **TAMPA** --Tonight
- **CEDAR KEY** --Early Friday morning

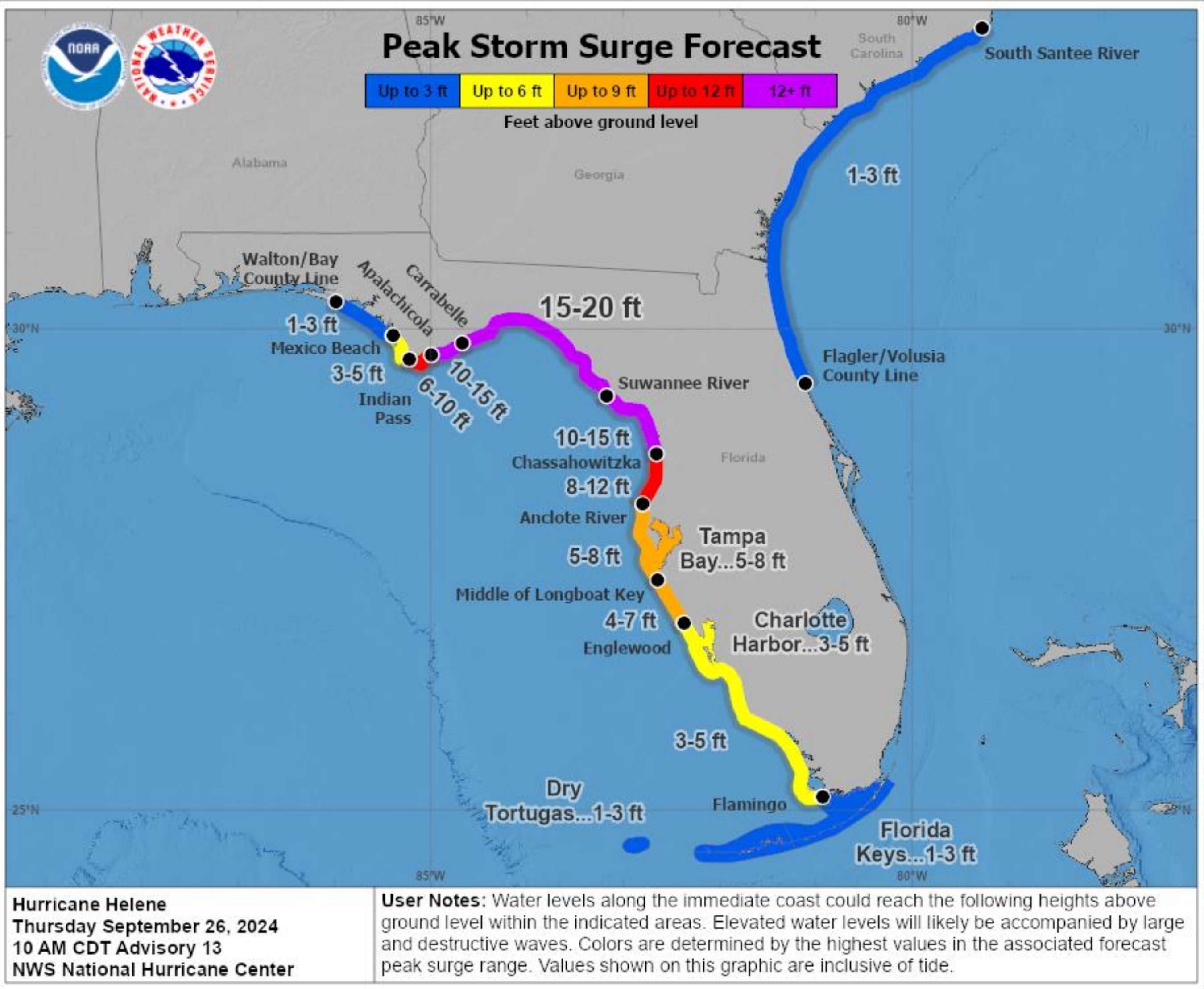
- **PATRICK AFB** --Tonight
- **COCOA BEACH** --Tonight
- **DAYTONA BEACH** --Late tonight
- **MAYPORT** --Early Friday morning
- **JACKSONVILLE** --Early Friday morning
- **KINGS BAY** --Friday morning

Potential Peak Storm Surge / Watches and Warnings

Hurricane Helene



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NWS National Hurricane Center



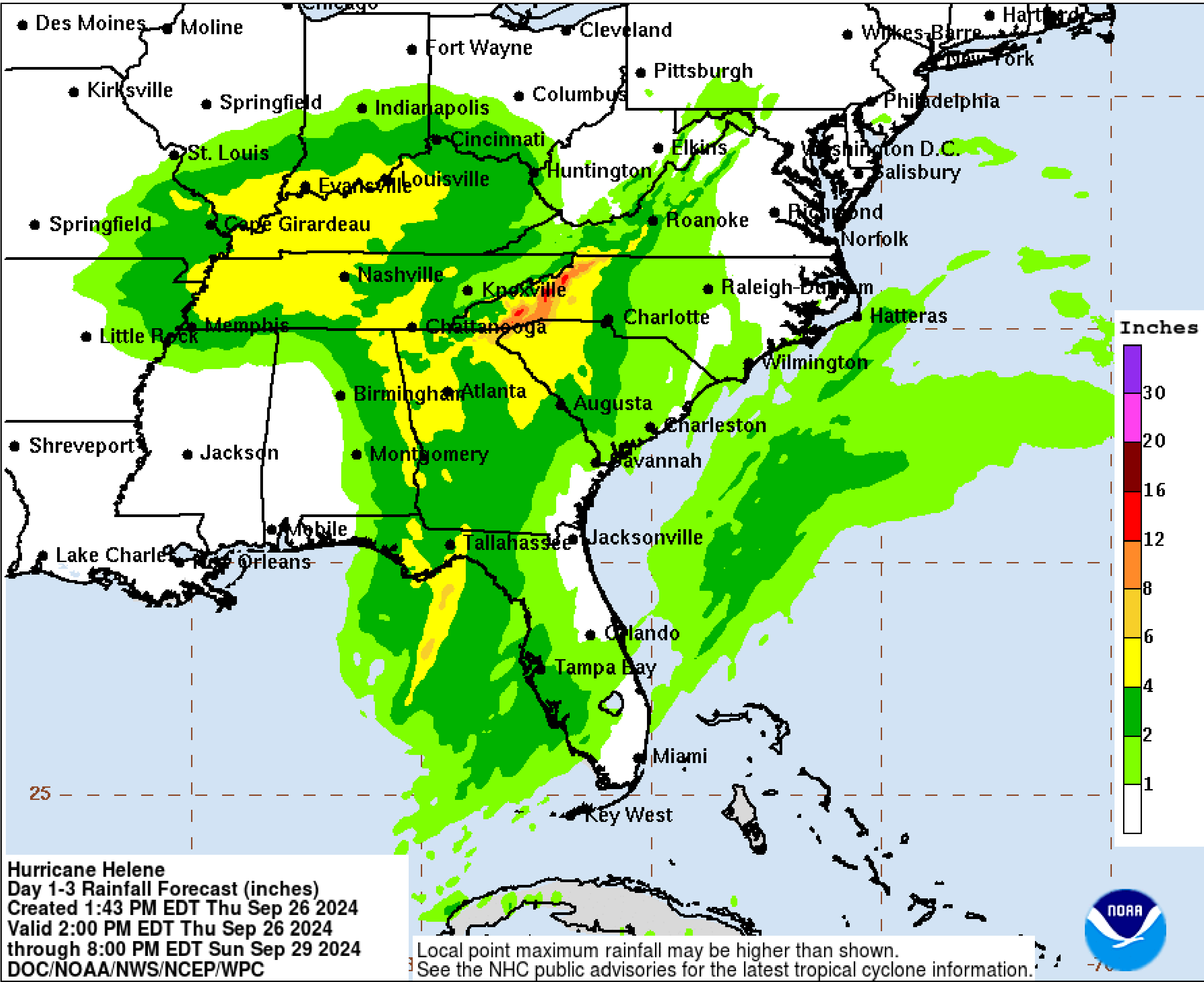
Expected Storm Total Rainfall

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



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NWS National Hurricane Center

HIGH RISK OF EXCESSIVE RAINFALL

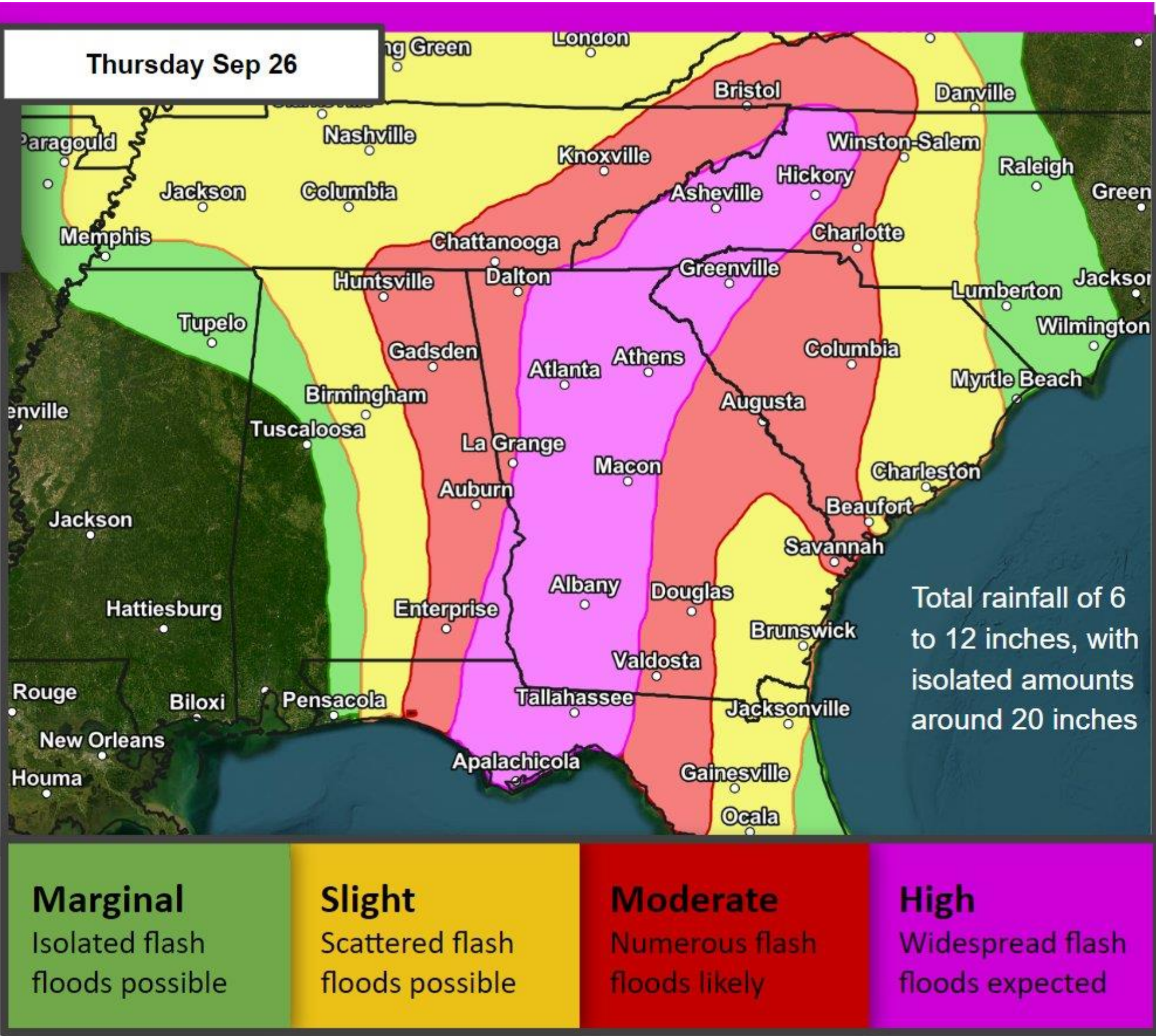
Catastrophic and *life-threatening* flash flooding, including numerous significant landslides, is expected across portions of the southern Appalachians through Friday.

Considerable to locally catastrophic flash flooding is likely from the Florida Panhandle into much of Georgia.

Widespread significant river flooding and isolated major river flooding are likely.

Be Prepared!

- ✓ Stay weather aware
- ✓ Have multiple ways to receive warning notifications
- ✓ NEVER drive or walk into a flooded road- Turn Around, Don't Drown



For more info visit: www.wpc.ncep.noaa.gov



NOAA NWS Weather Prediction Center

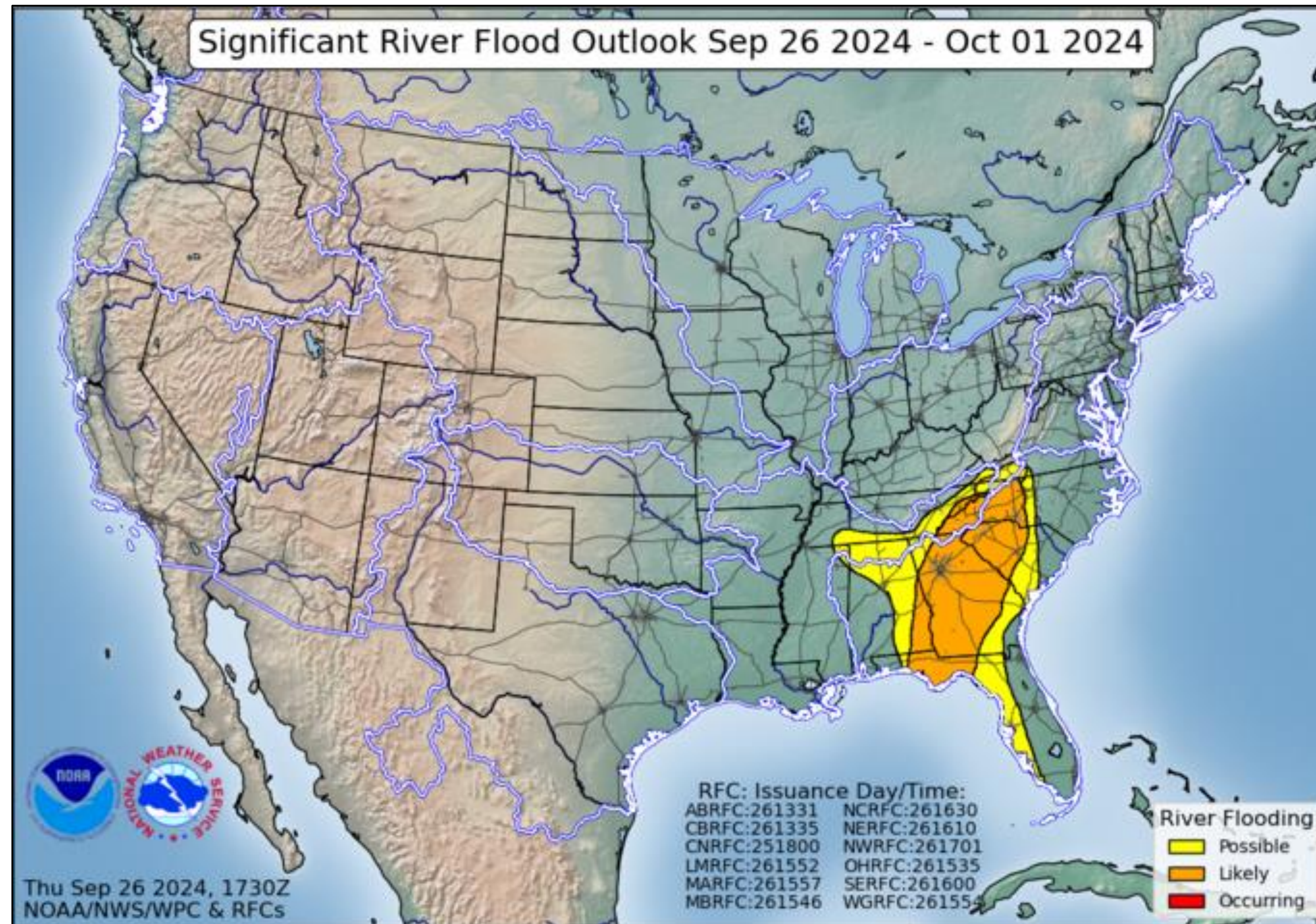
ISSUED: Thu Sep 26, 2024

Flood Outlook

Hurricane Helene



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NWS National Hurricane Center



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.

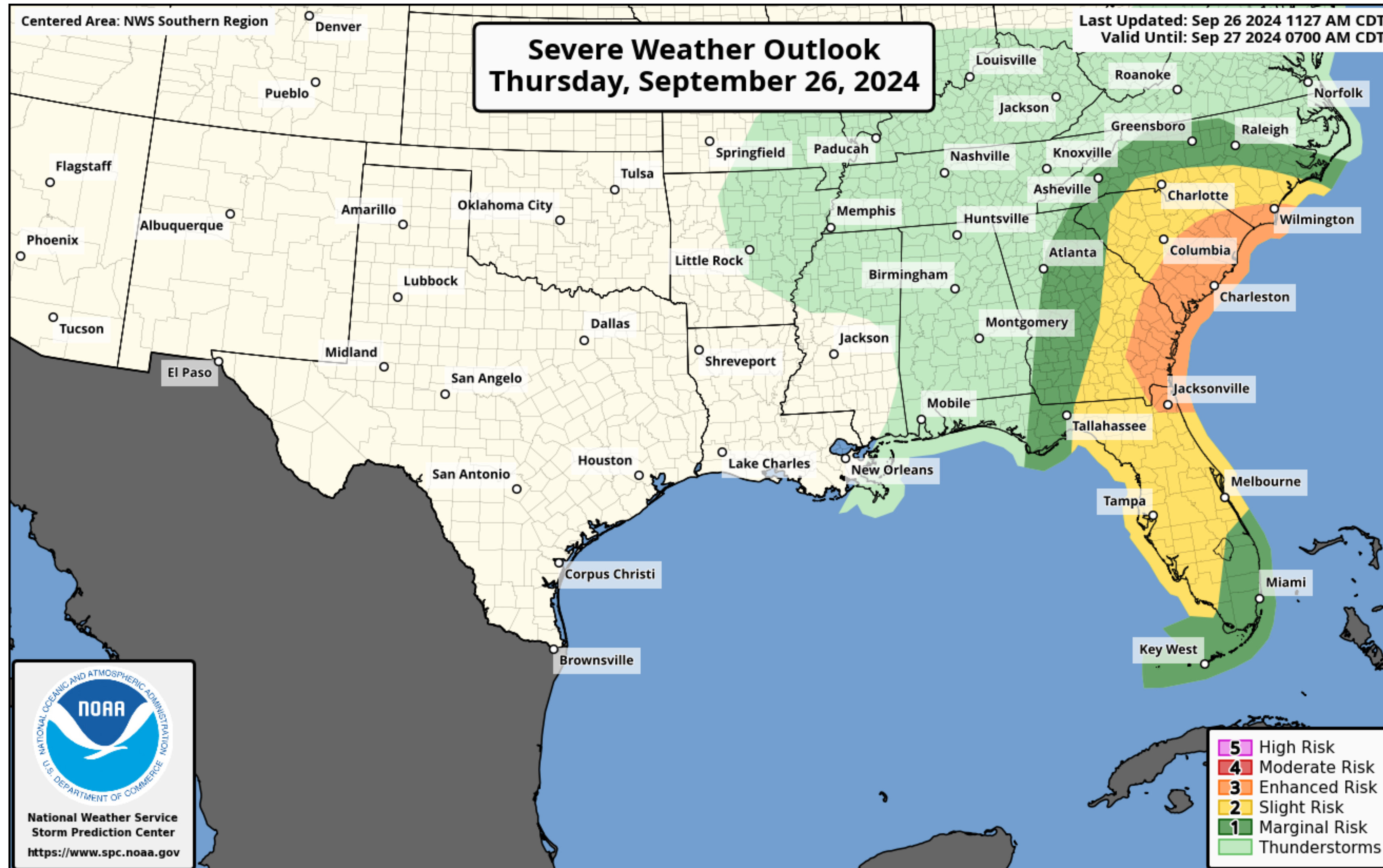
Tornado Outlook – Day 1

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.**

Enhanced Risk of
Tornadoes for parts of GA
& SC.

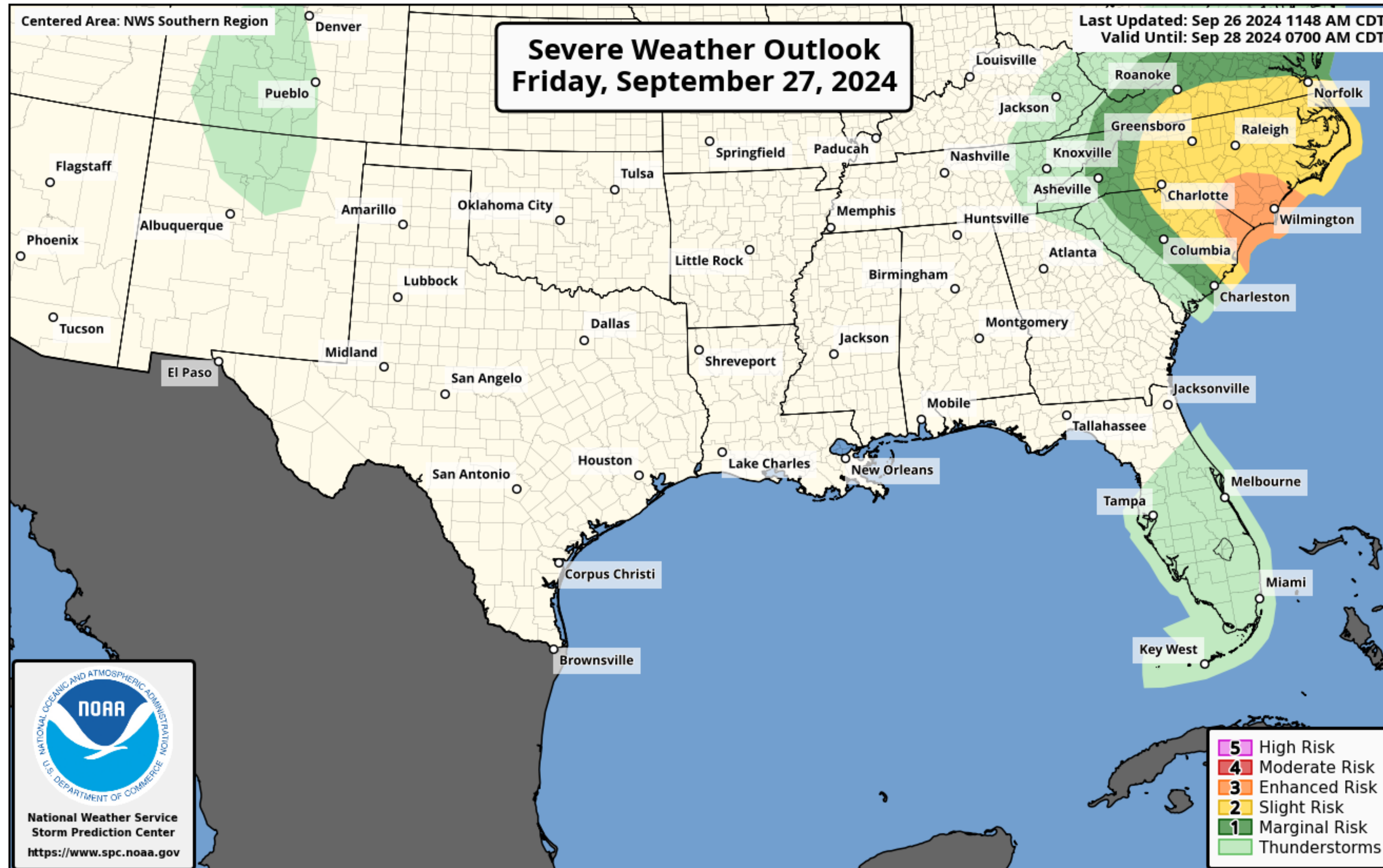
Tornado Outlook – Day 2

Hurricane Helene

Image from NWS Storm Prediction Center



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Tomorrow



South Carolina: There is an enhanced risk of tornados for some parts of the state.

Key Messages

Hurricane Helene



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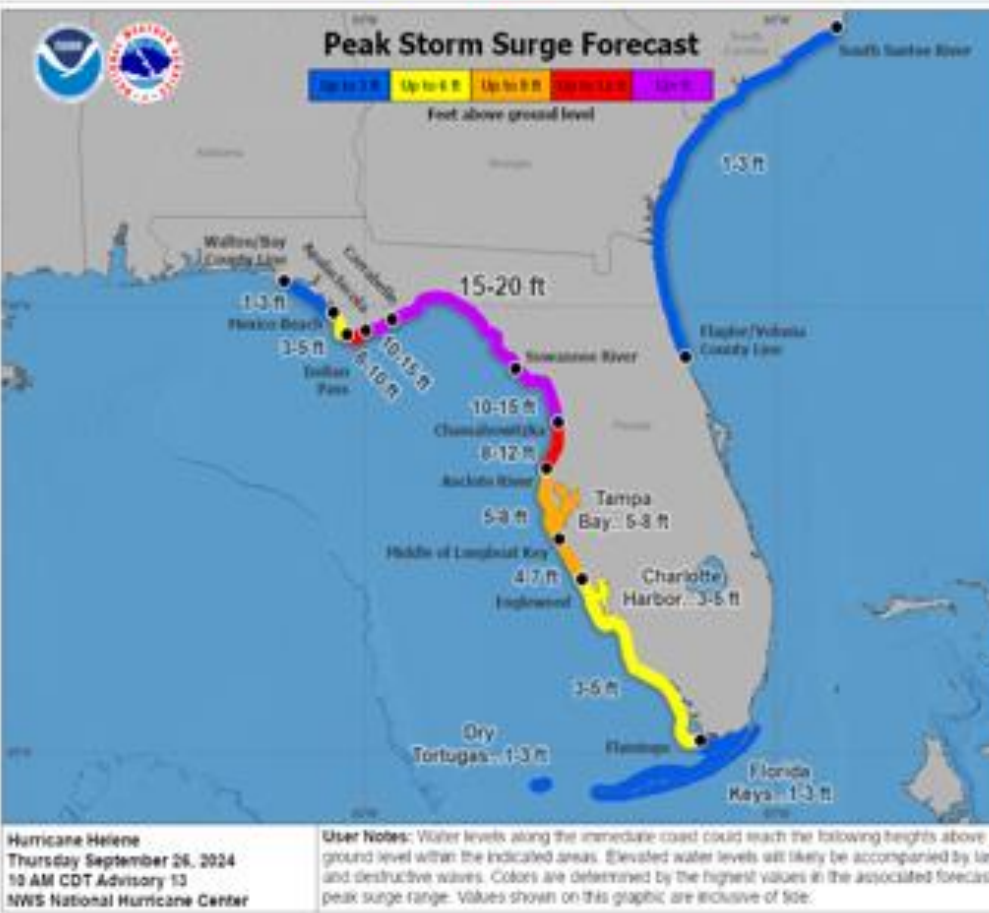
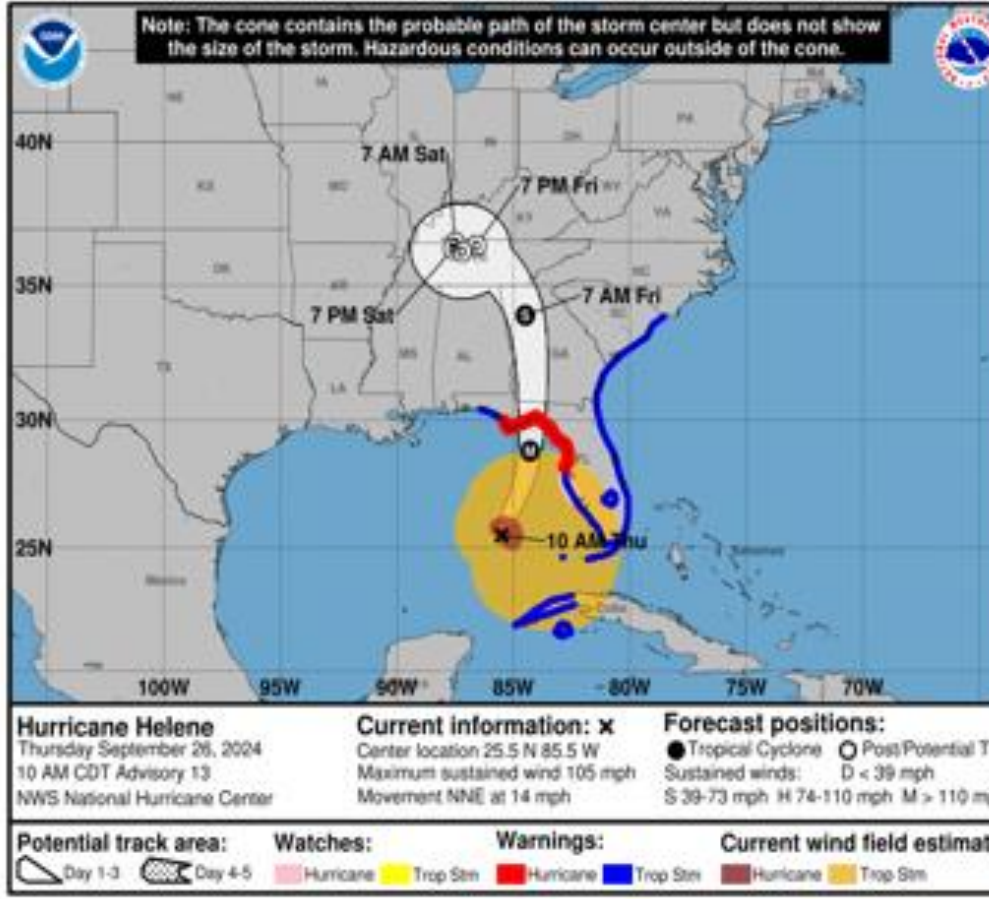
Key Messages for Hurricane Helene

Advisory 13: 10:00 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 this evening. Preparations to protect life and property should be rushed to completion. 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.



For more information go to hurricanes.gov

IMPACTS FOR **D7** 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 – **High**

Key Messages:

- Thursday late afternoon NE Gulf:
 - Peak winds of 110-115 kt are likely.
 - Peak seas near 38 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: 5 PM EDT

*The Next Briefing Will Be:
Friday 9:00 AM EDT*

You can always find get the latest graphics and information for this storm at www.hurricanes.gov



NHC_TAFB

www.nhc.noaa.gov