

# Overview of National Hurricane Center/ Tropical Analysis and Forecast Branch (TAFB) Marine Products and Services

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NOAA/NHC/TAFB

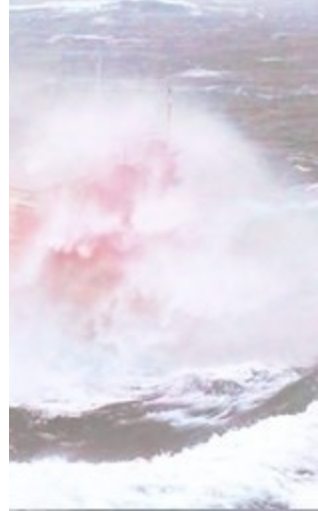
May 24<sup>th</sup>, 2022

NOAA's Southeast and Caribbean Regional Team  
2022 Hurricane Awareness Webinar Series

To provide meteorological analysis, forecasts and warnings over the tropical and subtropical oceans for the protection of life and property



# Our Customers: The Mariners and the Mets



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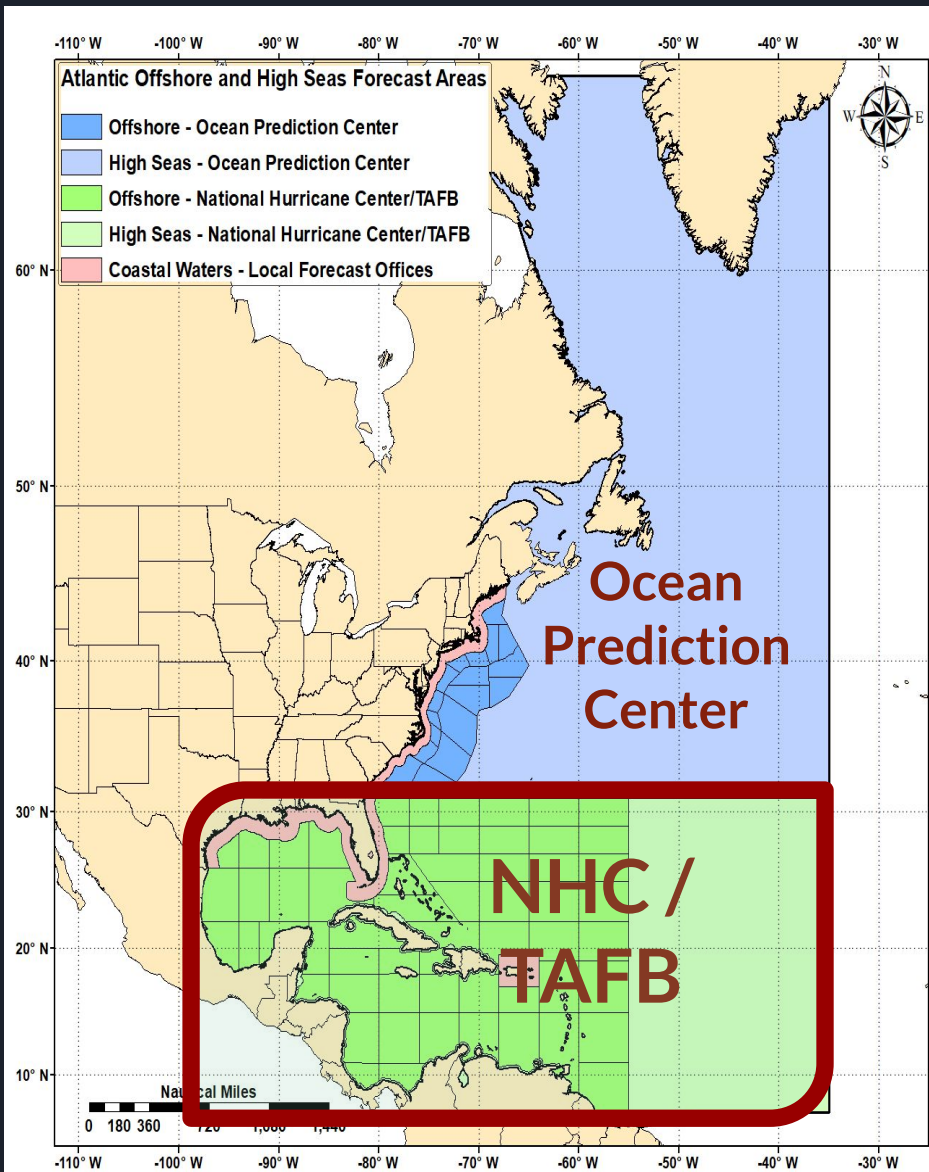
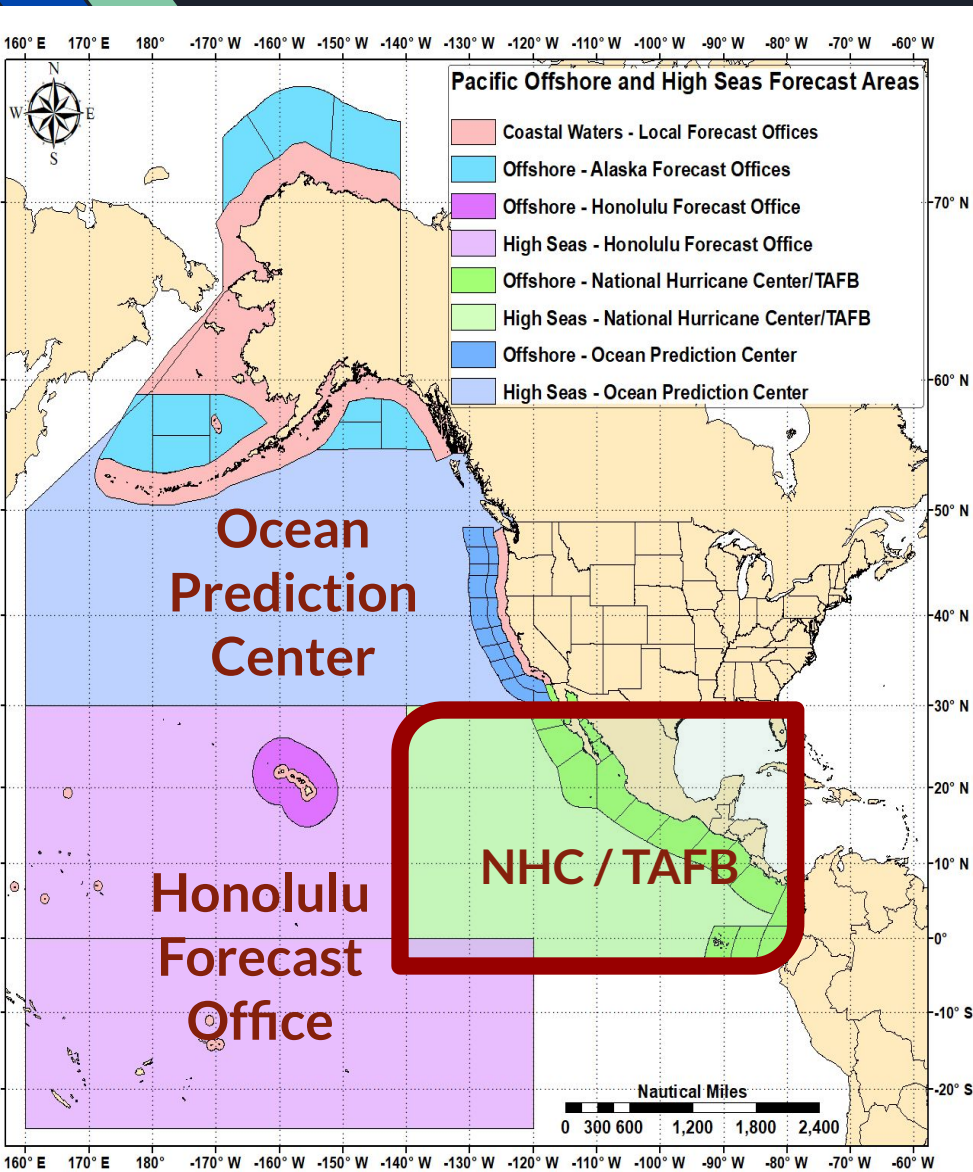


# A Bad Cruise

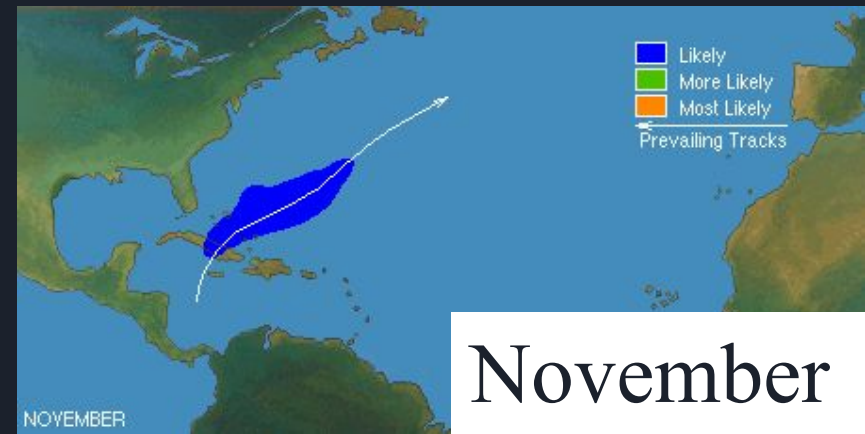
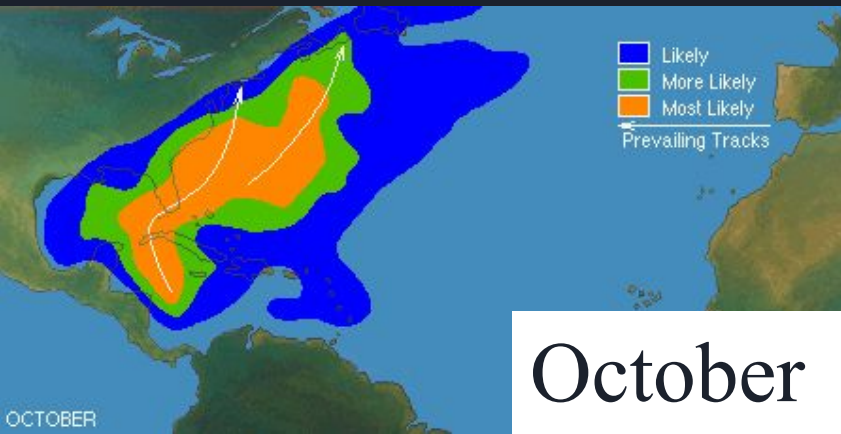
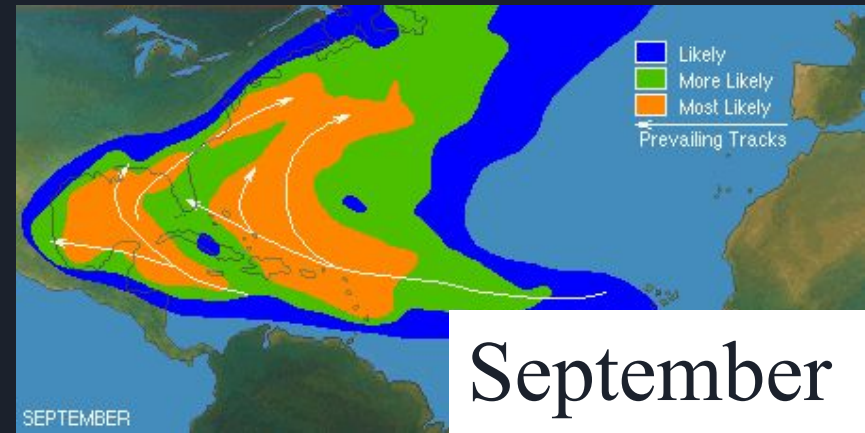
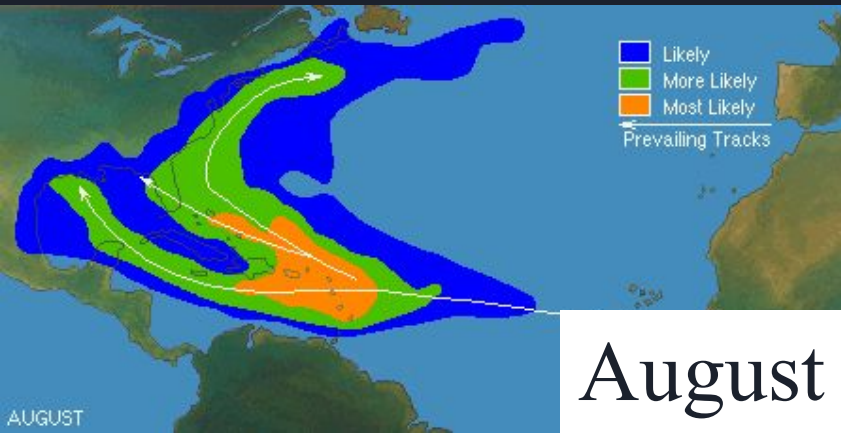
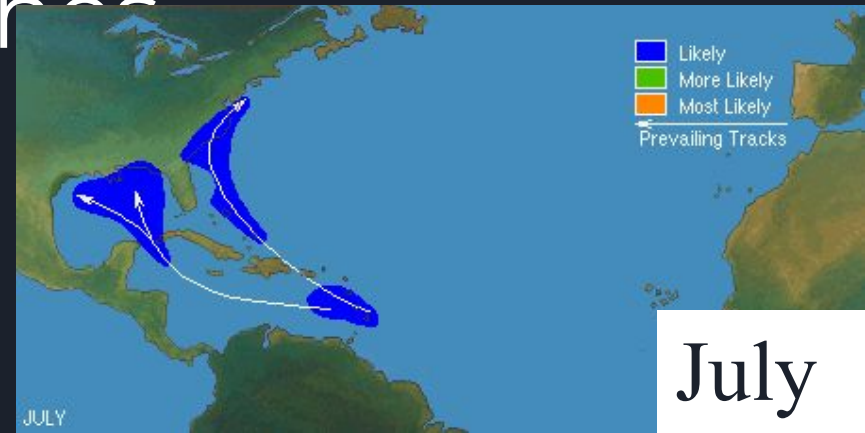
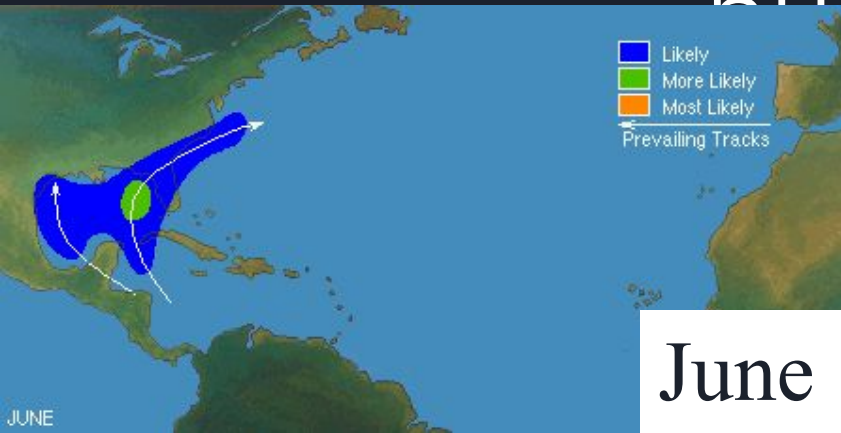




# NHC/TAFB - Areas of Responsibility



# Typical areas for tropical storms and hurricanes



# Tools – Incorporating NHC’s Tropical Storm/Hurricane Forecast



**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.**

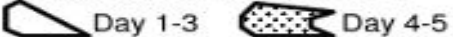


**Hurricane Ida**  
 Saturday August 28, 2021  
 7 AM CDT Intermediate Advisory 8A  
 NWS National Hurricane Center

**Current information: x**  
 Center location 24.4 N 85.7 W  
 Maximum sustained wind 85 mph  
 Movement NW at 16 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:**



**Watches:**



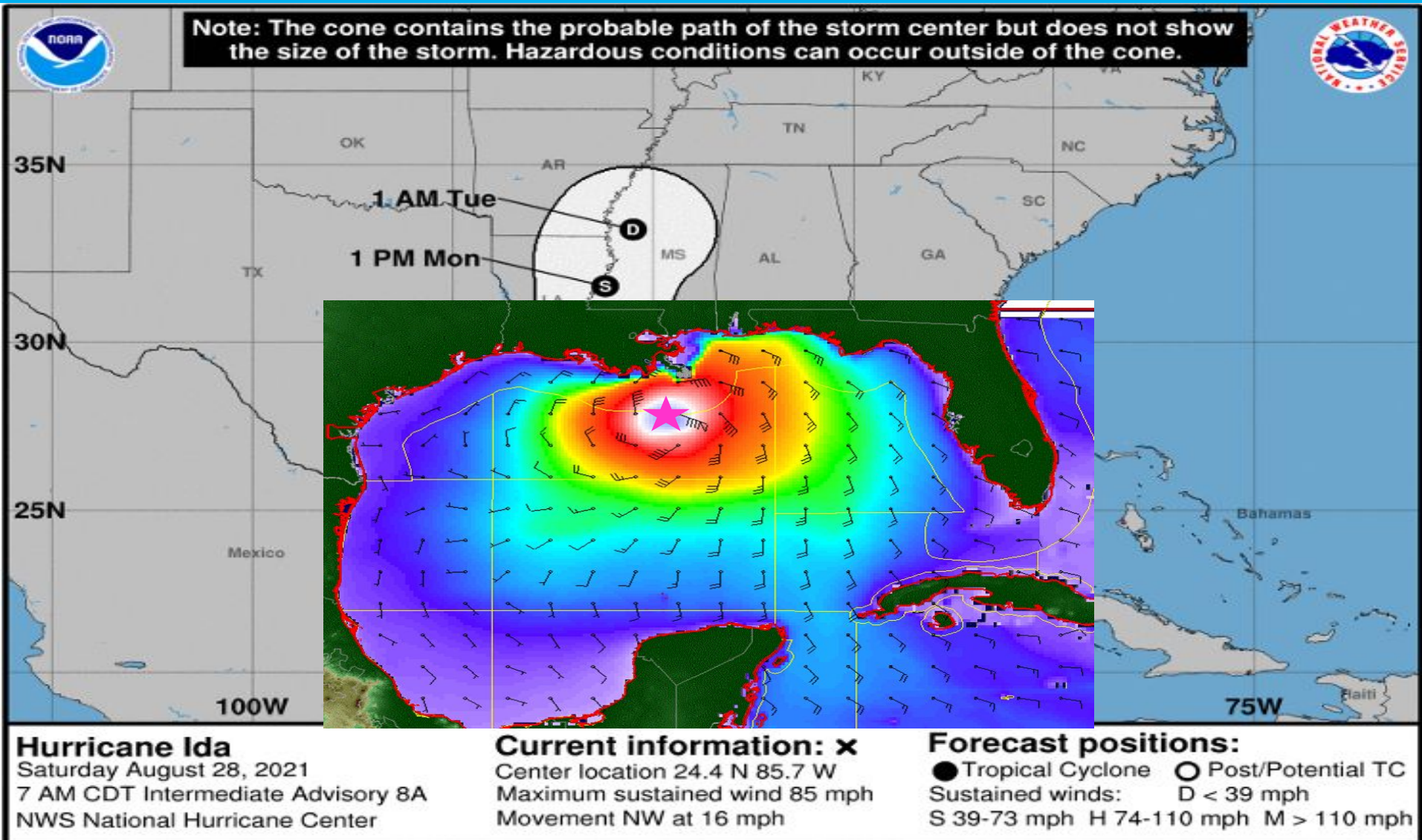
**Warnings:**



**Current wind extent:**



# Tools – Incorporating NHC’s Tropical Storm/Hurricane Forecast





# NHC/TAFB Wind and Wave Forecasts

## High Seas and Offshores Text Forecasts

HIGH SEAS FORECAST  
NWS NATIONAL HURRICANE CENTER  
1030 UTC FRI OCT 02 2015

SUPERSEDED BY NEXT ISSUANCE IN 6 HOURS

SEAS GIVEN AS SIGNIFICANT WAVE HEIGHT...WHICH IS THE AVERAGE HEIGHT OF THE HIGHEST 1/3 OF THE WAVES. INDIVIDUAL WAVES MAY BE MORE THAN TWICE THE SIGNIFICANT WAVE HEIGHT.

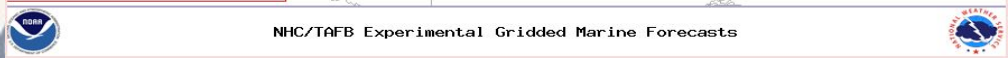
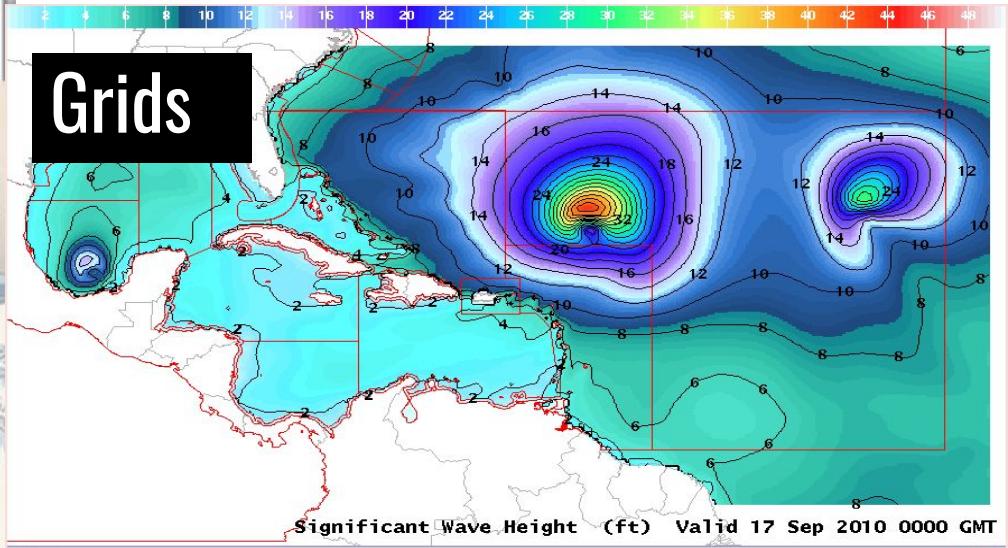
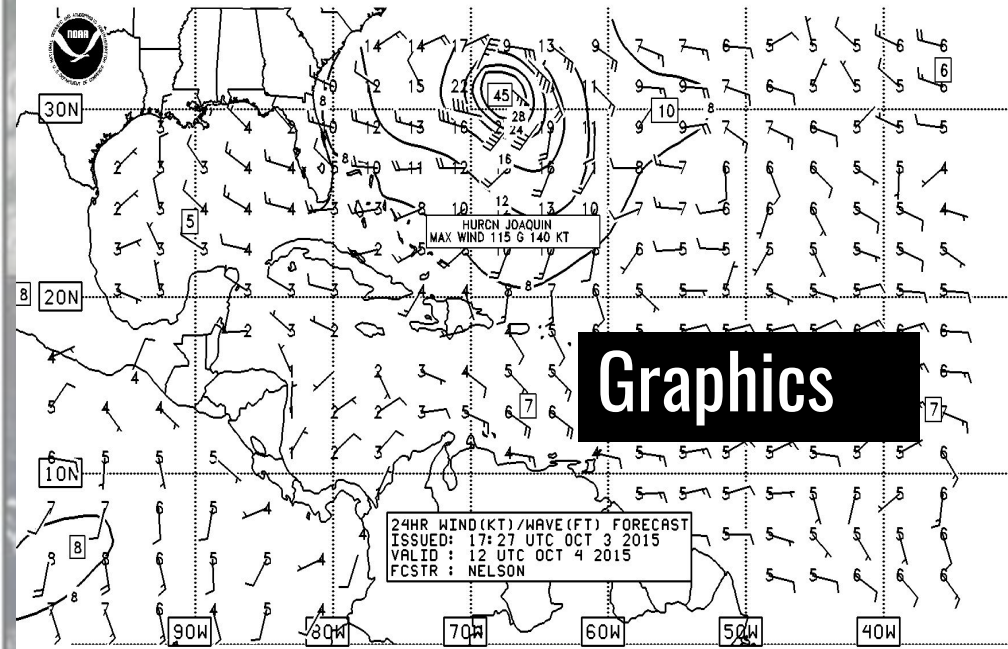
PAN PAN

ATLANTIC FROM 07N TO 31N W OF 35W INCLUDING CARIBBEAN SEA AND GULF OF MEXICO.

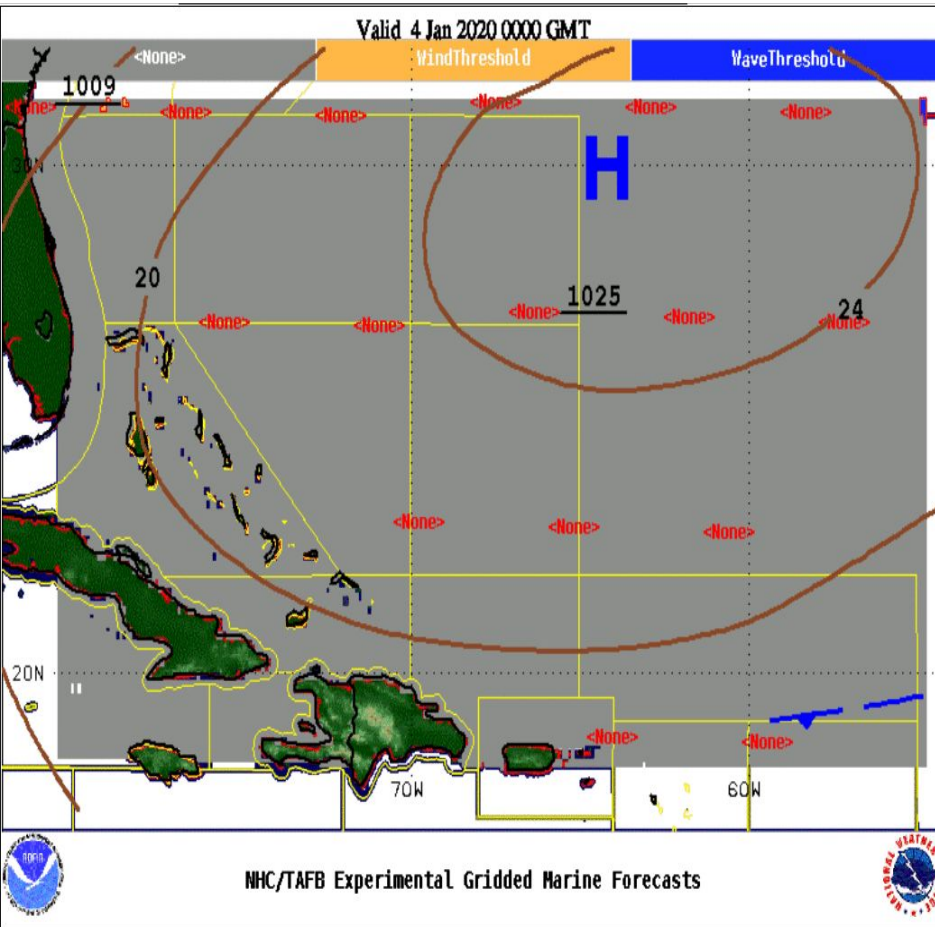
SYNOPSIS VALID 0600 UTC FRI OCT 02.  
24 HOUR FORECAST VALID 0600 UTC SAT OCT 03.  
48 HOUR FORECAST VALID 0600 UTC SUN OCT 04.

.WARNINGS.

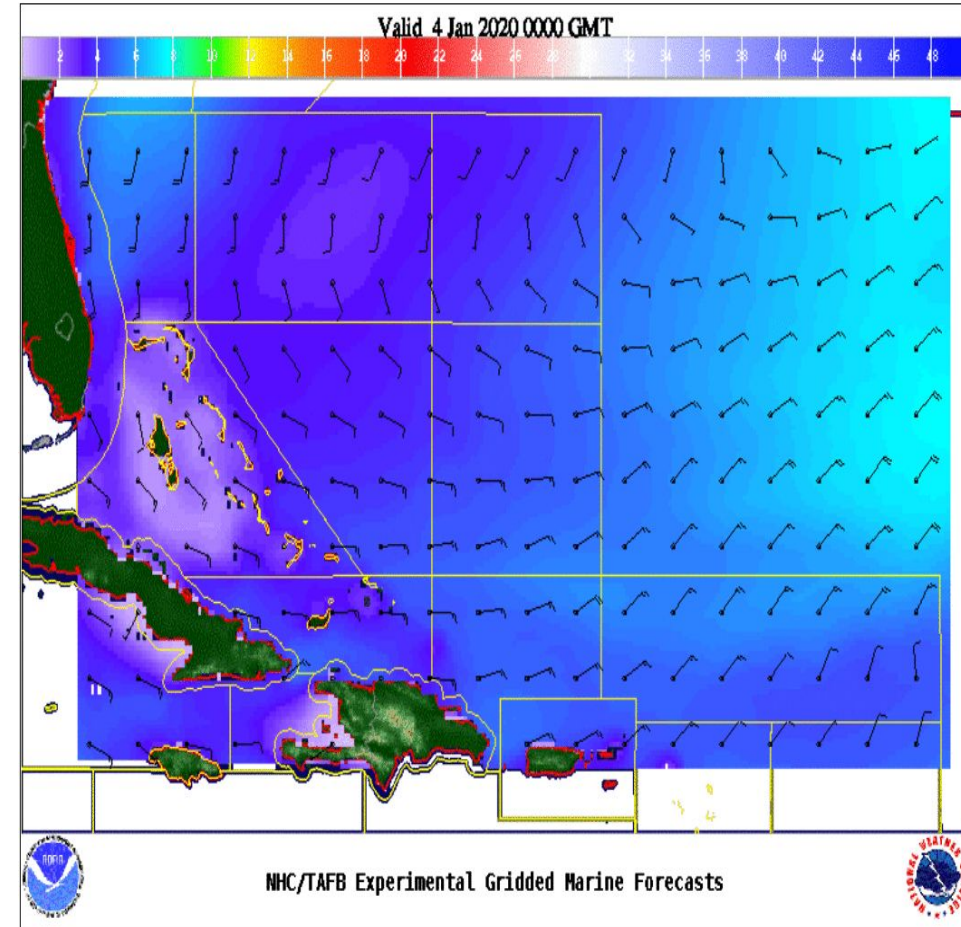
...HURRICANE WARNING...  
.HURRICANE JOAQUIN NEAR 23.3N 74.7W 935 MB AT 0900 UTC OCT 02 MOVING NW OR 315 DEG AT 3 KT. MAXIMUM SUSTAINED WINDS 115 KT GUSTS 140 KT. TROPICAL STORM FORCE WINDS WITHIN 160 NM W SEMICIRCLE...140 NM NE QUADRANT AND 180 NM SE QUADRANT. SEAS 12 FT OR GREATER WITHIN 400 NM NE QUADRANT...150 NM SE QUADRANT...120 NM SW QUADRANT...AND 300 NM NW QUADRANT WITH SEAS TO 39 FT. ELSEWHERE S OF 28N BETWEEN 70W AND 78W WINDS 20 TO 33 KT. SEAS 9 TO 12 FT. N OF 28N BETWEEN 70W AND 75W E WINDS 20 TO 25 KT SEAS 8 TO 10 FT. REMAINDER OF AREA N OF 21N BETWEEN 65W AND 78W AND OUTSIDE OF THE BAHAMAS WINDS 20 KT OR LESS. SEAS 8 TO 11 FT IN MIXED SWELL.



# Marine Composite Page – Winds, Waves, Warnings, and Features



Red: Gale Warning  
Orange: Winds  $> 23$  kt Blue: Seas  $\geq 8$  ft



Colors: Seas (in feet)  
Flags: Wind barbs (in knots)

# EL FARO

33 fatalities when it sank in Hurricane Joaquin (2015)



## BOURBON RHODE

11 fatalities when it sank in Hurricane Lorenzo (2019)

## BOUNTY

2 fatalities when it sank in Hurricane Sandy (2012)

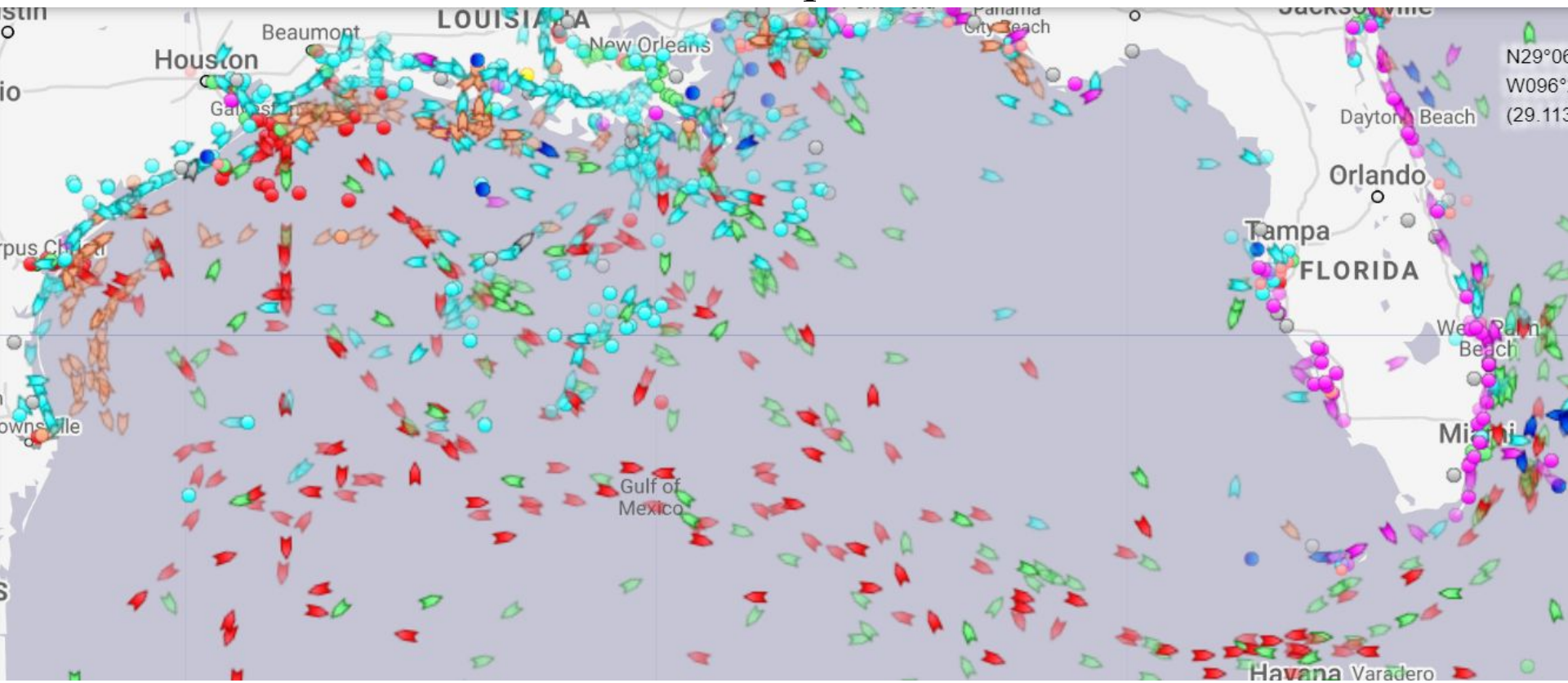
## FANTOME

31 fatalities when it sank in Hurricane Mitch (1998)

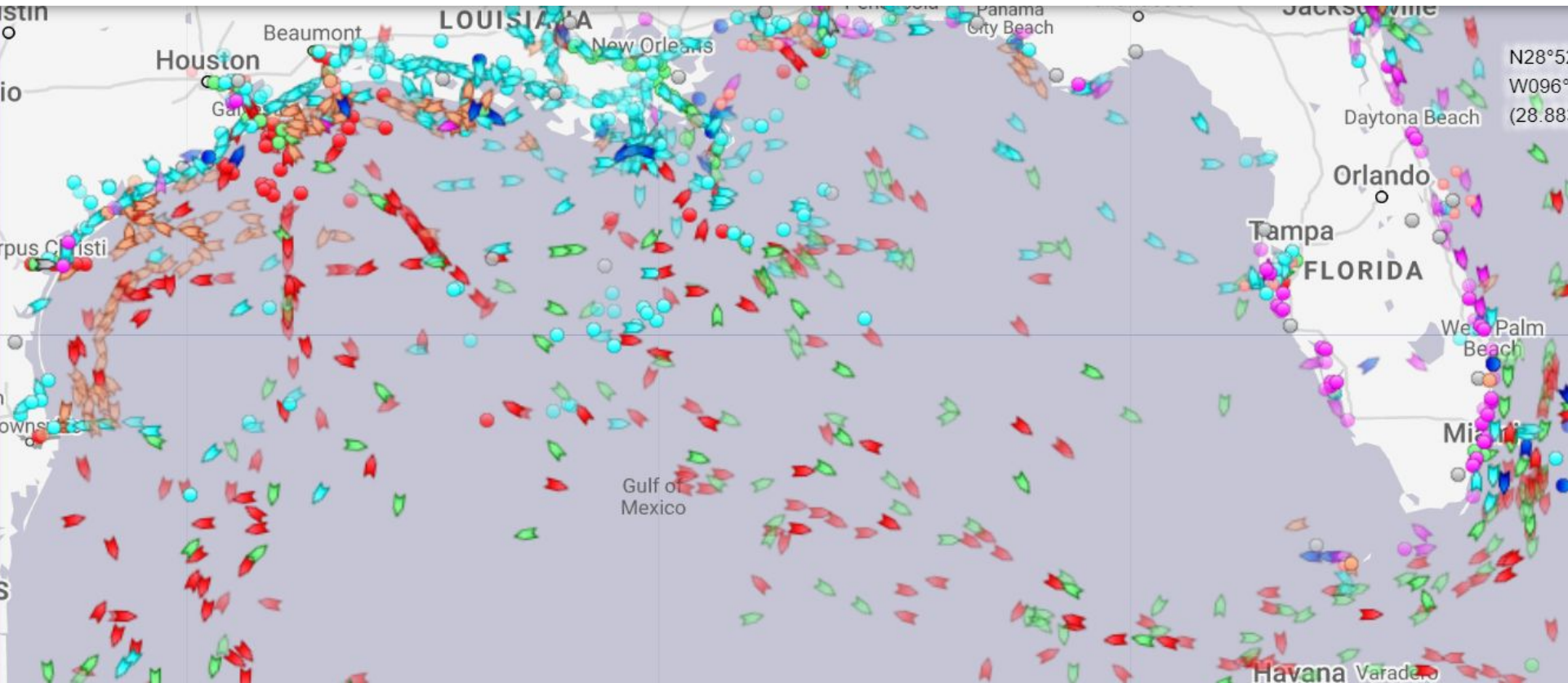
# Hurricane Delta - 2020

October 6<sup>th</sup>, 2pm EDT

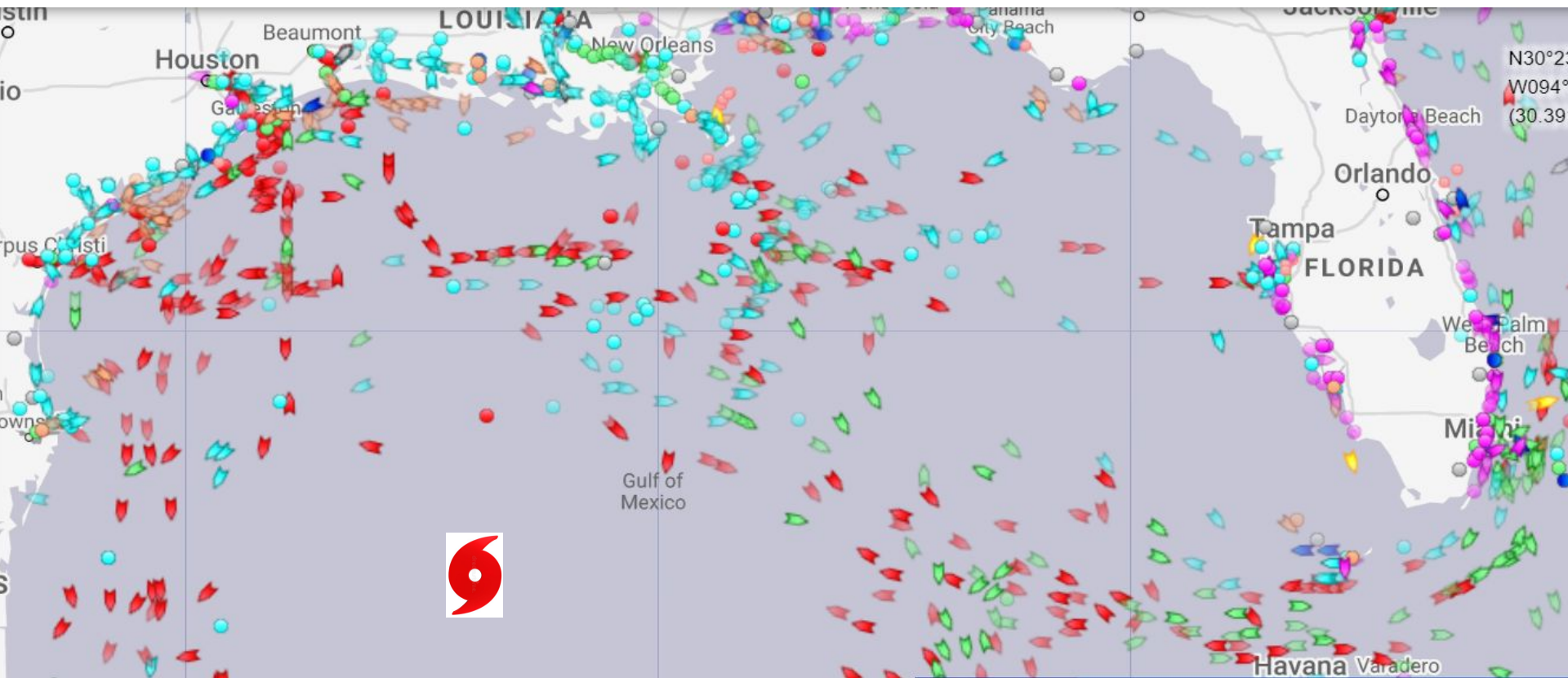
# Weather Avoidance by Ships



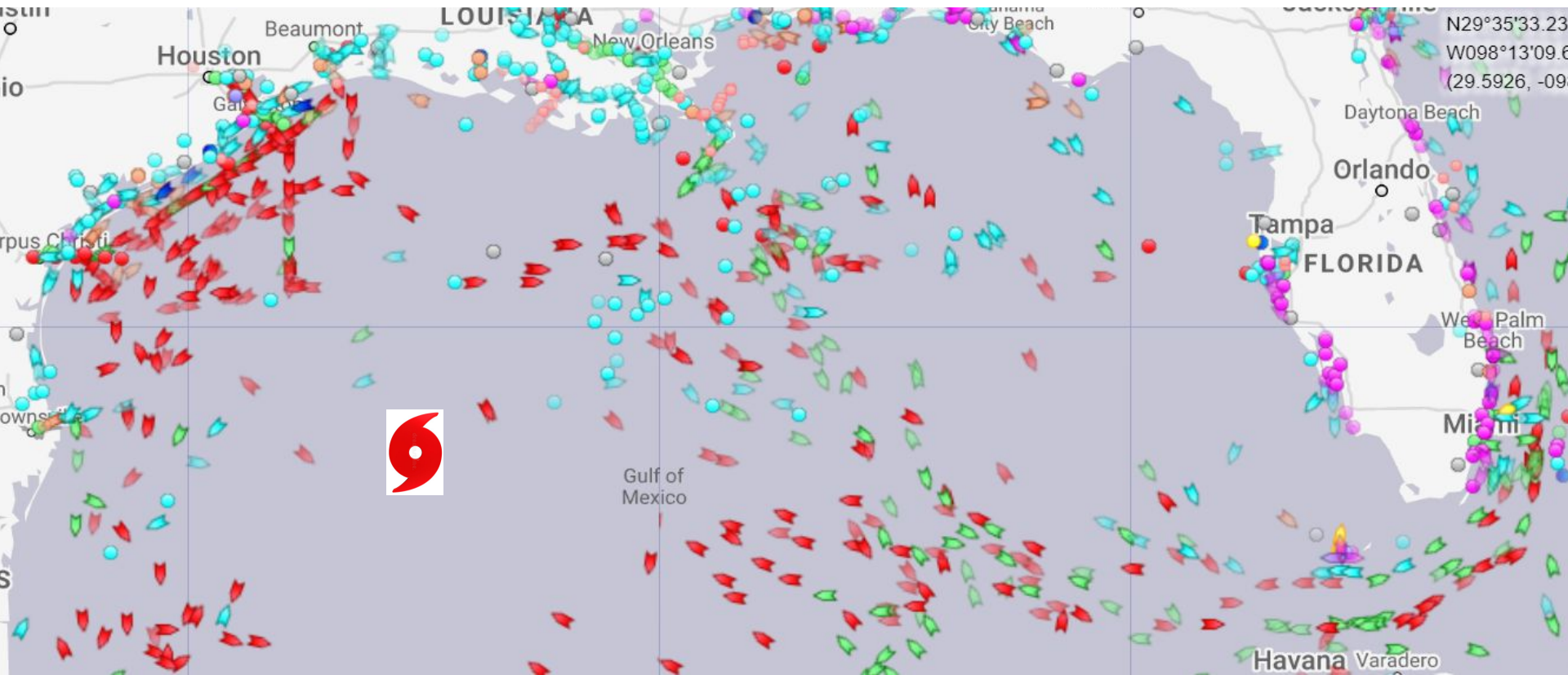
# Hurricane Delta - 2020 October 7<sup>th</sup>, 9am EDT Weather Avoidance by Ships



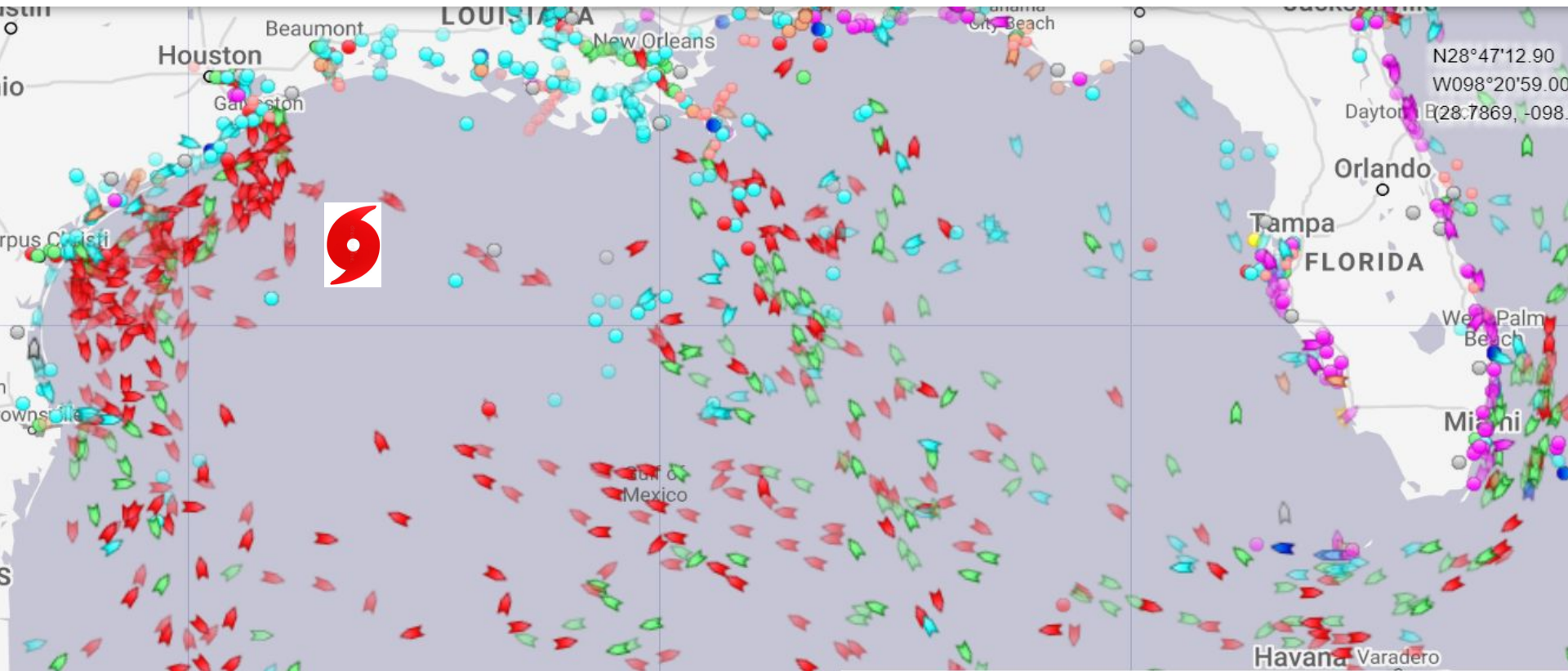
# Hurricane Delta - 2020 October 8<sup>th</sup>, 9am EDT Weather Avoidance by Ships



# Hurricane Delta - 2020 October 8<sup>th</sup>, 5pm EDT Weather Avoidance by Ships

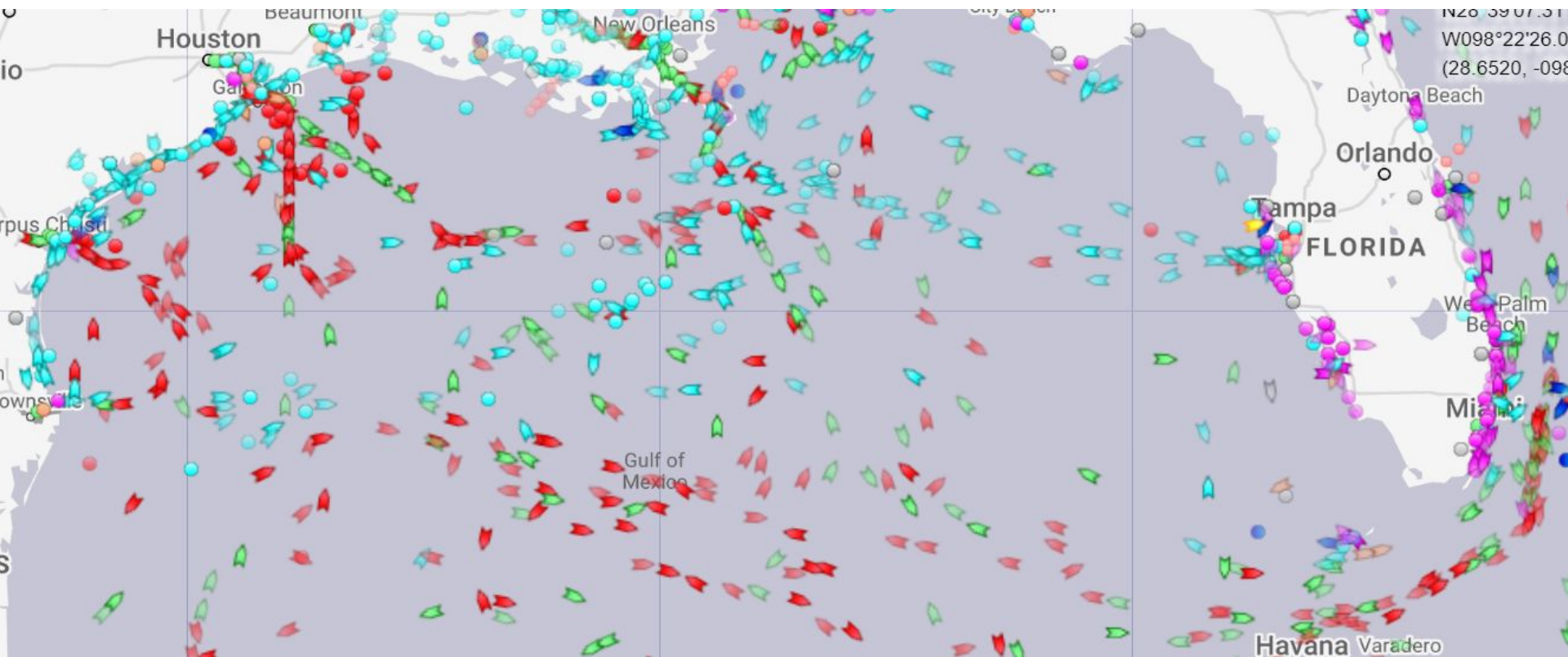


# Hurricane Delta - 2020 October 9<sup>th</sup>, 9am EDT Weather Avoidance by Ships

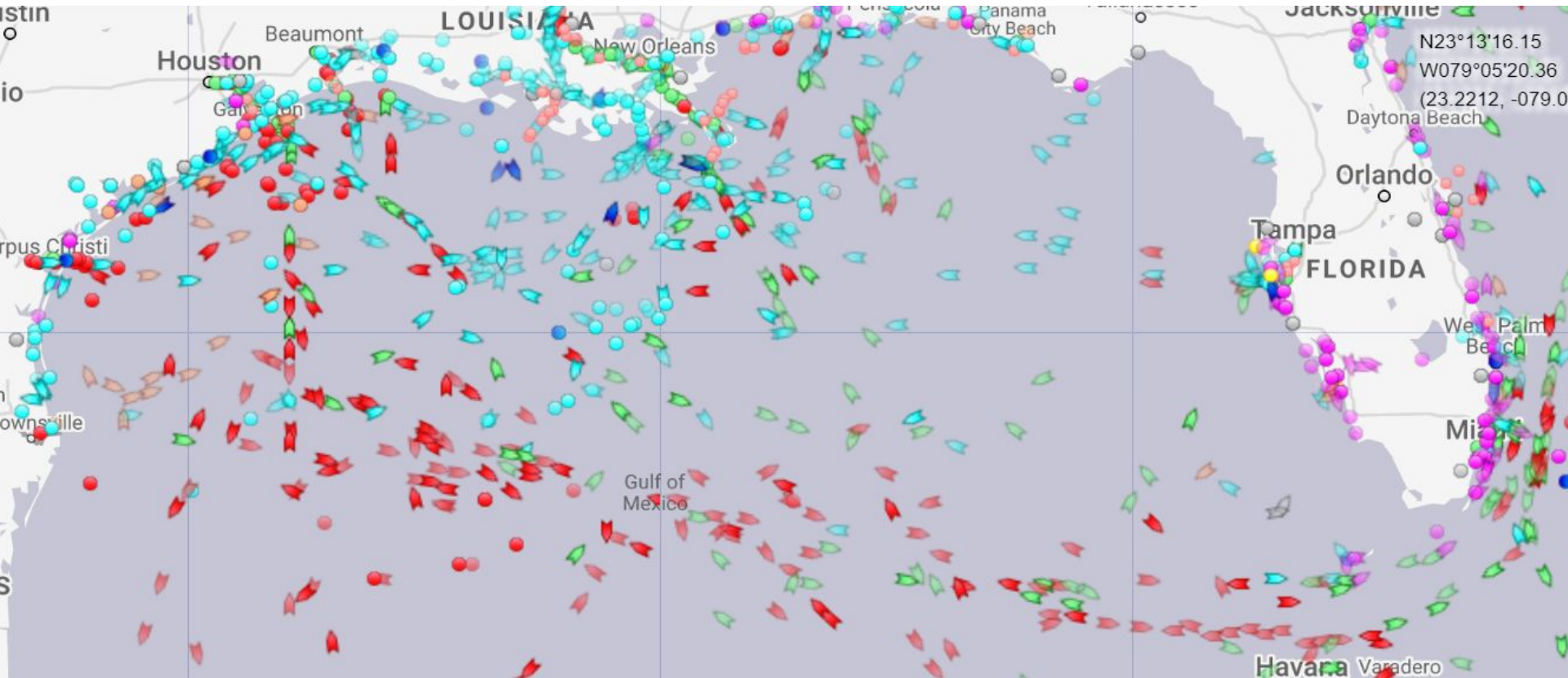




# Hurricane Delta - 2020 October 10<sup>th</sup>, 1pm EDT Weather Avoidance by Ships



# Hurricane Delta - 2020 October 11<sup>th</sup>, 7am EDT Weather Avoidance by Ships





**MEMORANDUM OF AGREEMENT  
BETWEEN  
THE UNITED STATES COAST GUARD  
AND  
THE NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION  
NATIONAL WEATHER SERVICE  
REGARDING  
THE MANAGEMENT OF MARINE  
WEATHER INFORMATION**

APPROVED: 03/30/2020

*Louis W. Uccellini*

**Louis W. Uccellini**  
NOAA Assistant Administrator  
for Weather Services

APPROVED: 3/31/20

*RV Timme*

**Richard V. Timme**  
Rear Admiral, USCG  
Assistant Commandant for  
Prevention Policy



# 2021 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/ National Hurricane Center (NHC)



## 80 Spot Forecasts by NHC/TAFB for 2021 U.S. Coast Guard District Operations





# 2021 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/ National Hurricane Center (NHC)



## Atlantic Maritime Search and Rescue Regions

UNCLASSIFIED



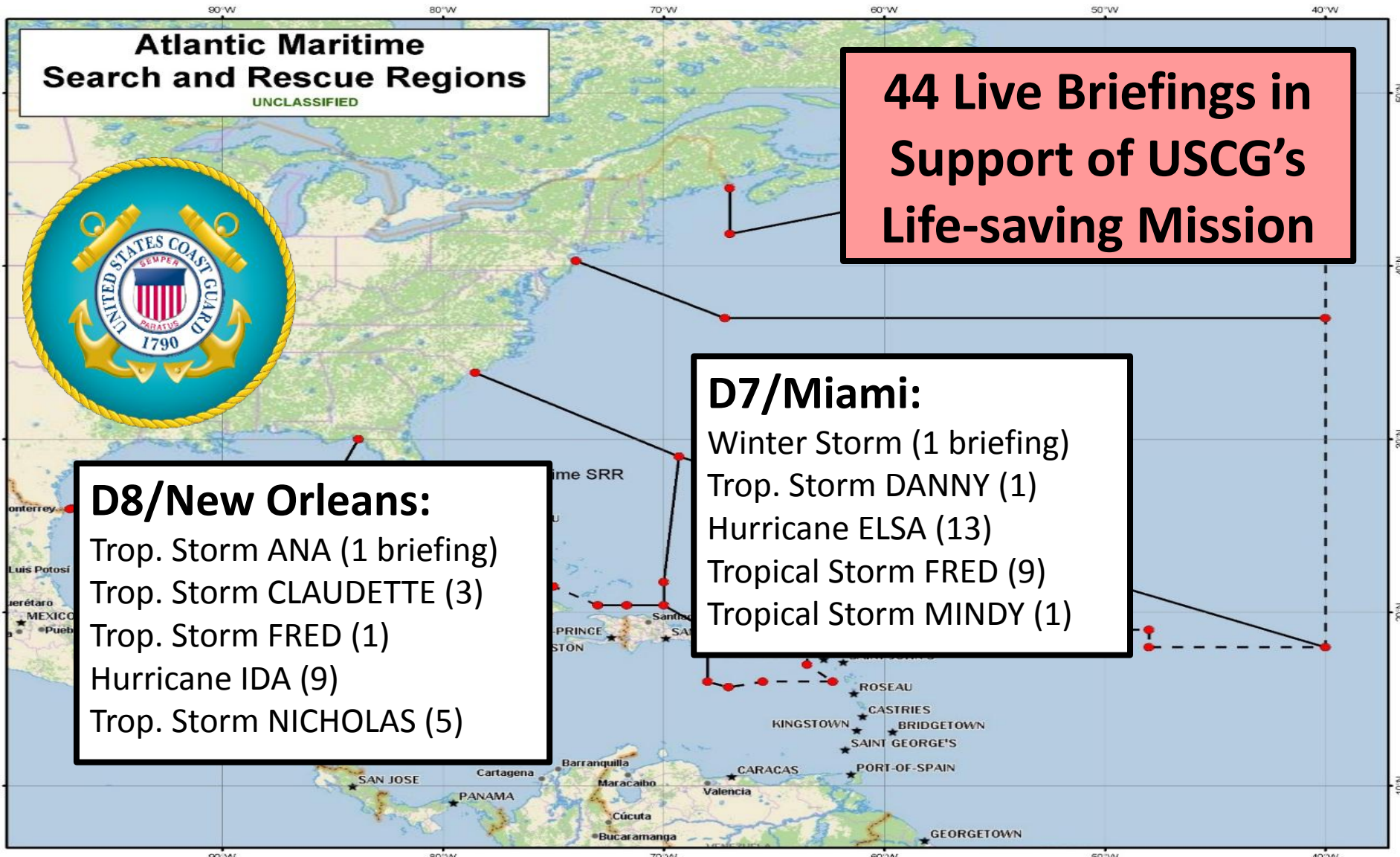
**44 Live Briefings in  
Support of USCG's  
Life-saving Mission**

### D8/New Orleans:

- Trop. Storm ANA (1 briefing)
- Trop. Storm CLAUDETTE (3)
- Trop. Storm FRED (1)
- Hurricane IDA (9)
- Trop. Storm NICHOLAS (5)

### D7/Miami:

- Winter Storm (1 briefing)
- Trop. Storm DANNY (1)
- Hurricane ELSA (13)
- Tropical Storm FRED (9)
- Tropical Storm MINDY (1)



# 2021 TAFB

## Social Media Highlights

### 2021 Year in Review



### Tweet Bank

- Completed with over 150 manual tweets on TAFB Climatology data

### Weekly Marine Briefing

- Weekly Marine Weather Briefing experimental Monday & Thursday

[twitter.com/NHC\\_TAFB](https://twitter.com/NHC_TAFB)

	2021	2020
<b>Human Tweets (manual)</b>	762 (2.1/day)	545
<b>Automated Tweets</b>	1,044 (2.9/day)	982
<b>Total tweets</b>	1,806 (4.9/day)	1,527
<b>Retweets</b>	10,121	10,035
<b>Profile Visits</b>	288,800	57,476
<b>New Followers for 2021</b>	1,957	4,200
<b>Total followers</b>	29,160 (increase of 7.2%)	27,203

# National Hurricane Center/Tropical Analysis and Forecast Branch

<https://www.nhc.noaa.gov/marine/?atlc>

