

IMPACTS FOR District 8

Winds/US Coast – Low

Winds/SRR – High

Waves/US Coastal – Low

Waves/SRR – High

through next 5 days

US Storm Surge – None

US Rainfall/Flash Flooding – Low

US Tornadoes – None

HURRICANE RAFAEL BRIEFING

11:00 AM CST

Friday, November 8, 2024

Prepared by:

Stephen Konarik

*Tropical Analysis and Forecast Branch
NWS National Hurricane Center*



NHC_TAFB

www.nhc.noaa.gov

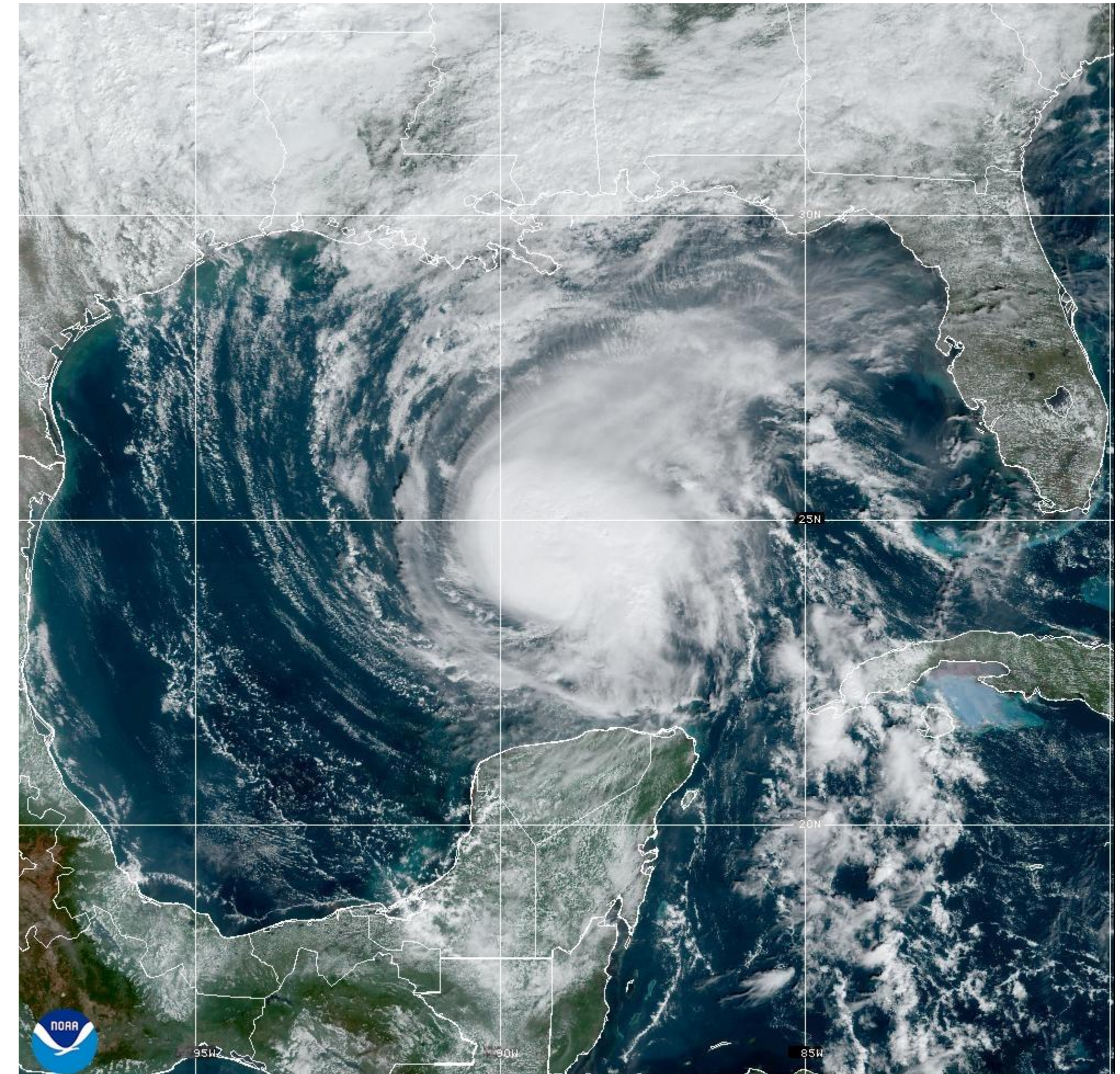
Changes since yesterday

Hurricane Rafael



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

- Rafael strengthened overnight, but has now slightly weakened
- Hurricane Rafael has moved W into the central Gulf of Mexico
- Area of 12 ft or higher seas is expanding (now 200-300 NM from center)



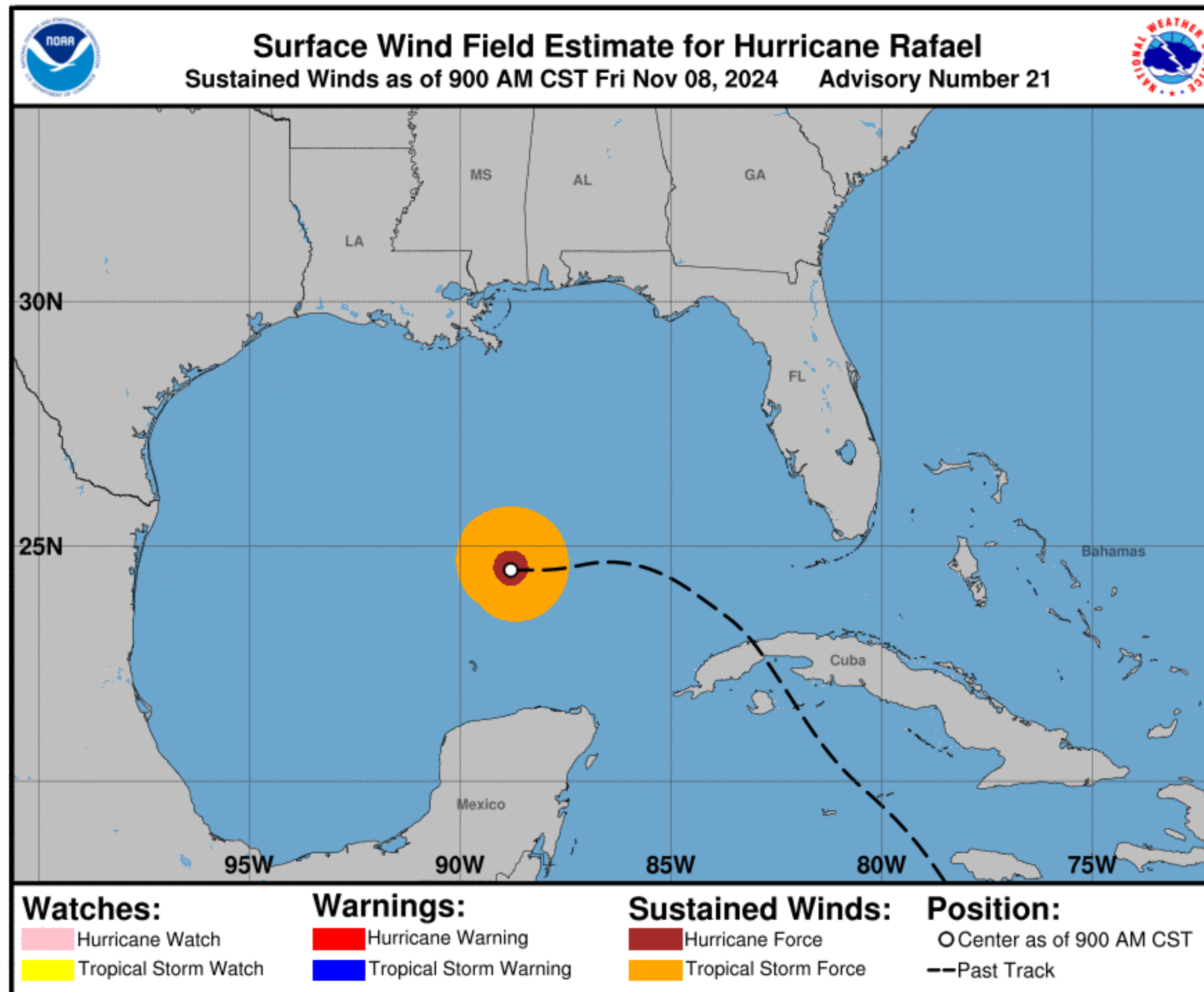
08 Nov 2024 15:50Z - NOAA/NESDIS/STAR - GOES-East - GEOCOLOR Composite - AL182024

Situation Overview

Hurricane Rafael



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NWS National Hurricane Center



**...RAFAEL REMAINS A POWERFUL
COMPACT HURRICANE OVER THE
CENTRAL GULF OF MEXICO...**

SUMMARY OF 900 AM CST...1500 UTC...

LOCATION...24.5N 88.8W

ABOUT 740 NM W of Texas/Mexico border

MAXIMUM SUSTAINED WINDS...95 KT

PRESENT MOVEMENT...W at 8 KT

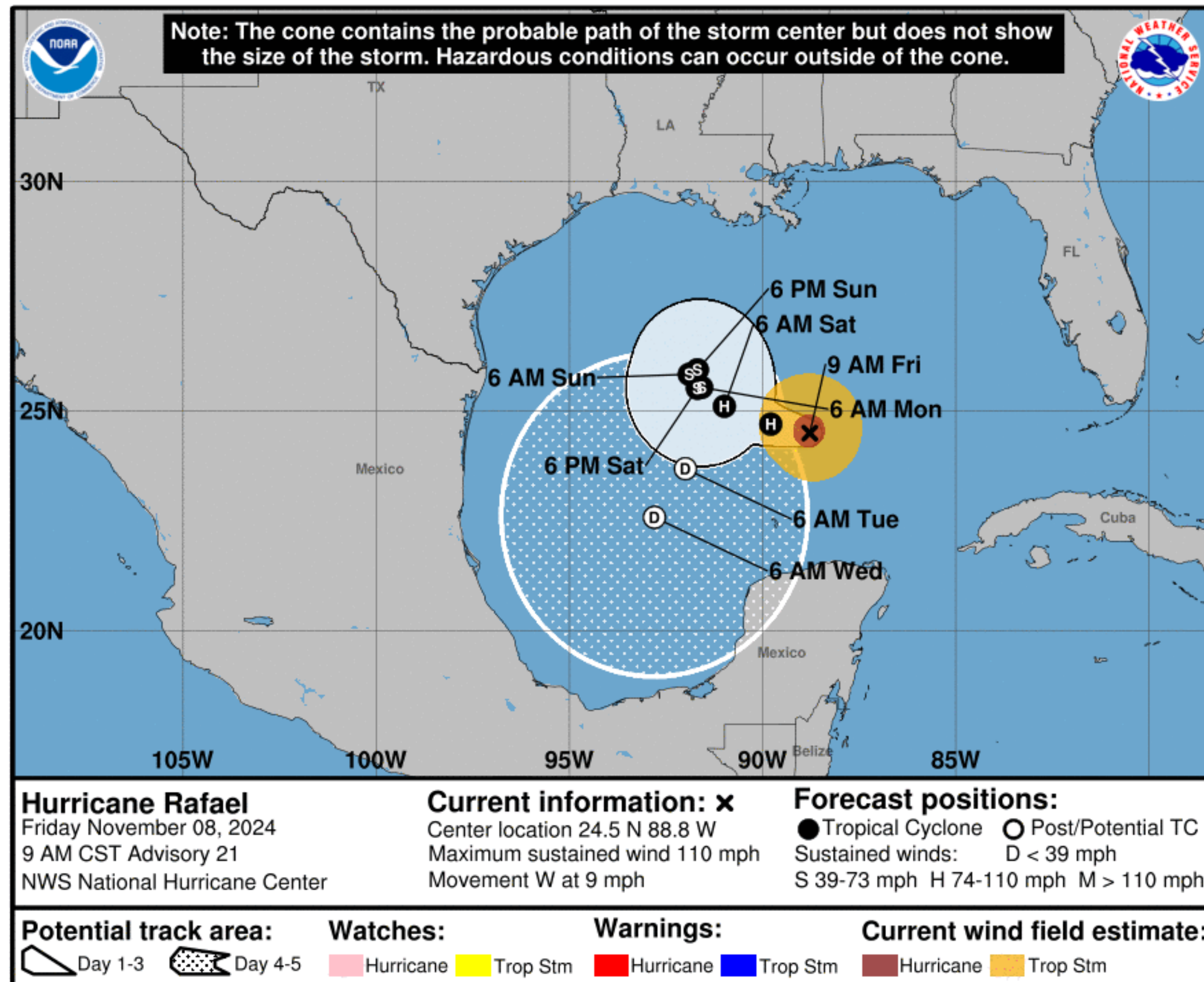
12 FT SEAS..270NE 90SE 120SW 240NW.

Forecast Information

Hurricane Rafael



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NWS National Hurricane Center



- Hurricane Rafael should move WNW and slow down over the next 24 hours
- Dry air and increasing wind shear should causing increasingly fast weakening
- Weak cold front over TX/LA should force Rafael to stall this weekend.
- Stronger cold front for the start of next week likely to push Rafael or its remnants S

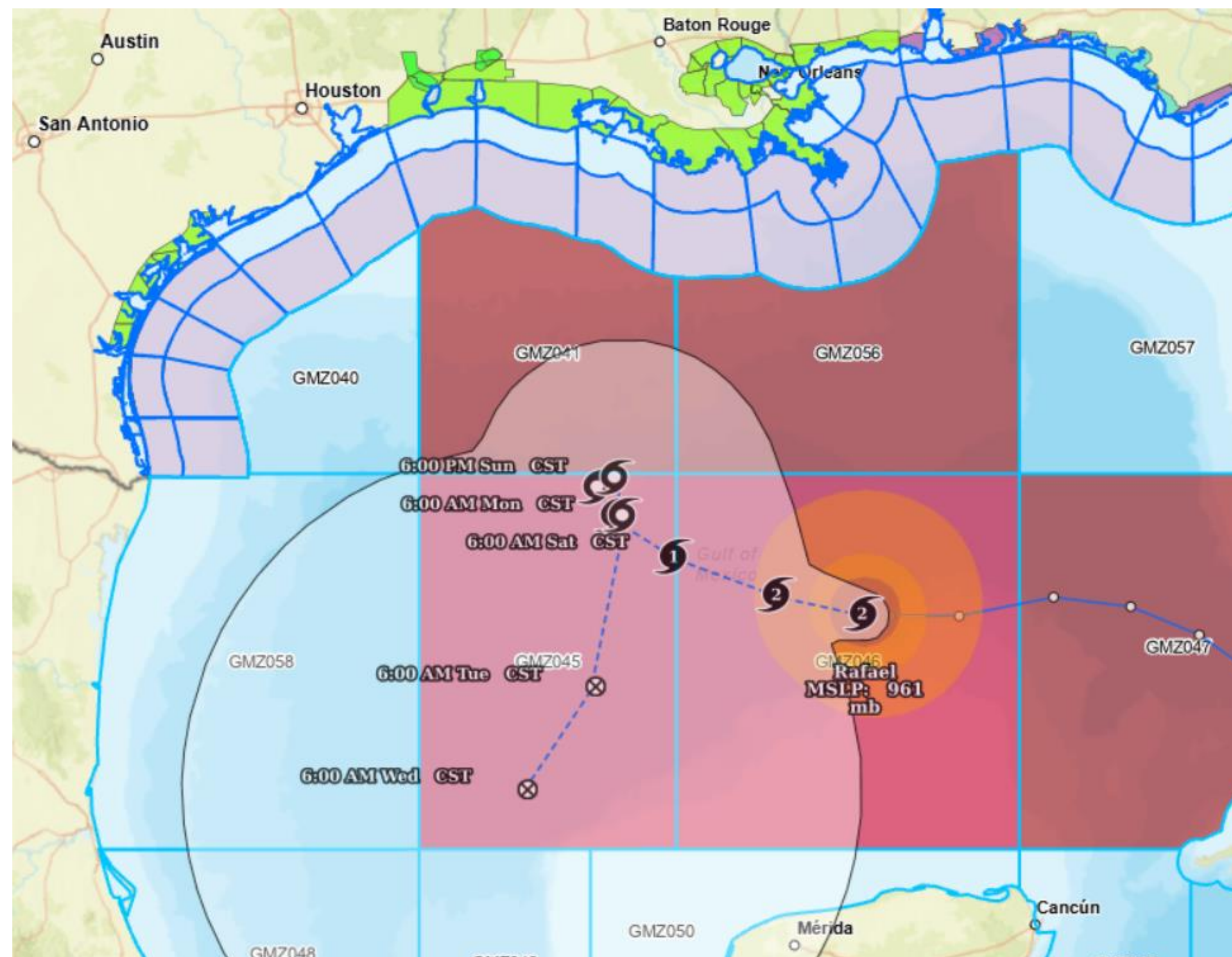
NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.




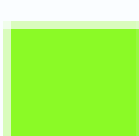
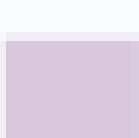

Hazards Map

Hurricane Rafael



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NWS National Hurricane Center



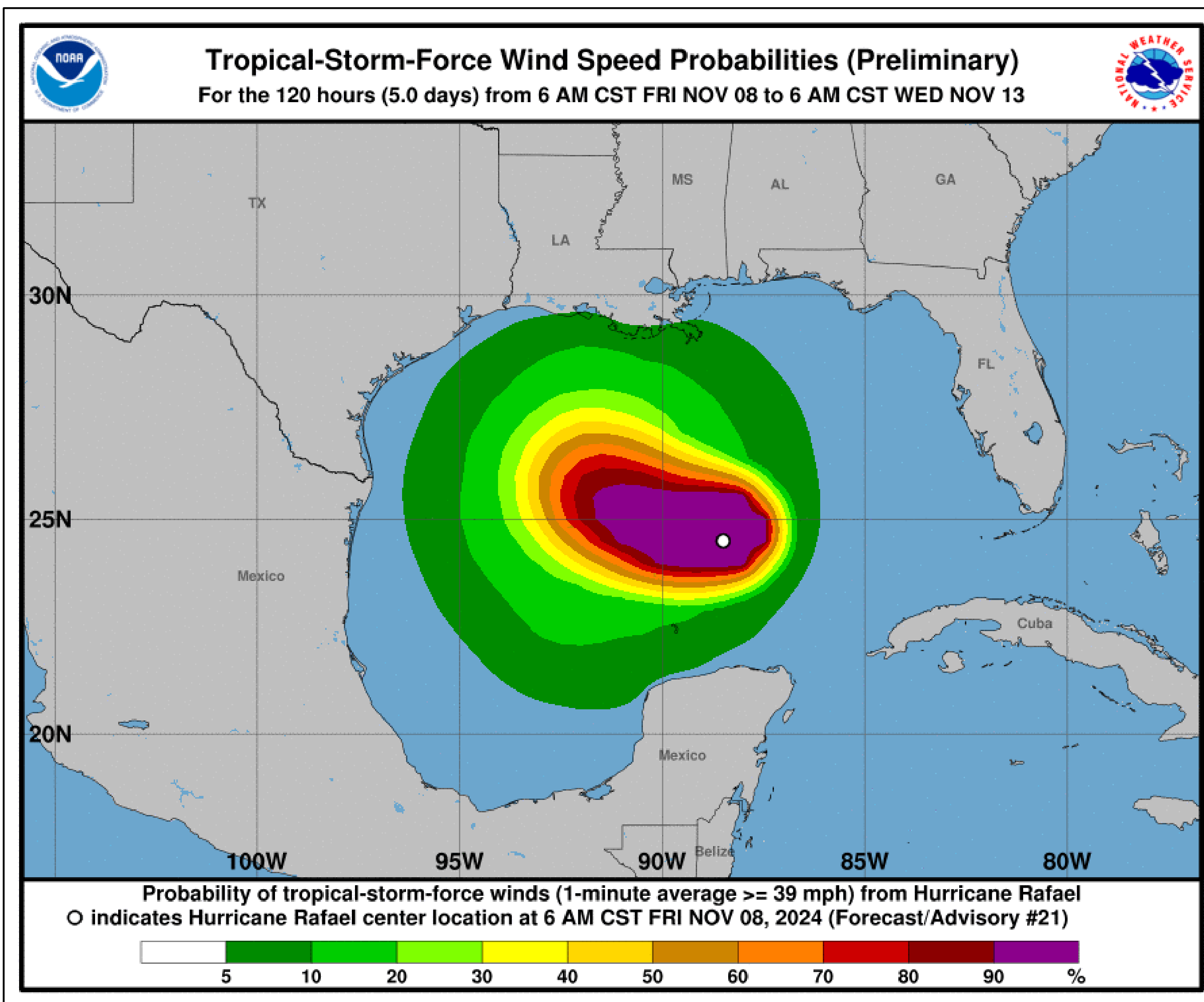
-  Hurricane Warning
-  Tropical Storm Warning
-  High Surf Advisory (9)
-  Coastal Flood Advisory
-  Small Craft Advisory
-  Rip Current Statement

T.S. Wind Speed Probabilities

Hurricane Rafael



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- Cameron, LA – 5%
- Galveston, TX – 5%
- Matagorda, TX – 5%

** TS Force winds still can't completely be ruled out along the immediate LA and middle and upper TX coasts.

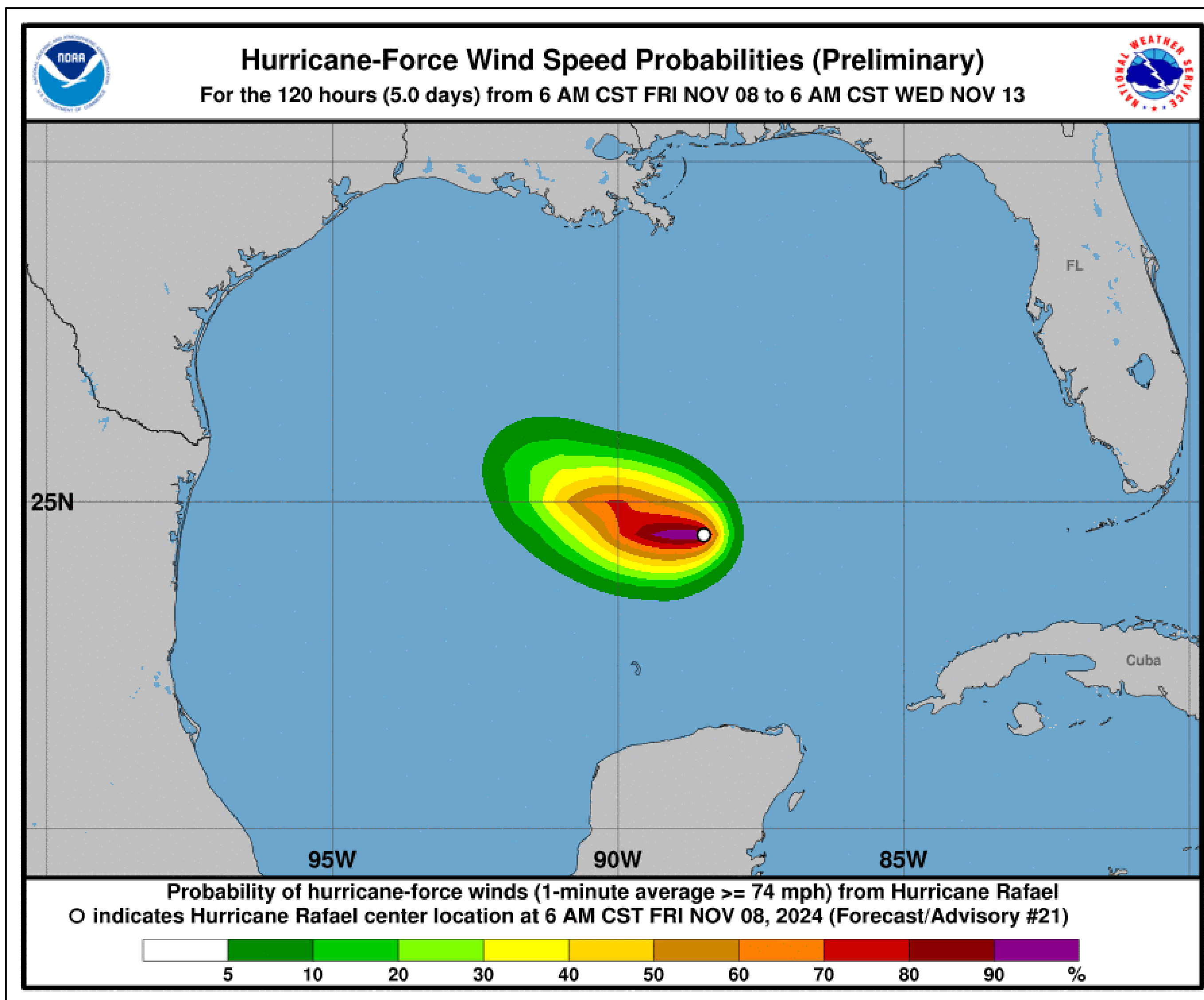
** IF TS winds occur, Saturday/Saturday night is most likely time.

Hurricane Wind Speed Probabilities

Hurricane Rafael



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NWS National Hurricane Center



- Hurricane force winds will be confined well offshore over central Gulf of Mexico

Expected Storm Total Rainfall and Chance of Rainfall Flooding

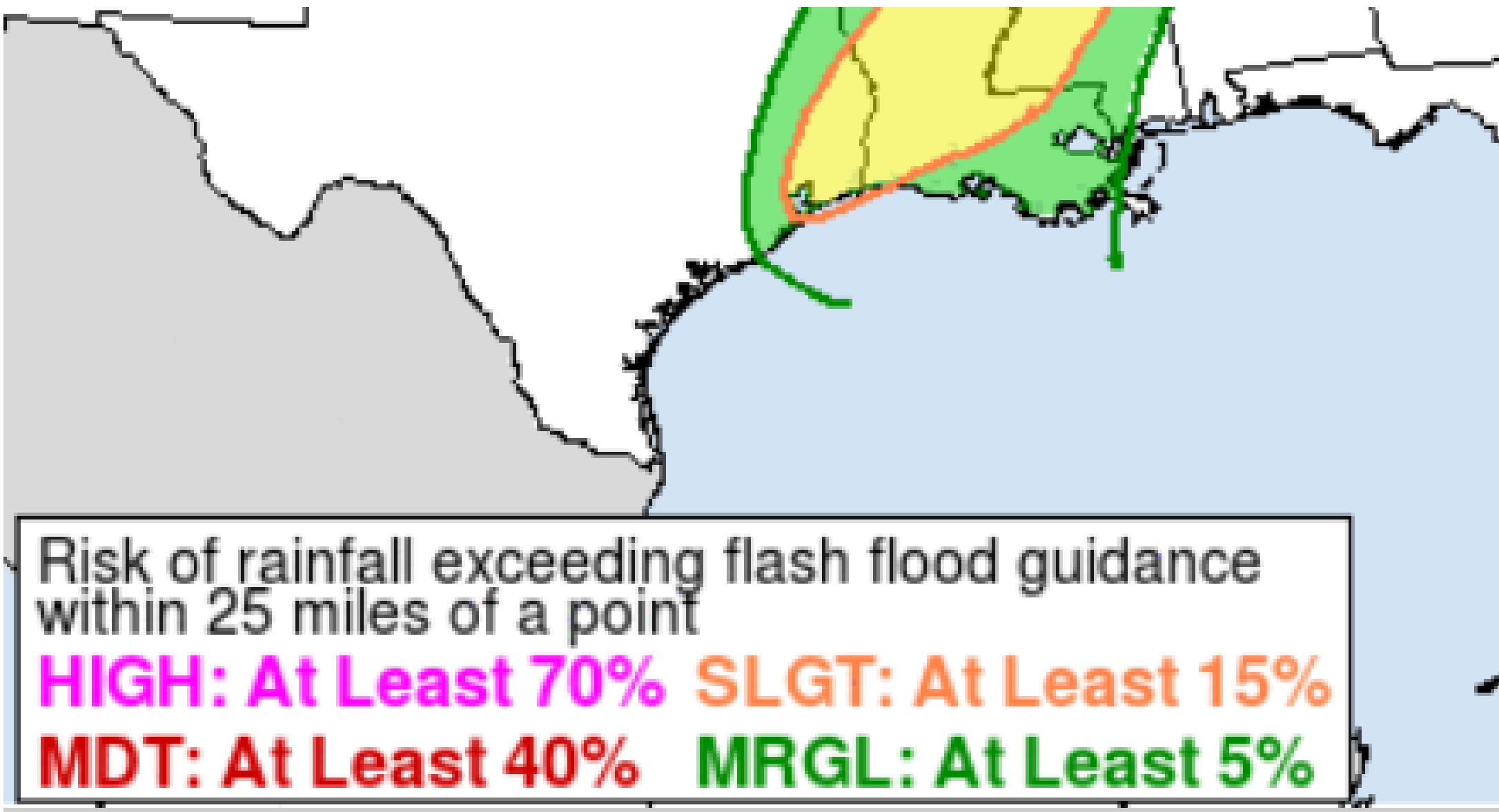
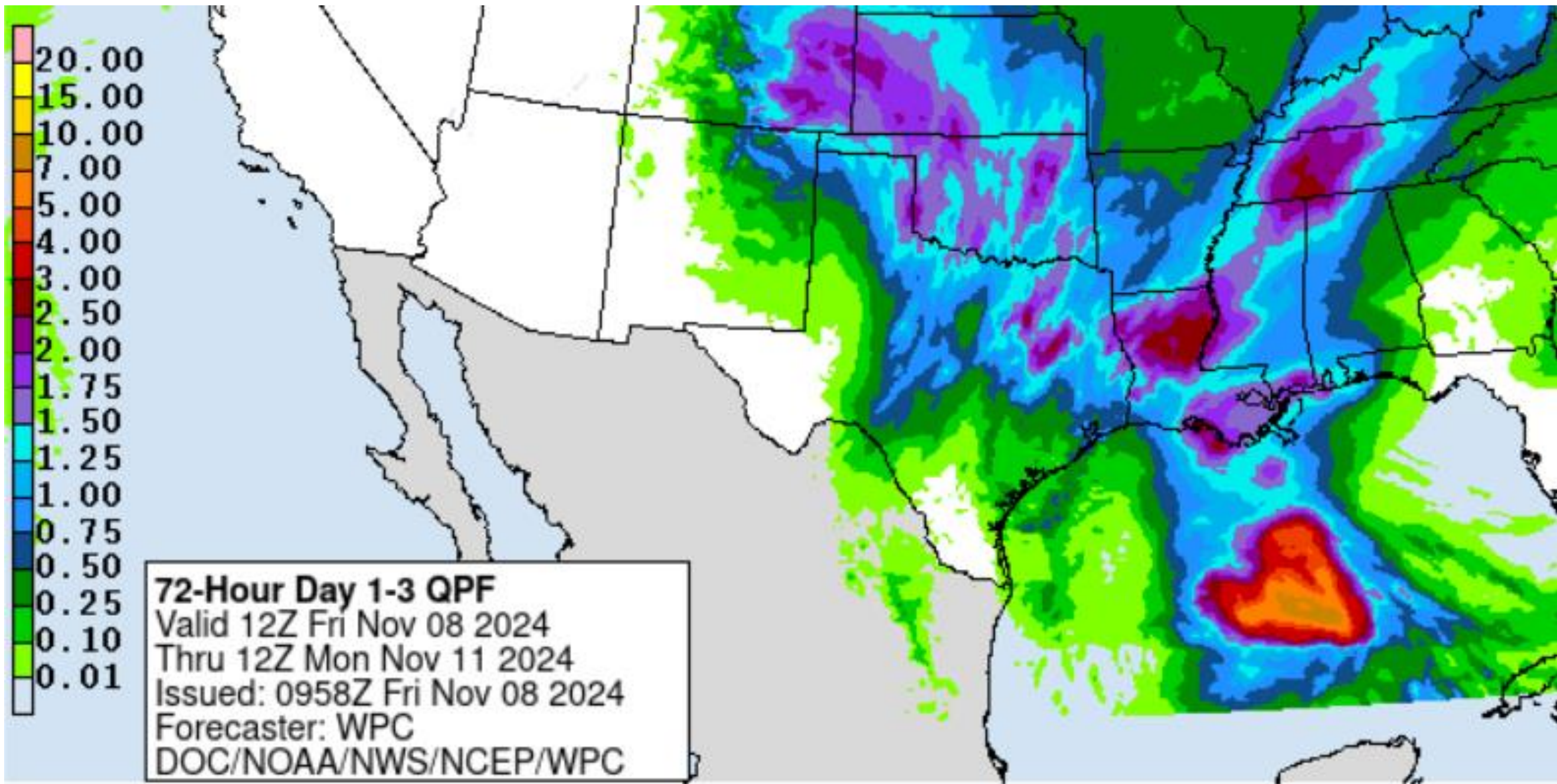
Hurricane Rafael

Images from NWS Weather Prediction Center



Tropical Analysis and Forecast Branch
NWS National Hurricane Center

Rainfall flooding threat is due to cold fronts, not Rafael

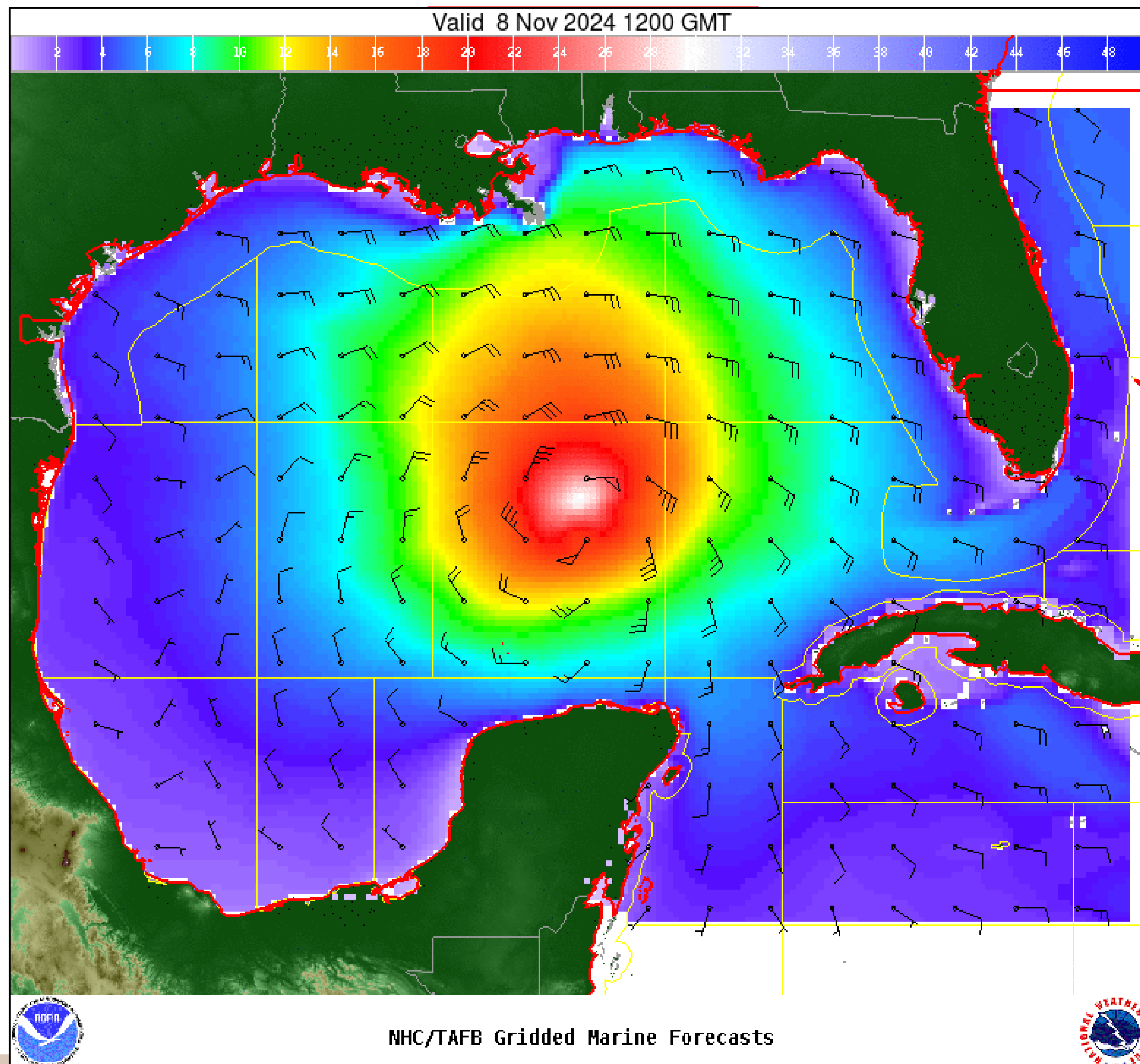


Wind And Waves

Hurricane Rafael



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NWS National Hurricane Center



Current Conditions (6AM CST)

Peak Winds: 95 KT

Peak Seas: 30 FT

■ Wave heights are in feet



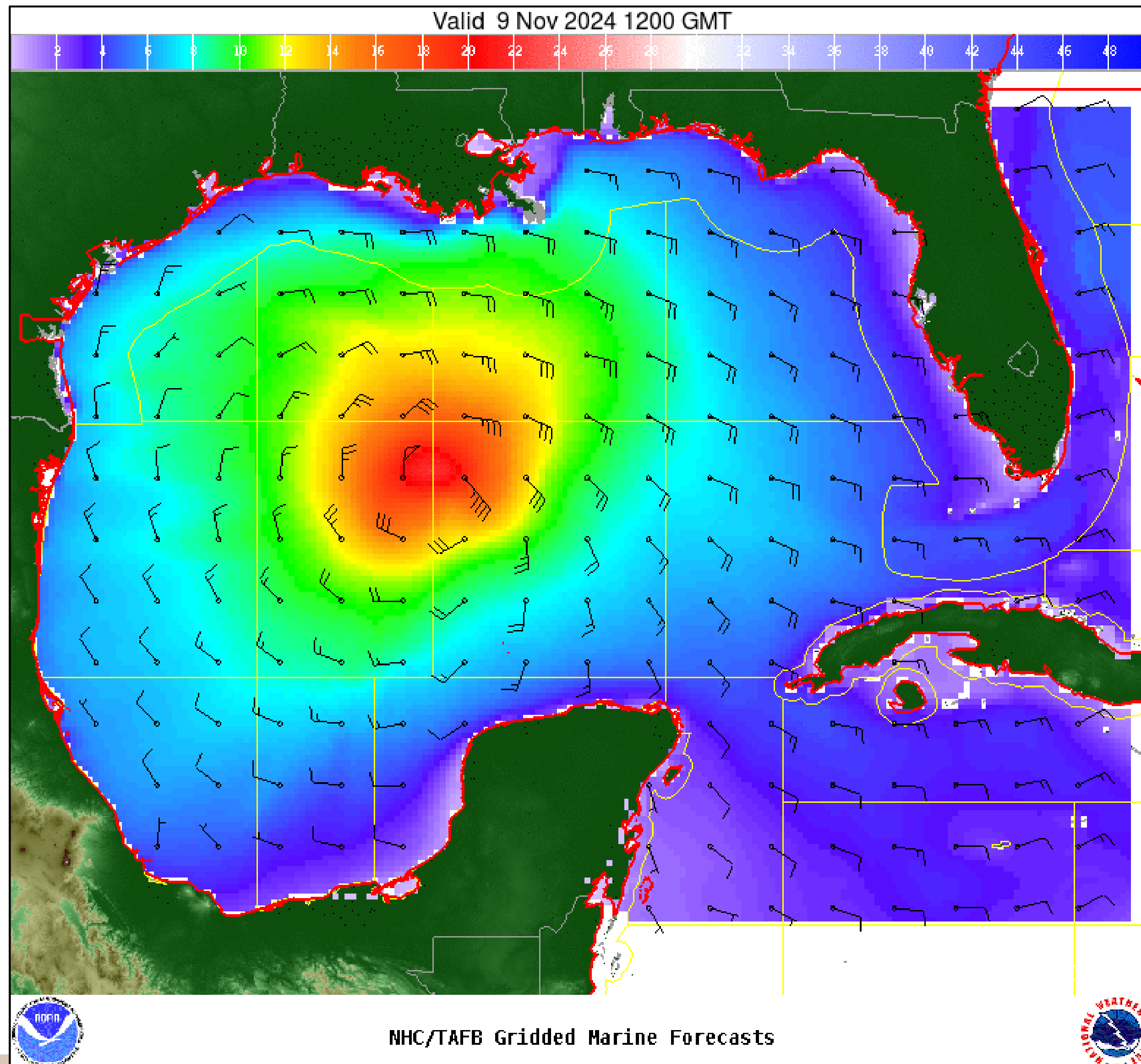
Significant Wave Height (ft)

Wind And Waves

Hurricane Rafael



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NWS National Hurricane Center



Saturday (6AM CST)

Peak Winds: 70 KT

Peak Seas: 25 FT

- Wave heights are in feet



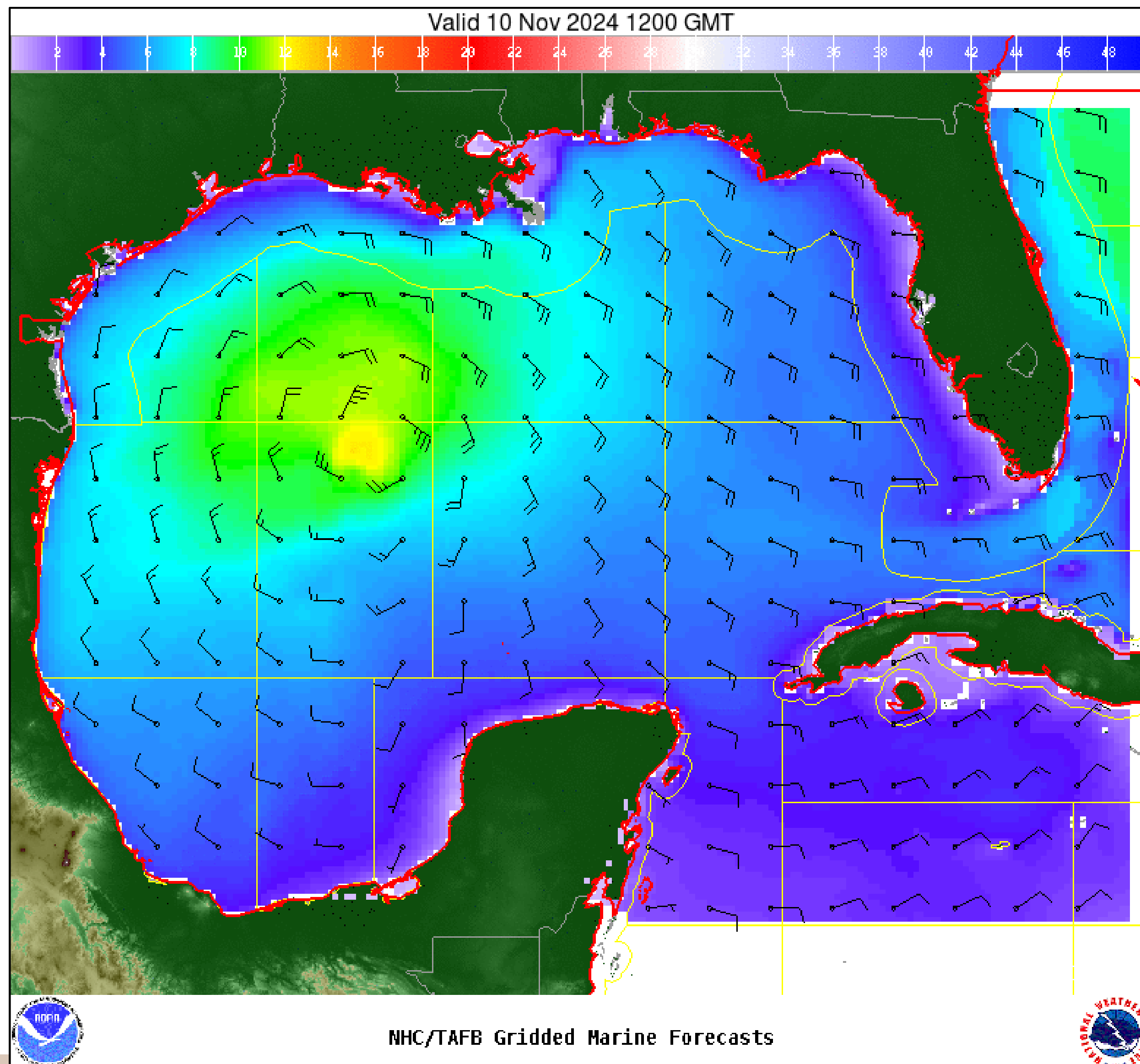
Significant Wave Height (ft)

Wind And Waves

Hurricane Rafael



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Sunday (6AM CST)
Peak Winds: 45 KT
Peak Seas: 18 FT

■ Wave heights are in feet



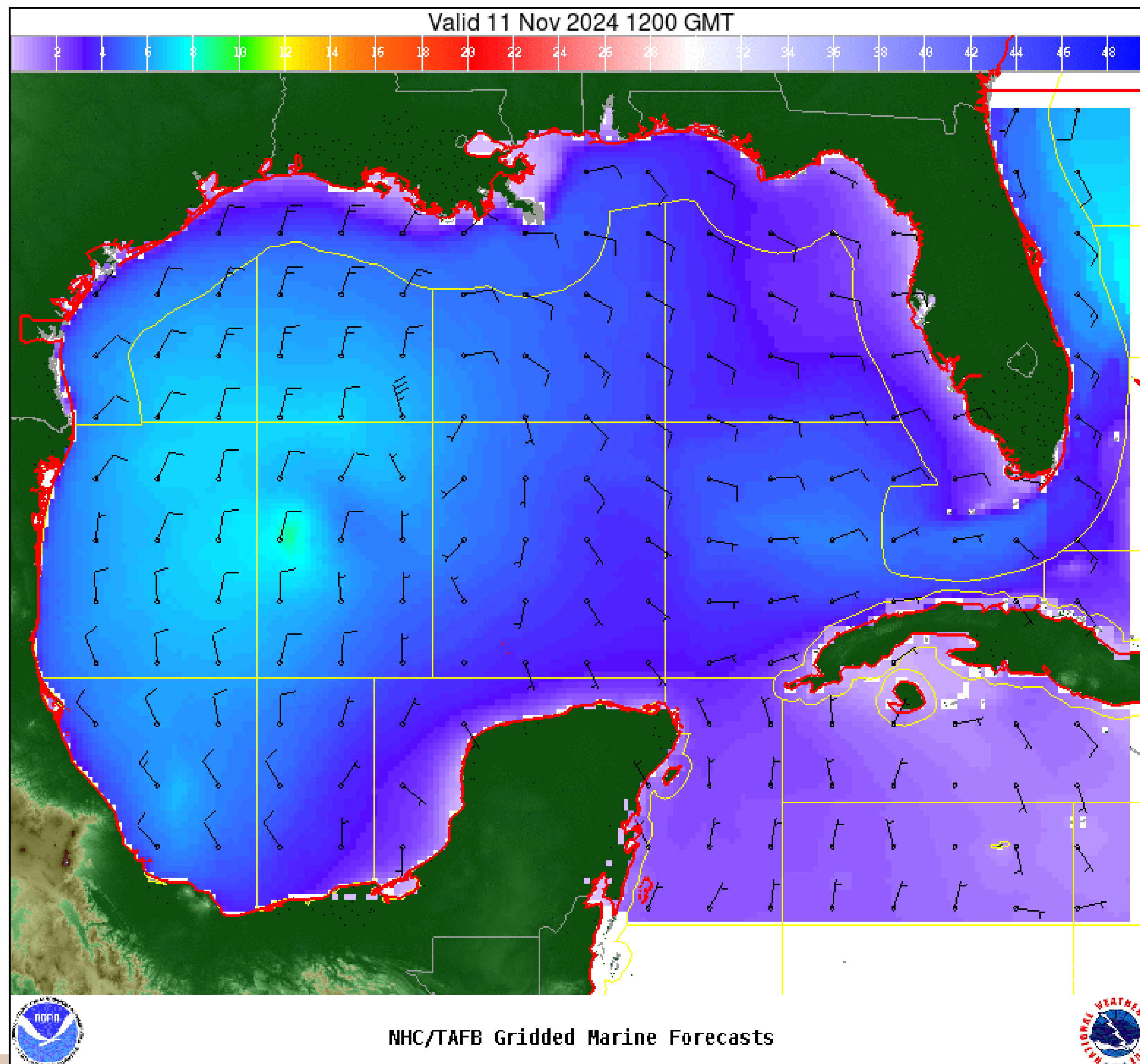
Significant Wave Height (ft)

Wind And Waves

Hurricane Rafael



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Monday (6AM CST)

Peak Winds: 35 KT

Peak Seas: 12 FT

- Wave heights are in feet



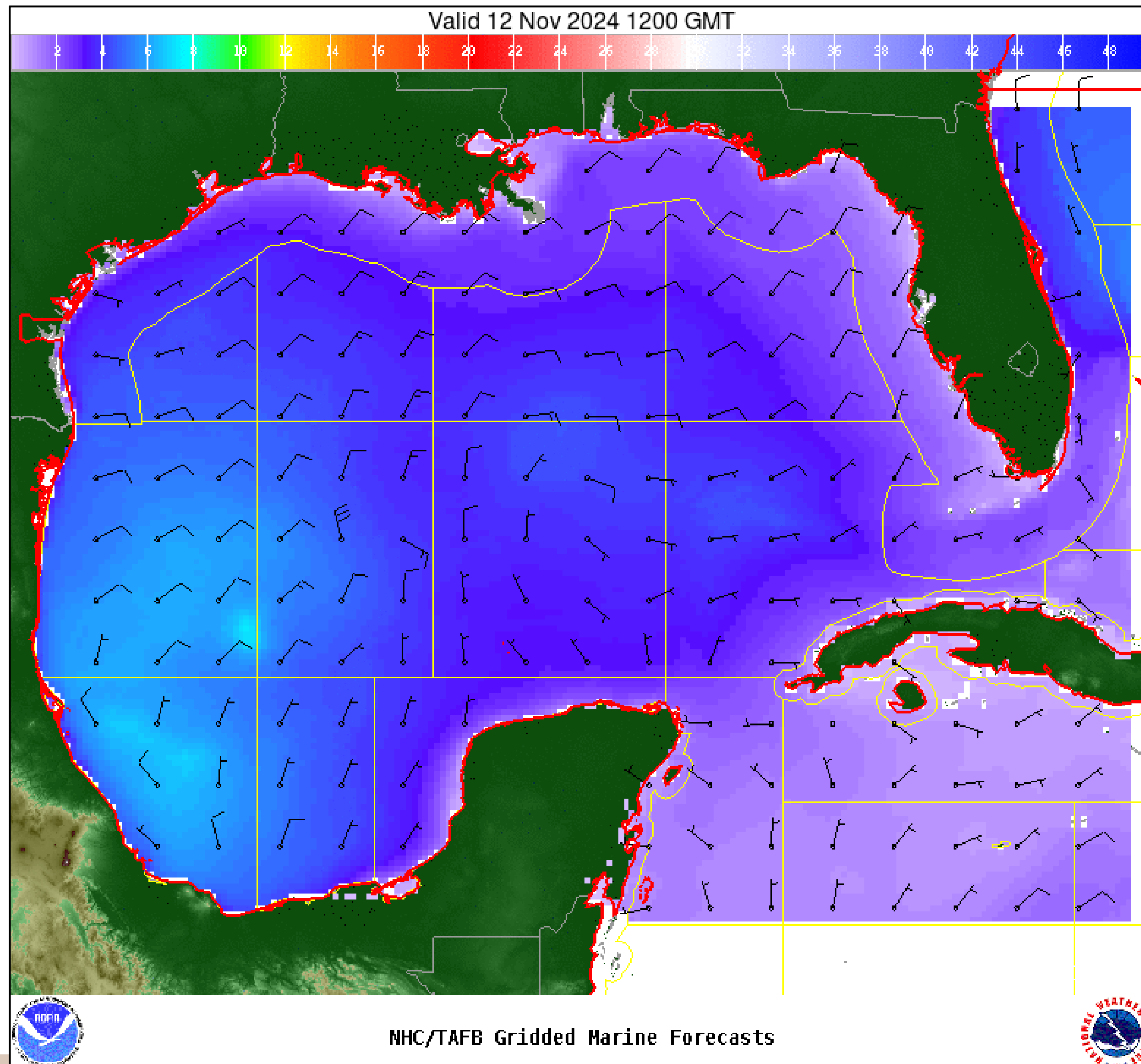
Significant Wave Height (ft)

Wind And Waves

Hurricane Rafael



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Tuesday (6AM CST)
Peak Winds: 30 KT
Peak Seas: 9 FT

■ Wave heights are in feet





Significant Wave Height (ft)

Key Messages

Hurricane Rafael



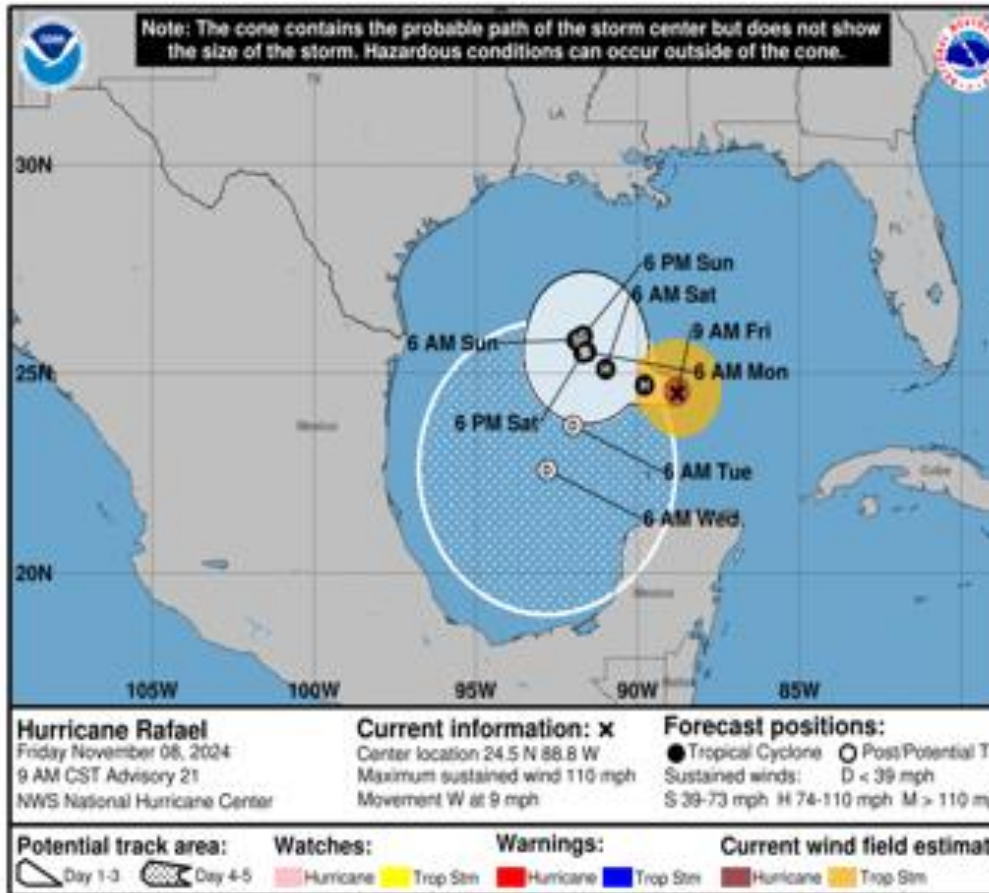
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NWS National Hurricane Center



Key Messages for Hurricane Rafael

Advisory 21: 9:00 AM CST Fri Nov 08, 2024

1. Swells generated by Rafael are likely to cause life-threatening surf and rip current conditions along the Gulf Coast for the next few days.
2. Rafael is forecast to move slowly over the central Gulf of Mexico this weekend and early next week. Interests in the southern and southwestern Gulf of Mexico should monitor the progress of this system.




Hurricane Rafael
Friday November 08, 2024
9 AM CST Advisory 21
NWS National Hurricane Center

Current information: x
Center location 24.5 N 88.6 W
Maximum sustained wind 110 mph
Movement W at 9 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 Str
Warnings: Hurricane Trop Str
Current wind field estimate: Hurricane Trop Str



Tropical-Storm-Force Wind Speed Probabilities (Preliminary)
For the 120 hours (5.0 days) from 6 AM CST FRI NOV 08 to 6 AM CST WED NOV 13

Probability of tropical-storm-force winds (1-minute average ≥ 39 mph) from Hurricane Rafael
○ Indicates Hurricane Rafael center location at 6 AM CST FRI NOV 08, 2024 (Forecast/Advisory #21)

5 10 20 30 40 50 60 70 80 90 %

For more information go to hurricanes.gov

- Marine Key Messages:

- Hurricane force winds and seas to 30 ft central Gulf into Saturday
- Near the coast: very dangerous rip currents, rough/high surf, some coastal/tidal flooding through the weekend
- Near the coast: strong NE winds and seas 8-12 ft through Saturday
- Quickly improving conditions Sun into Mon

IMPACTS FOR District 8

Winds/US Coast – Low

Winds/SRR – High

Waves/US Coastal – Low

Waves/SRR – High

US Rainfall/Flash Flooding – Low



TIME of NEXT NHC Advisory:

21 UTC: 3 PM CST

HURRICANE RAFAEL BRIEFING

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

This briefing was prepared by:

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



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