**IMPACTS FOR D8** Winds/US Coast – High Winds/SRR – High Waves/US Coastal – Extreme Waves/SRR – Extreme

II AM CDT Monday, September 9, 2024 Prepared by: Keren Rosado-Vázquez **Tropical Analysis and Forecast Branch** NWS National Hurricane Center



NHC\_TAFB

through next 5 days **US Storm Surge – Extreme US Rainfall/Flash Flooding – High US** Tornadoes – Low

# TROPICAL STORM FRANCINE BRIEFING

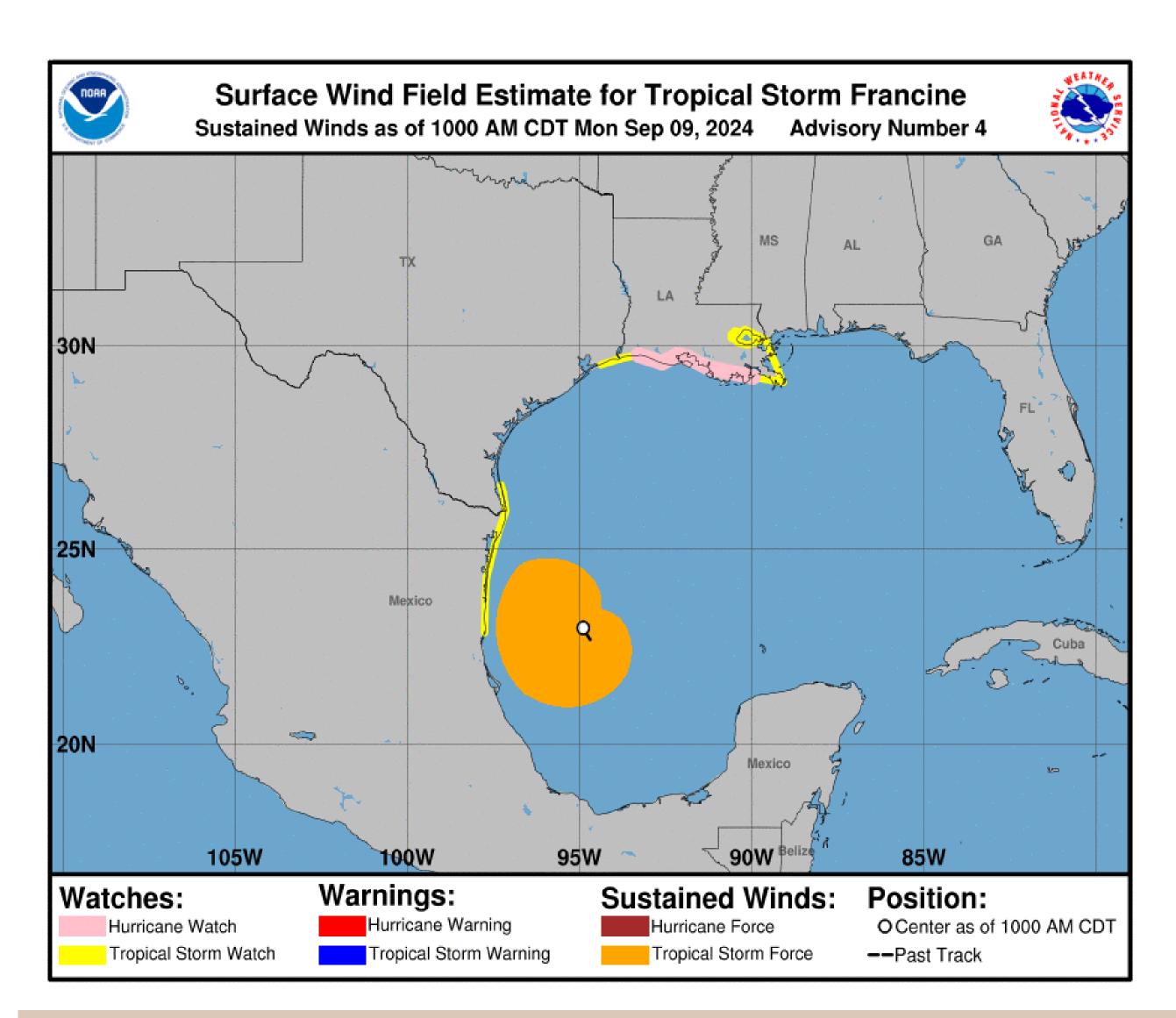






# Situation Overview

### **Tropical Storm Francine**



9/9/2024 11:49 AM



...DISTURBANCE BECOMES TROPICAL **STORM FRANCINE...** ... EXPECTED TO INTENSIFY WITH STORM SURGE AND HURRICANE WATCHES ISSUED FOR THE LOUISIANA COAST ...

SUMMARY OF 1000 AM CDT...1500 UTC...

LOCATION...23.0N 94.9W ABOUT 215 NM SE OF MOUTH OF THE RIO GRANDE **ABOUT 420 NM SSW OF CAMERON** LOUISIANA MAXIMUM SUSTAINED WINDS...45 KT PRESENT MOVEMENT...NNW OR 340 DEGREES AT 4 KT MINIMUM CENTRAL PRESSURE... 1002 MB



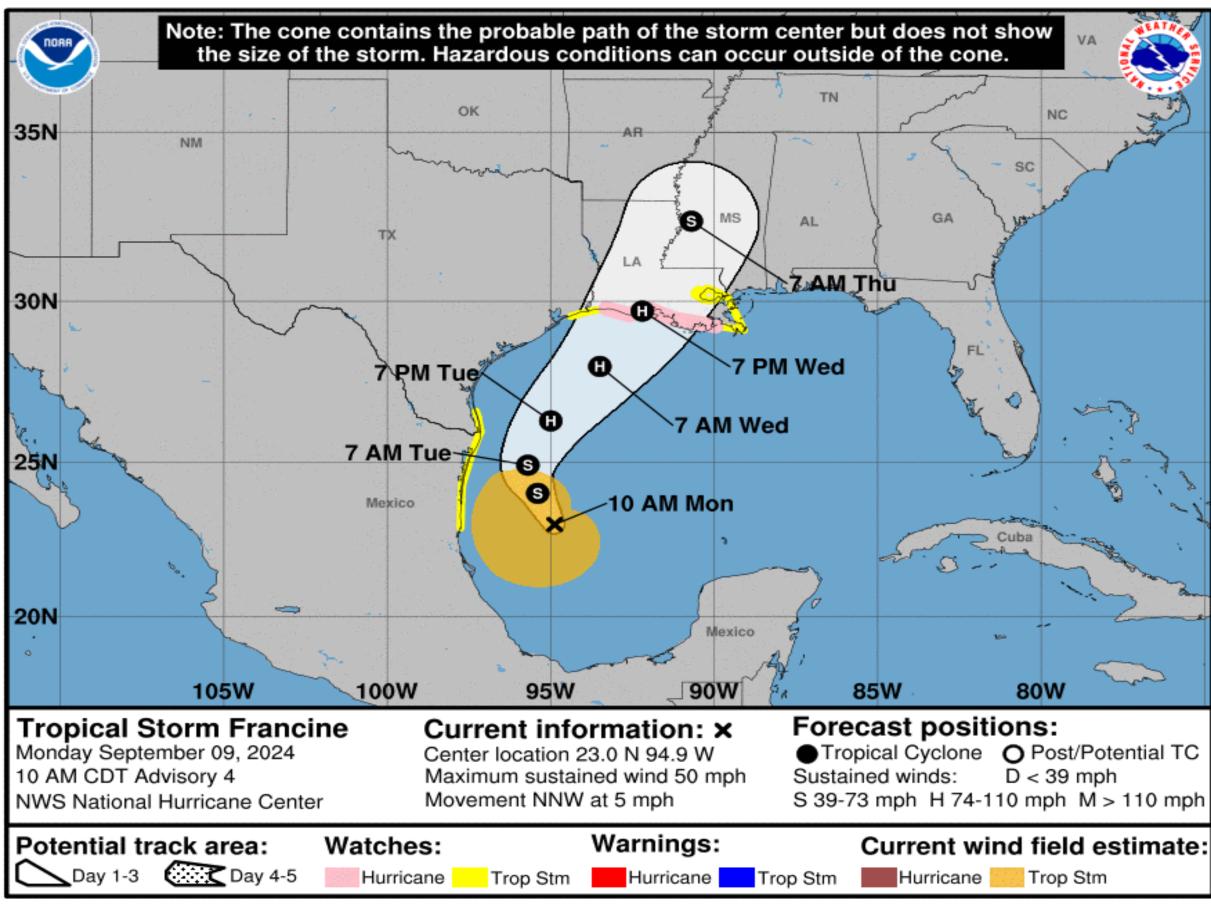






# Forecast Information

## **Tropical Storm Francine**



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

9/9/2024 11:49 AM



- A slow north-northwestward motion is expected for the remainder of the day, followed by a faster motion to the northeast beginning on Tuesday.
- Francine is expected to made landfall somewhere along the Louisiana or the Upper Texas coastline on Wednesday or Wednesday night.
- Gradual intensification is expected over the next day and Francine is expected to become a hurricane before it reaches the northwestern U.S. Gulf Coast on Wednesday.
- 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 swatch 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.















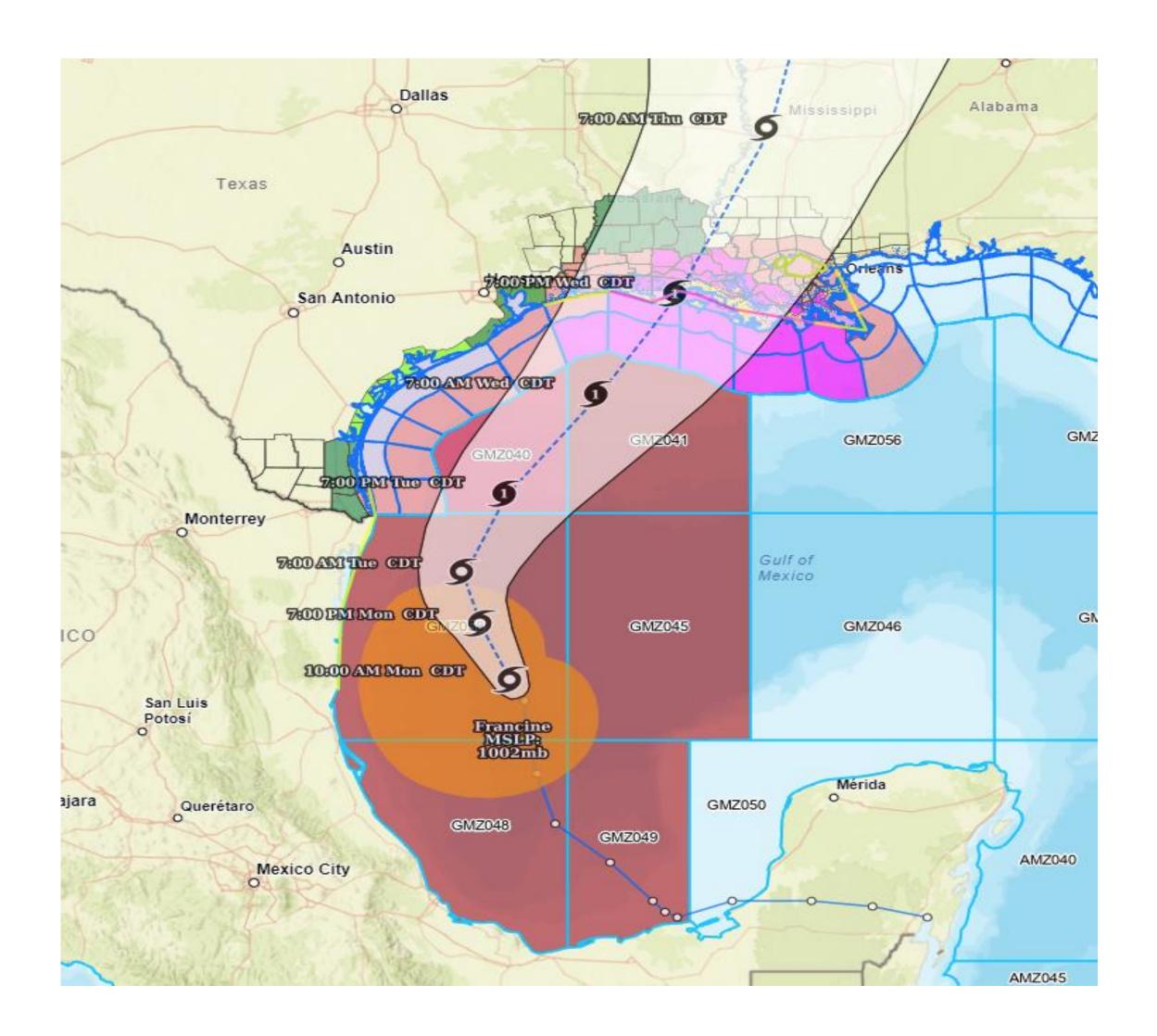






# Hazards Map

## **Tropical Storm Francine**



9/9/2024 11:49 AM



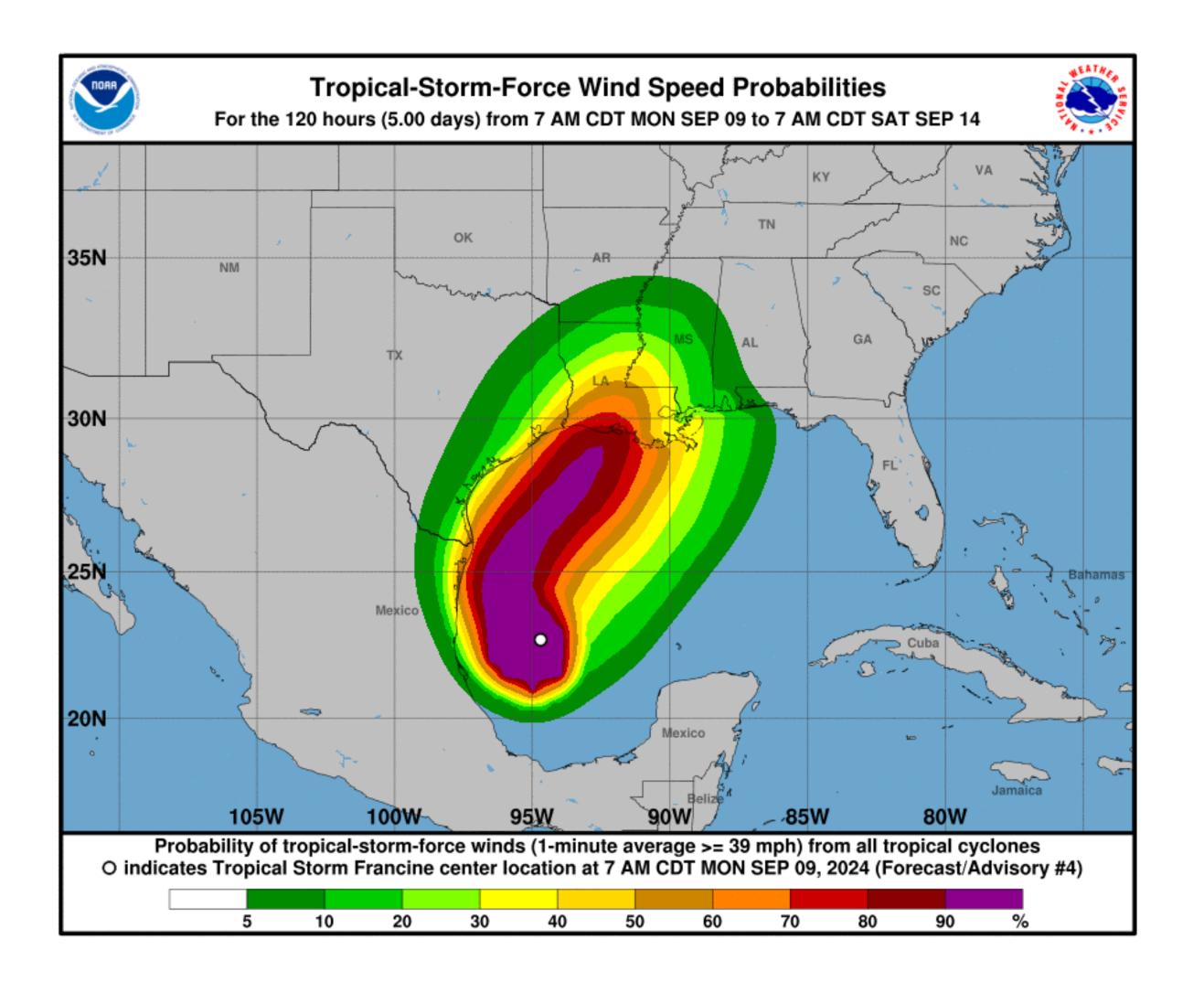
#### Tropical Analysis and Forecast Branch NWS National Hurricane Center





# T.S. Wind Speed Probabilities

#### **Tropical Storm Francine**



9/9/2024 11:49 AM



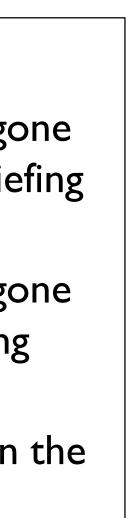
- BROWNSVILLE TX 51%
- CORPUS CHRISTI 14%
- PORT O CONNOR 41%
- MATAGORDA TX 45%
- HIGH ISLAND TX 46%
- FREEPORT TX 37%
- HOUSTON TX 23%
- GALVESTON TX 56%
- PORT ARTHUR TX 45%
- CAMERON LA 74%
- MORGAN CITY LA 57%
- BATON ROUGE LA 53%
- NEW ORLEANS LA 42 %

-Green indicates probabilities have gone down since last briefing -**Red** indicates probabilities have gone up since last briefing -Black indicates probabilities remain the

same

- 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.



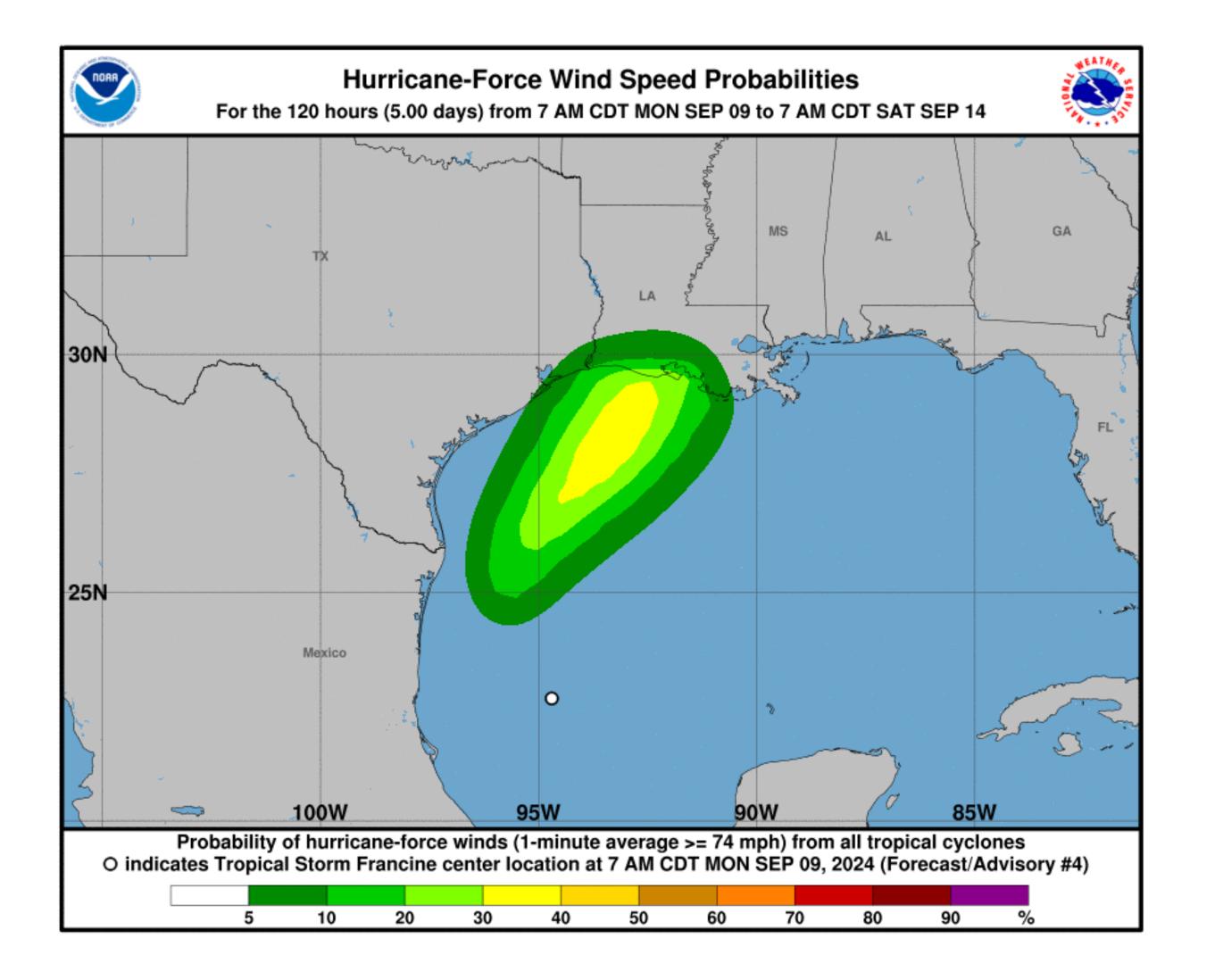






# Hurricane Wind Speed Probabilities

### **Tropical Storm Francine**



9/9/2024 11:49 AM



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- PORT O CONNOR 1%
- MATAGORDA TX 2%
- HIGH ISLAND TX 3%
- **GALVESTON TX 7%**
- CAMERON LA 17%
- **MORGAN CITY LA 4%**
- **BATON ROUGE LA 3%**
- NEW ORLEANS LA 12 %

- 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.





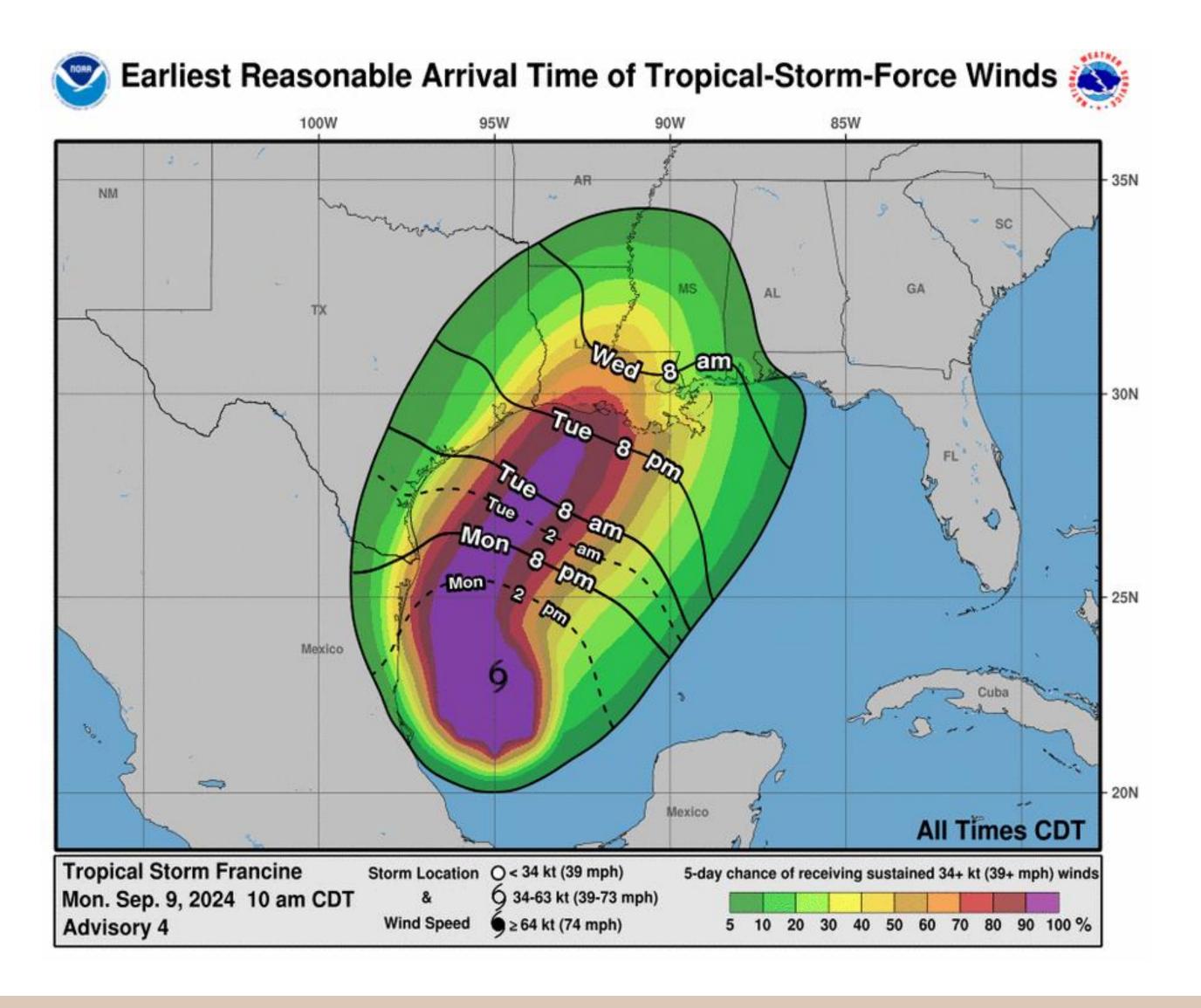








## **Tropical Storm Francine**



9/9/2024 11:49 AM



- Lower Texas Coast Monday night.
- Middle Texas Coast Tuesday Morning.
- Upper Texas Coast and Louisiana Coast Tuesday 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.

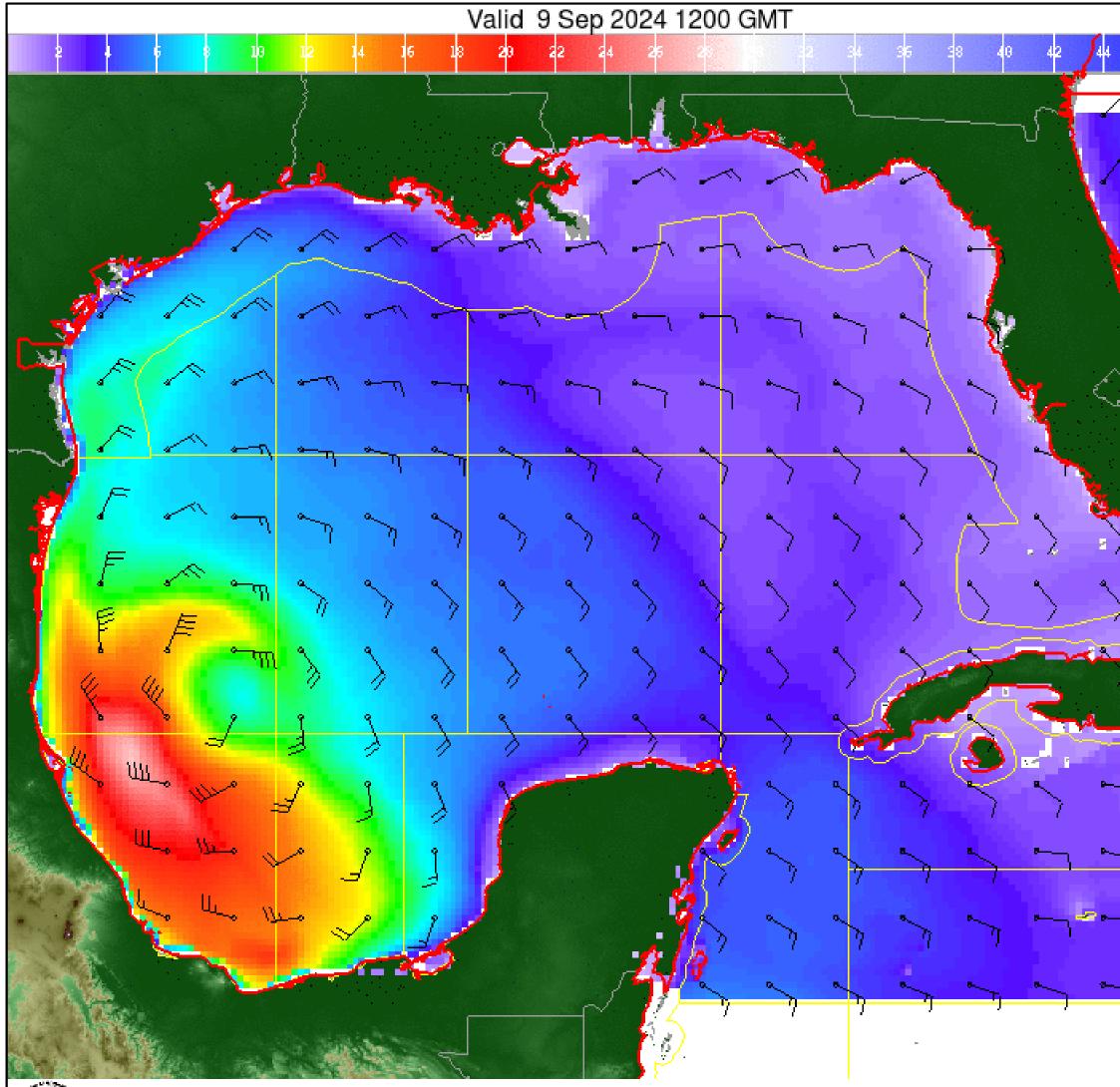








## **Tropical Storm Francine**





NHC/TAFB Gridded Marine Forecasts





# **Current Conditions** Monday morning, September 9 Peak Winds: 45 kt Peak Seas: 18 ft

## Wave heights are in feet

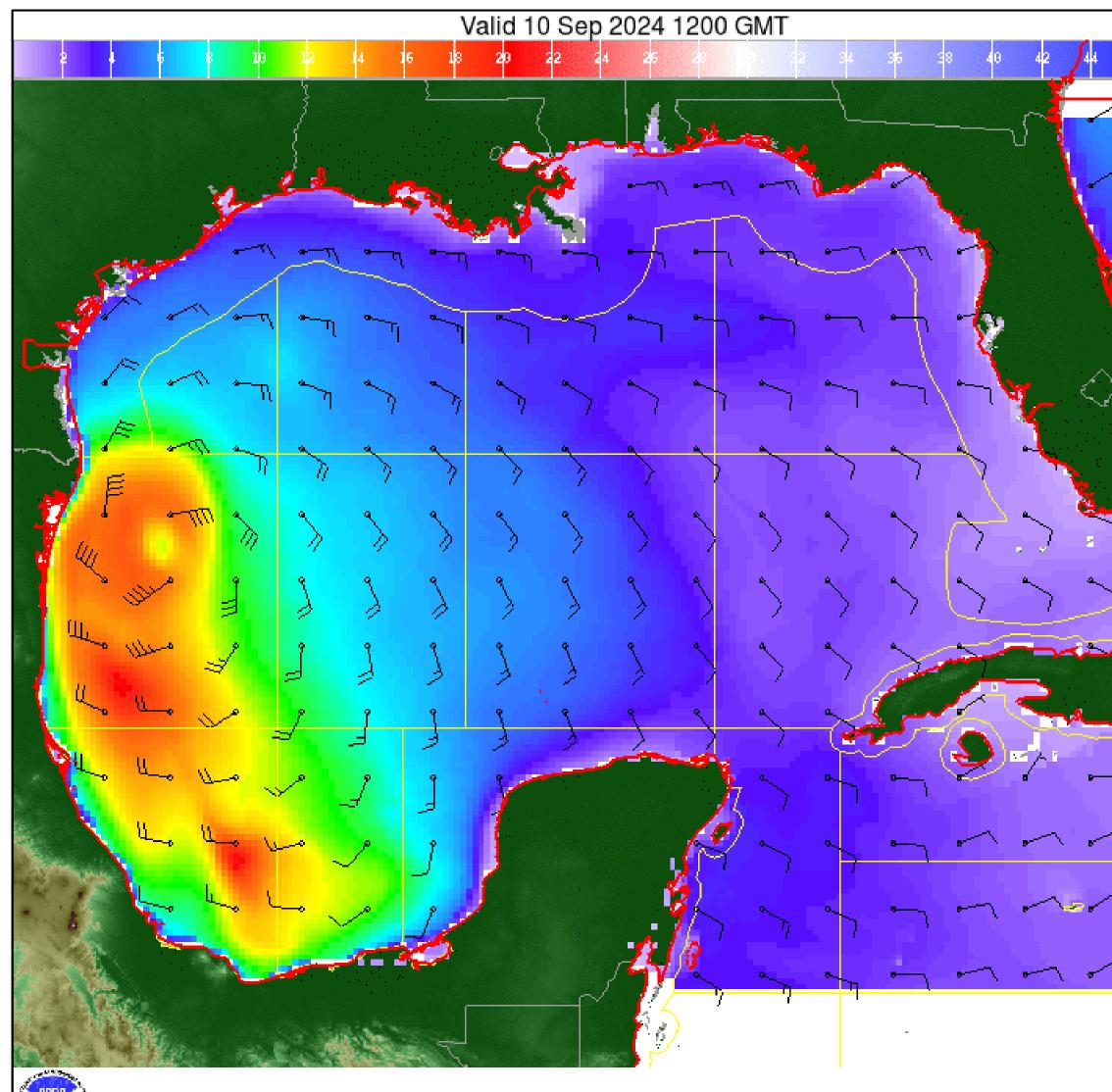
2	4	6	8	10	12	14	16	18
---	---	---	---	----	----	----	----	----







## **Tropical Storm Francine**



# 9/9/2024 11:49 AM

NHC/TAFB Gridded Marine Forecasts





# 24 Hour Forecast Tuesday 7 AM CDT, September 10 Peak Winds: 55 kt Peak Seas: 20 ft

## Wave heights are in feet

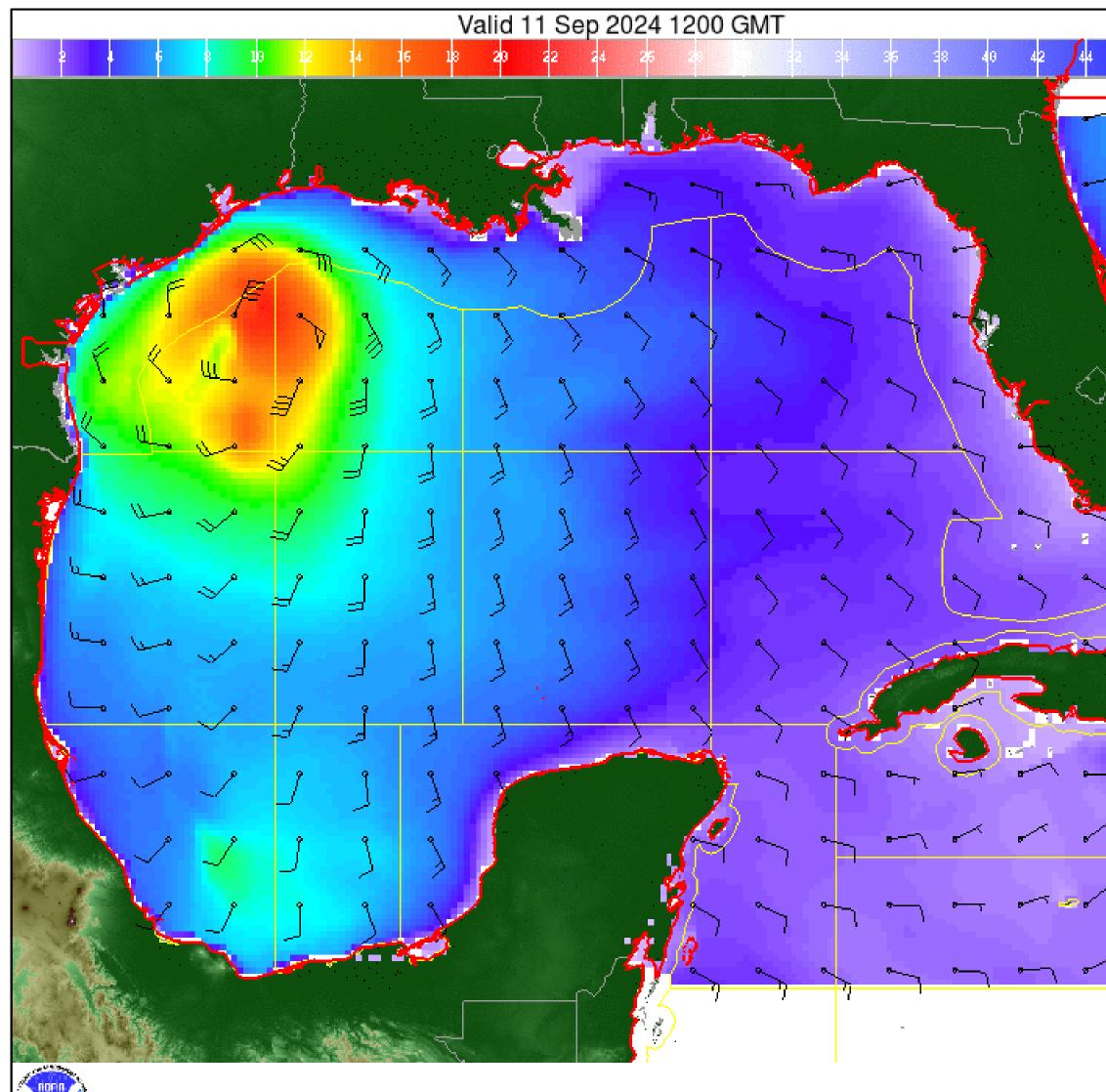
2 4 6 8 10 12 14 16	18
---------------------	----







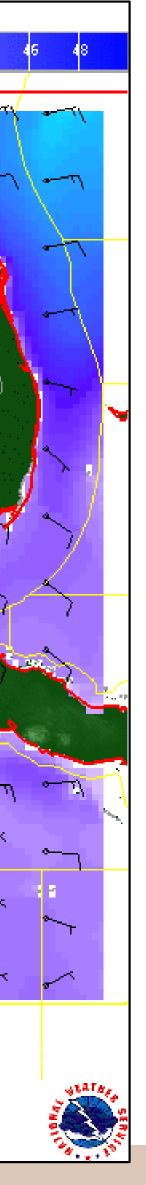
## **Tropical Storm Francine**





NHC/TAFB Gridded Marine Forecasts





# **48** Hour Forecast

# Wednesday 7 AM CDT, September 11

# Peak Winds: 75 kt Peak Seas: 28 ft

# Wave heights are in feet

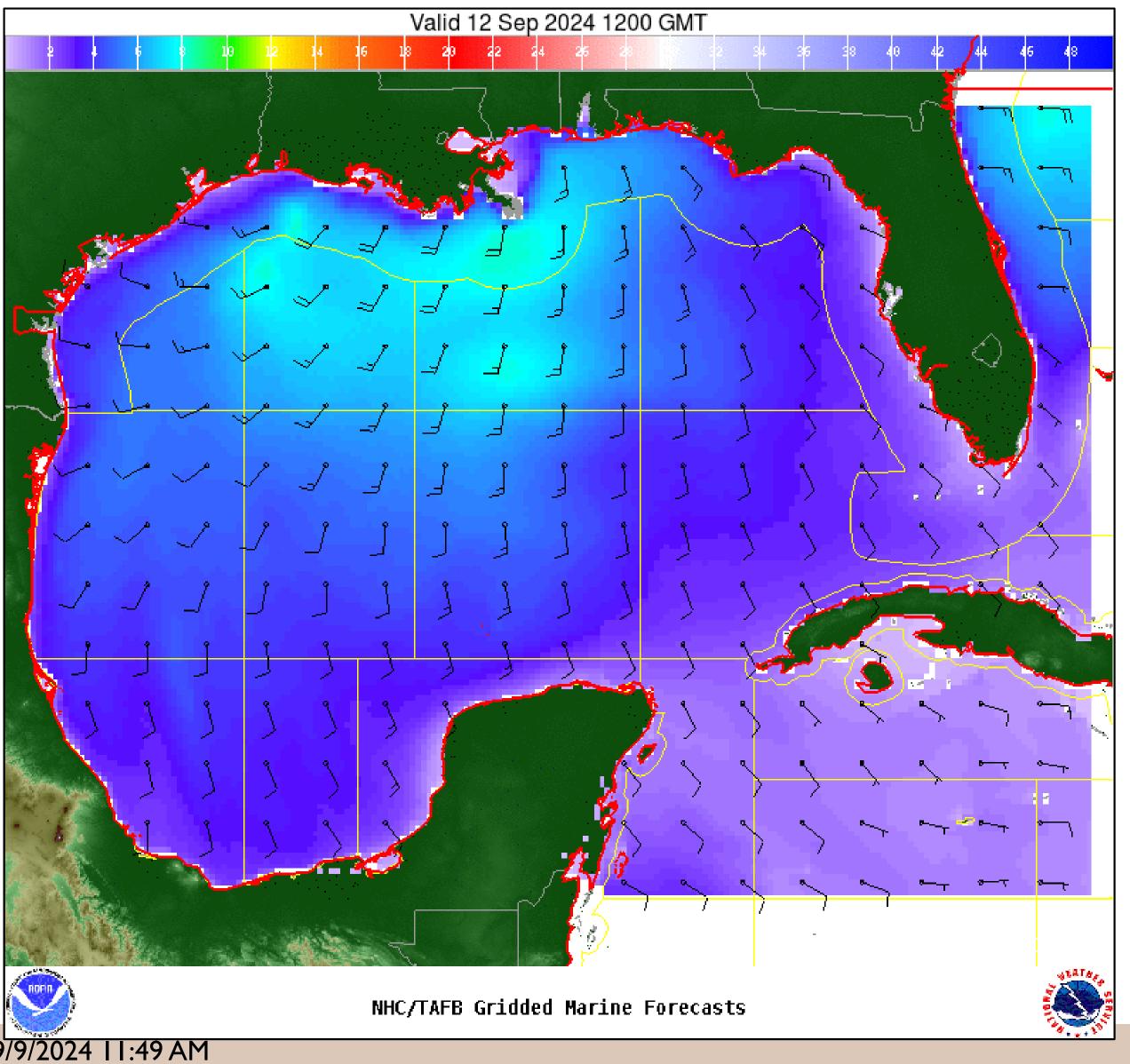
2	4	6	8	10	12	14	16	18
---	---	---	---	----	----	----	----	----







## **Tropical Storm Francine**







# 72 Hour Forecast

Thursday 7 AM CDT, September 12

# Peak Winds: 20 kt

Peak Seas: 8 ft

# Wave heights are in feet

2 4 6 8 10 12 14 16	18
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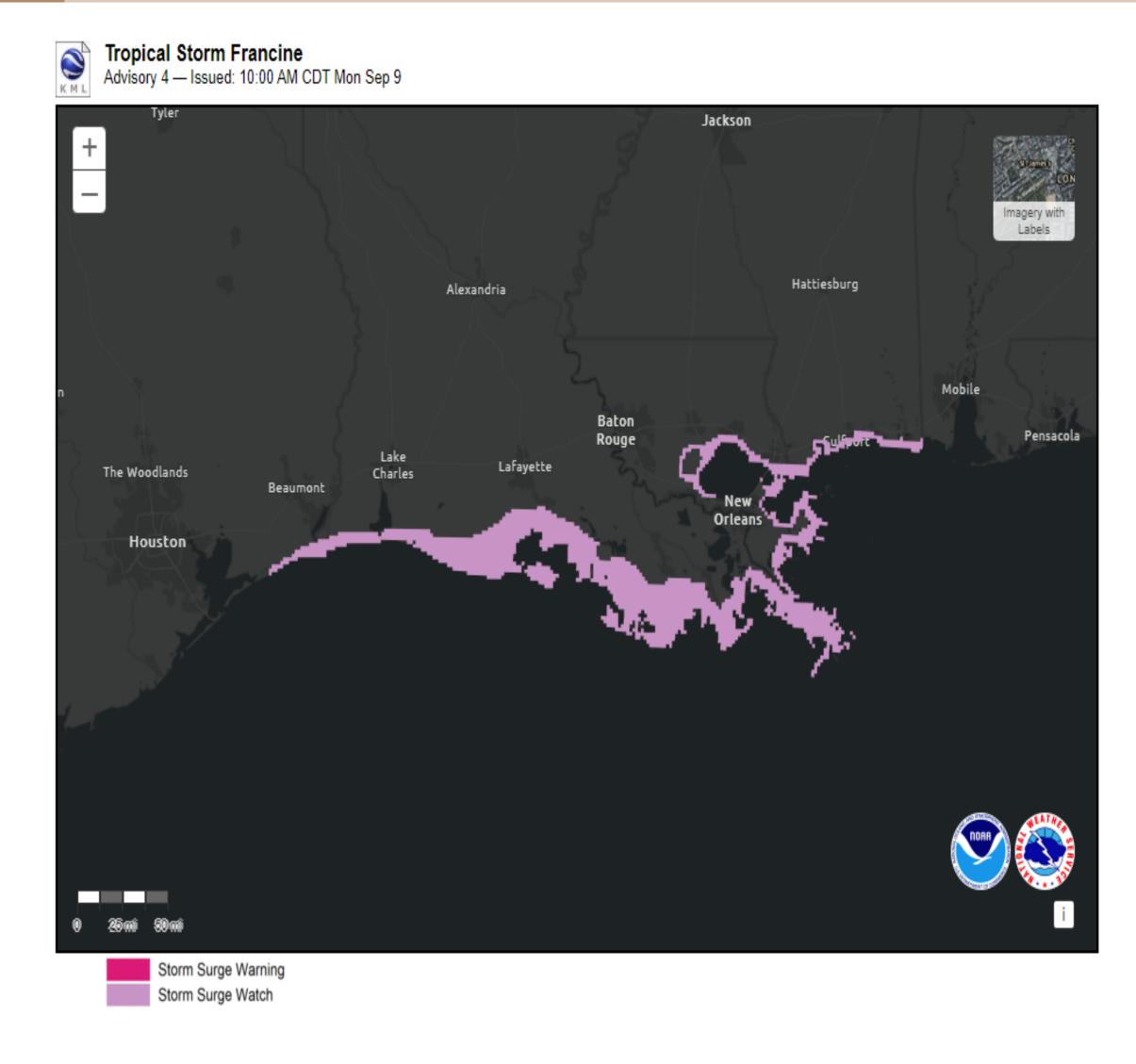






# Potential Peak Storm Surge / Watches and Warnings

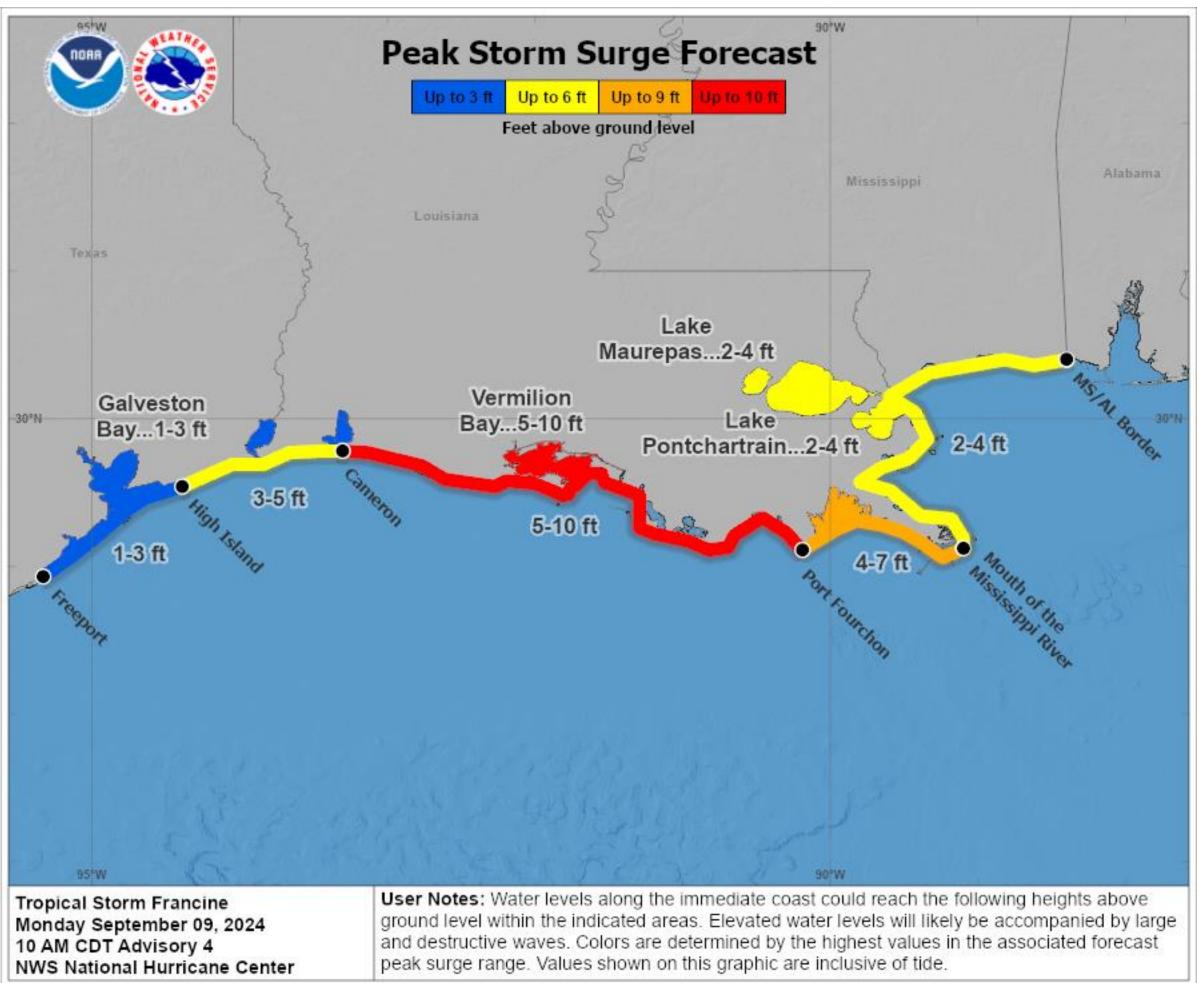
## **Tropical Storm Francine**



9/9/2024 11:49 AM



Tropical Analysis and Forecast Branch NWS National Hurricane Center



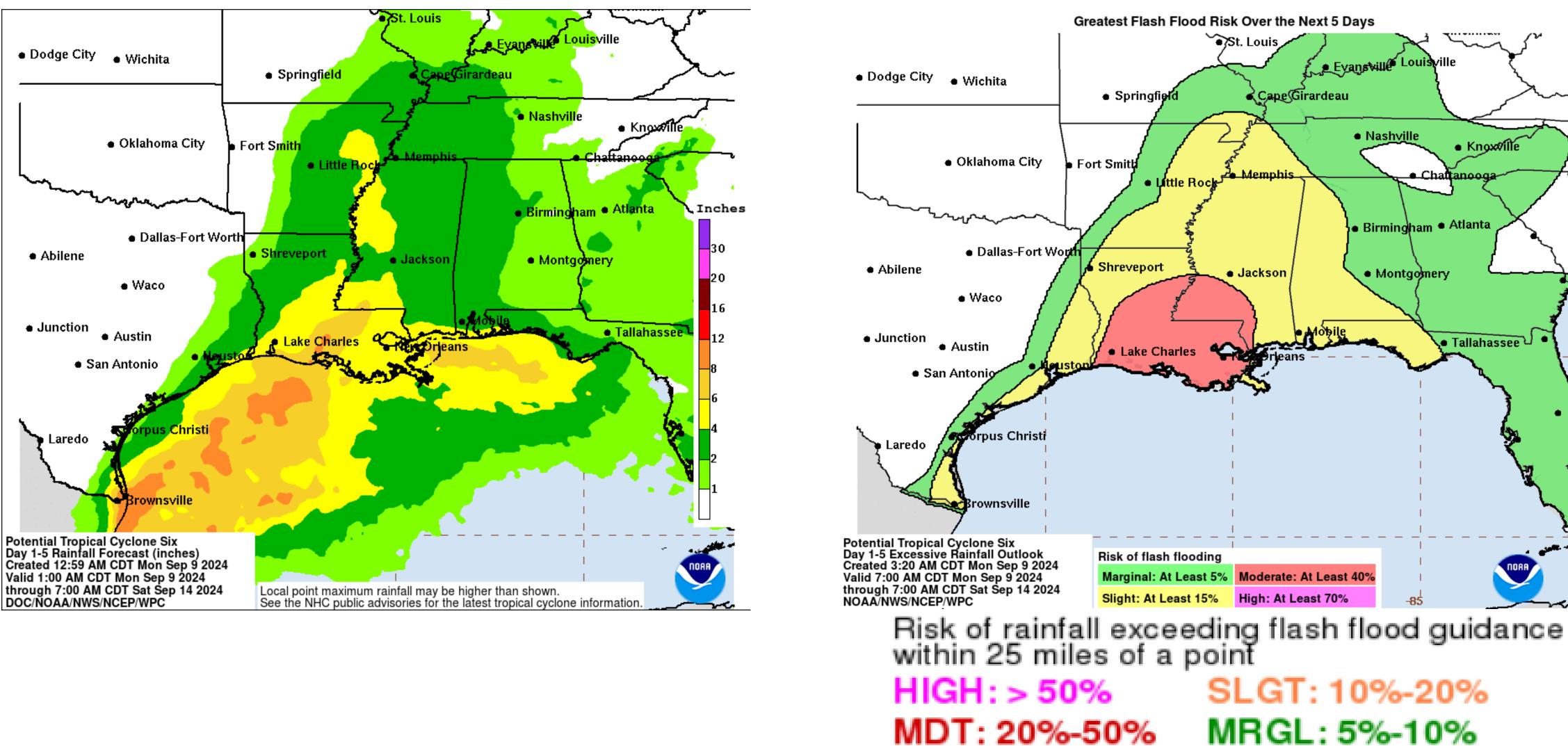




# Expected Storm Total Rainfall and Chance of Rainfall Flooding

# **Tropical Storm Francine**

# Images from NWS Weather Prediction Center





#### Tropical Analysis and Forecast Branch **NWS** National Hurricane Center

Refer to map legend for Valid Time

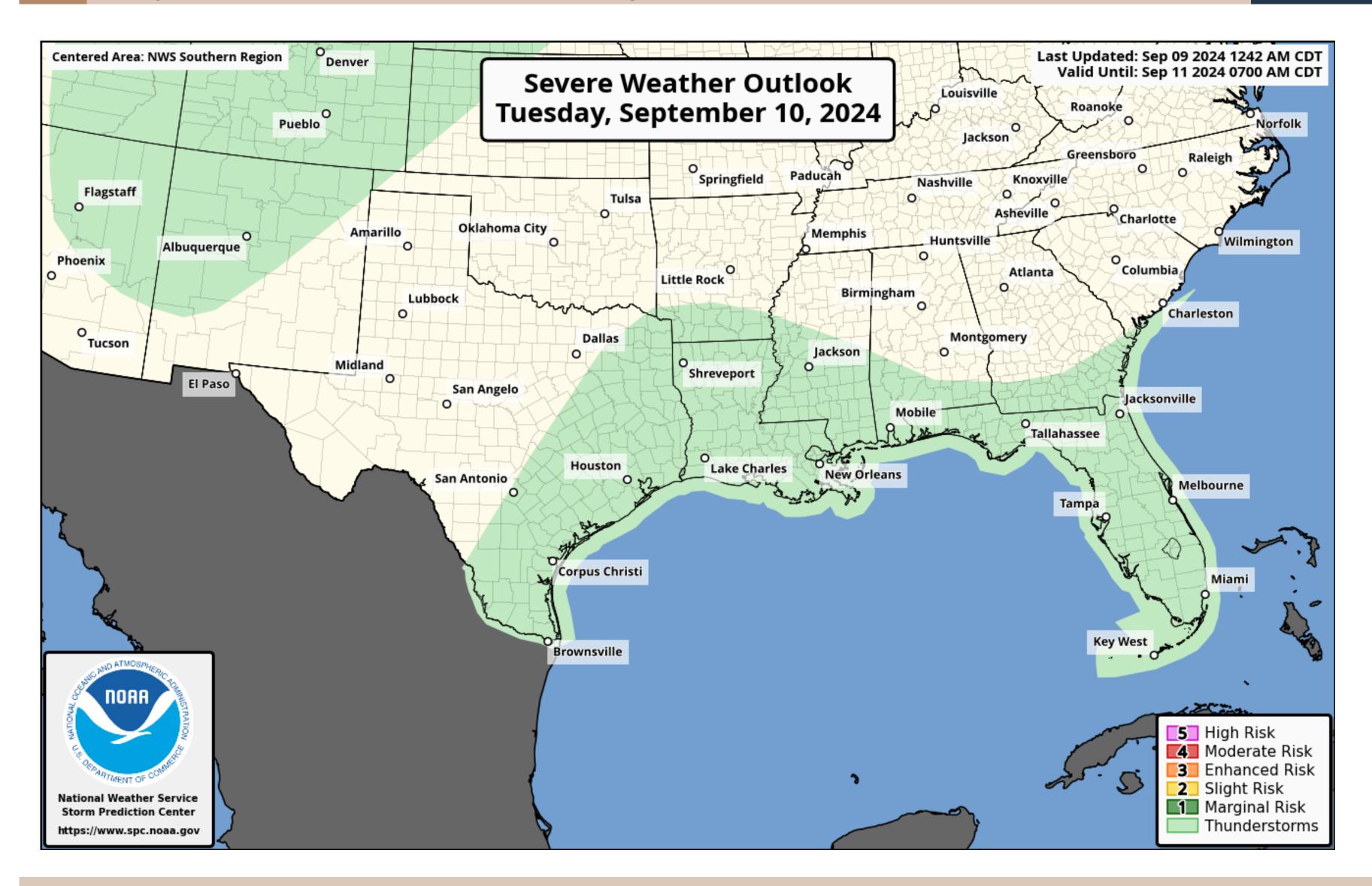




# Tornado Outlook – Day 2

#### **Tropical Storm Francine**

## Image from NWS Storm Prediction Center



9/9/2024 11:49 AM



#### Tropical Analysis and Forecast Branch NWS National Hurricane Center



# Key Messages

## **Tropical Storm Francine**



#### Key Messages for Tropical Storm Francine Advisory 4: 10:00 AM CDT Mon Sep 09, 2024



1. Francine is forecast to be a hurricane when it reaches the northwestern Gulf coast on Wednesday or Wednesday night and there is an increasing likelihood of life-threatening storm surge inundation for portions of the Upper Texas and Louisiana coastlines where a Storm Surge Watch is in effect. Residents in the watch area should follow advice given by local officials.

2. There is an increasing risk of damaging hurricane-force winds in portions of southern Louisiana beginning Wednesday, where a Hurricane Watch is now in effect.

3. Francine is expected to bring heavy rainfall and the risk of considerable flash flooding along the coast of far northeast Mexico, portions of the southernmost Texas coast, the Upper Texas Coast, southern Louisiana, and southern Mississippi into Thursday morning. A risk of flash and urban flooding exists across portions of the Mid-South from Wednesday into Friday morning.

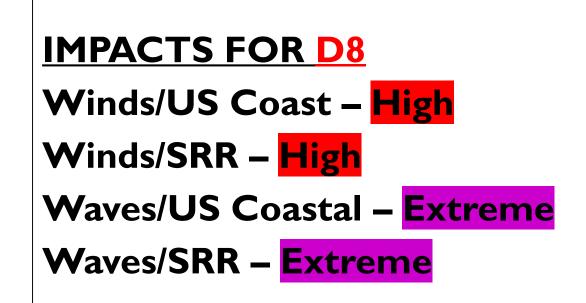




For more information go to hurricanes.gov





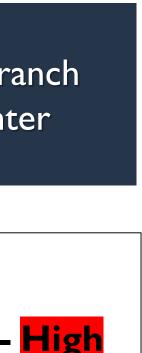


**US Storm Surge – Extreme** US Rainfall/Flash Flooding – High **US** Tornadoes – Low

#### through next 5 days

# **Marine Key Messages:**

- Francine is expected to become a hurricane before landfall on Wednesday.
- Seas will likely peak to 28 ft Wednesday.
- Conditions will quickly improve after landfall Wednesday night.







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

NHC\_TAFB

# **TROPICAL STORM FRANCINE** BRIEFING

This briefing was prepared by:

Keren Rosado-Vázquez -- keren.rosado-vazquez@noaa.gov)

The Next Briefing Will Be: Tuesday at 11 AM CDT

**TIME of NEXT NHC Advisory:** 21 UTC: 4 PM CDT

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







