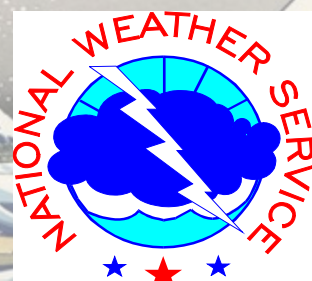


National Hurricane Center/ Tropical Analysis and Forecast Branch: Forecasts & Warnings for Blue Water Mariners

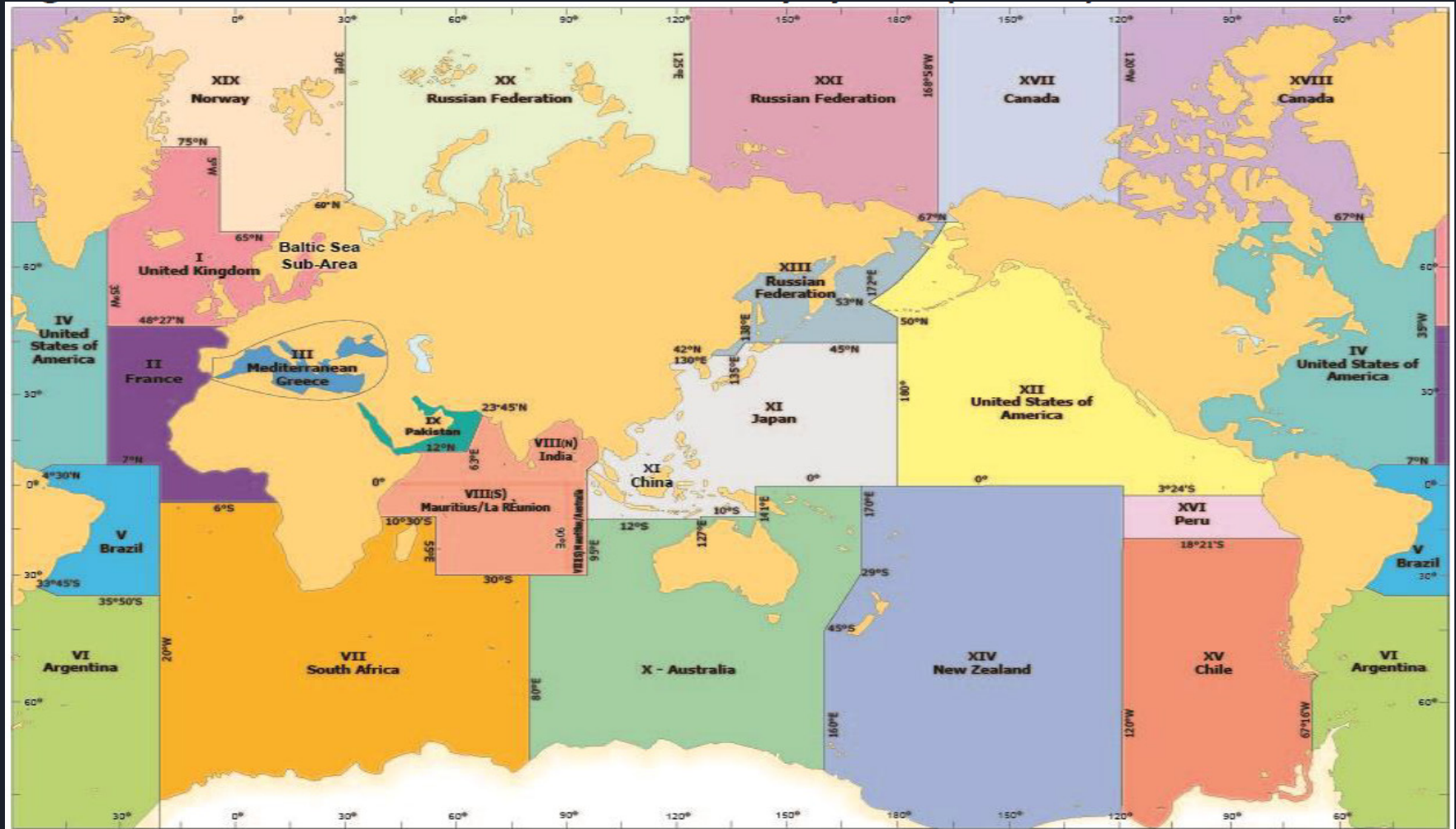
Chris Landsea
Chief, TAFB

Chris.Landsea@noaa.gov

Interdepartmental Hurricane Conference
March 3rd, 2021

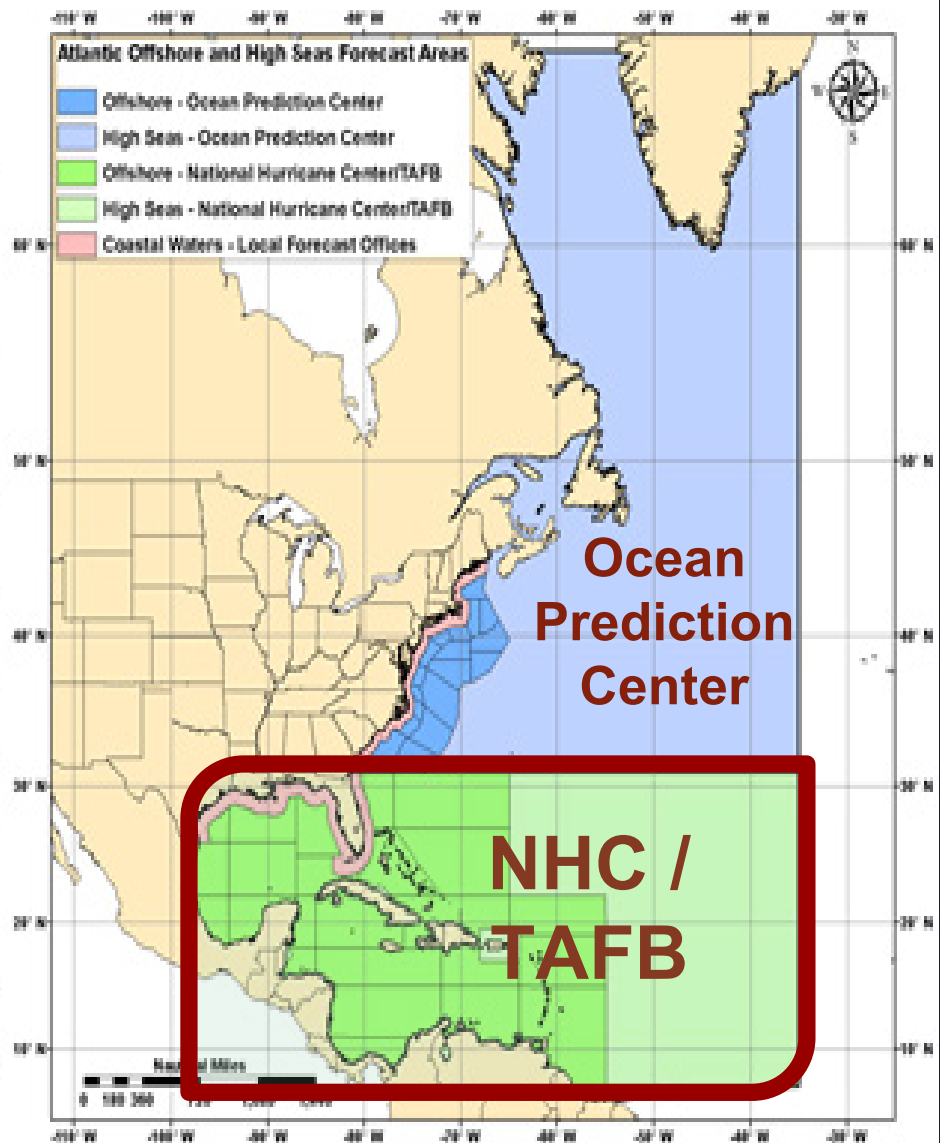
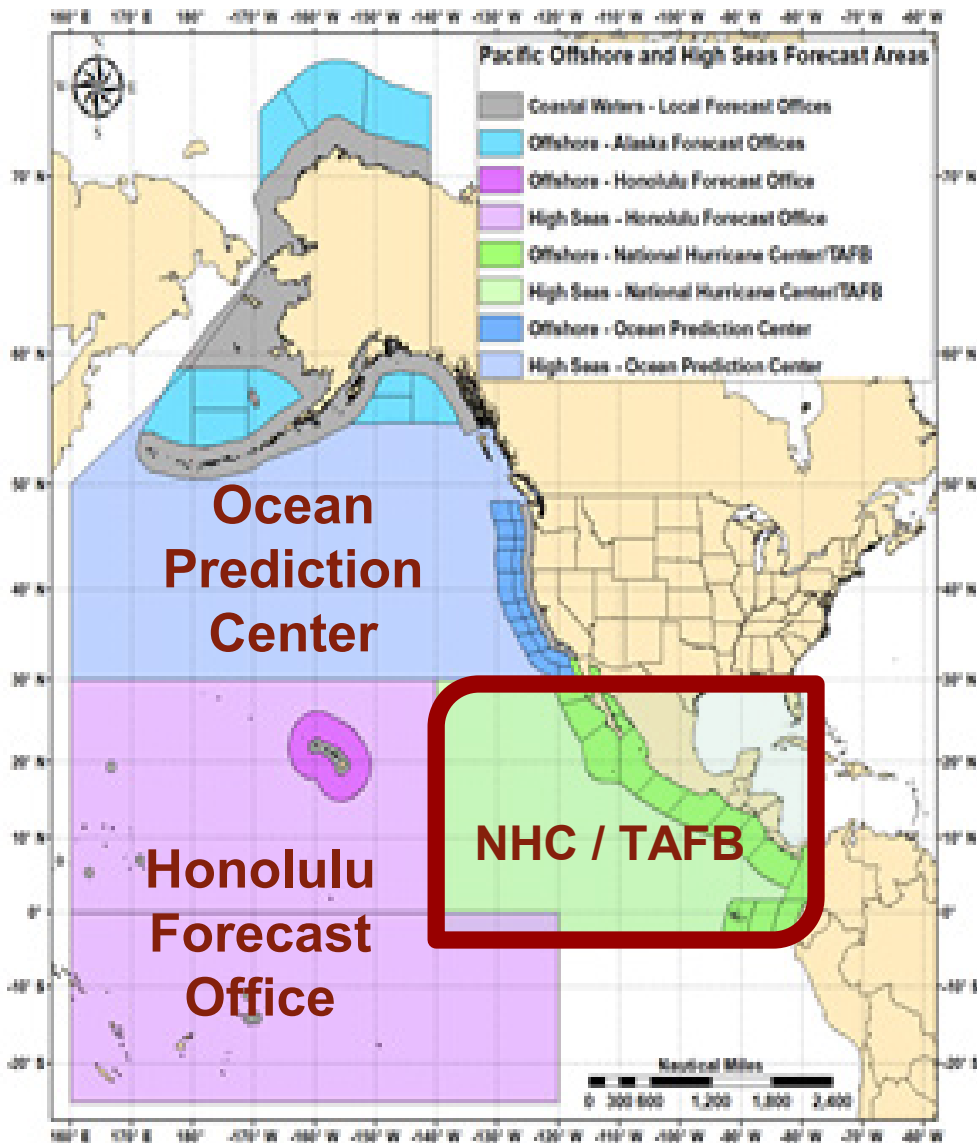


Global High Seas Forecasts - International Maritime Organization

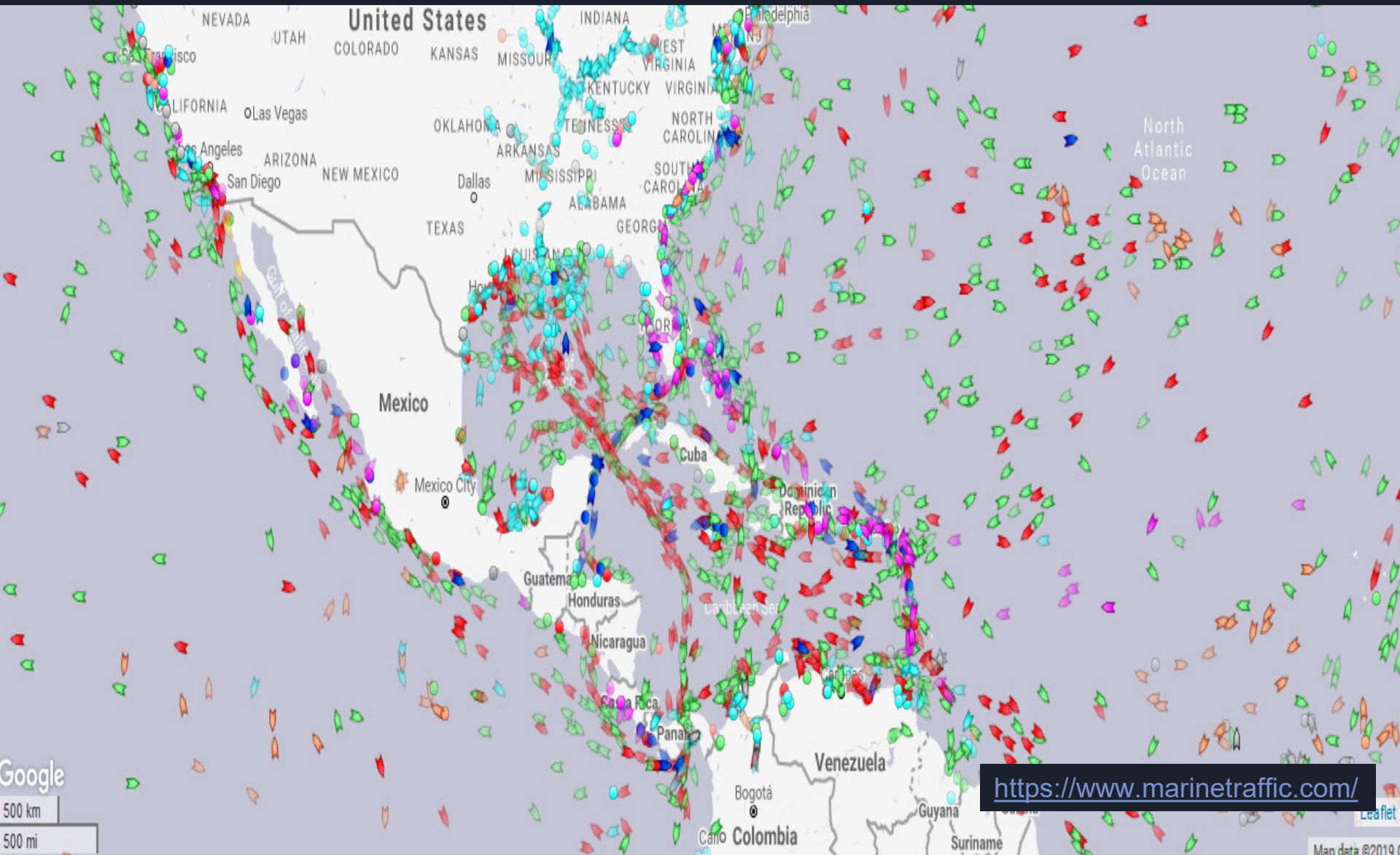




NHC/TAFB - Areas of Responsibility



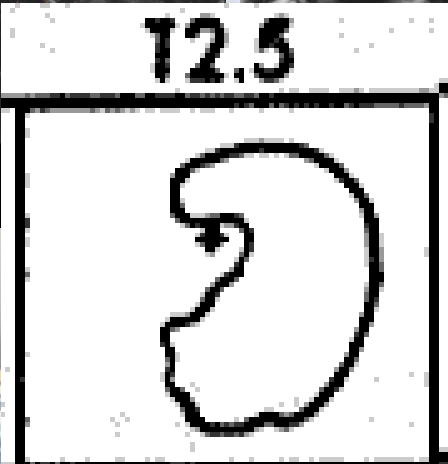
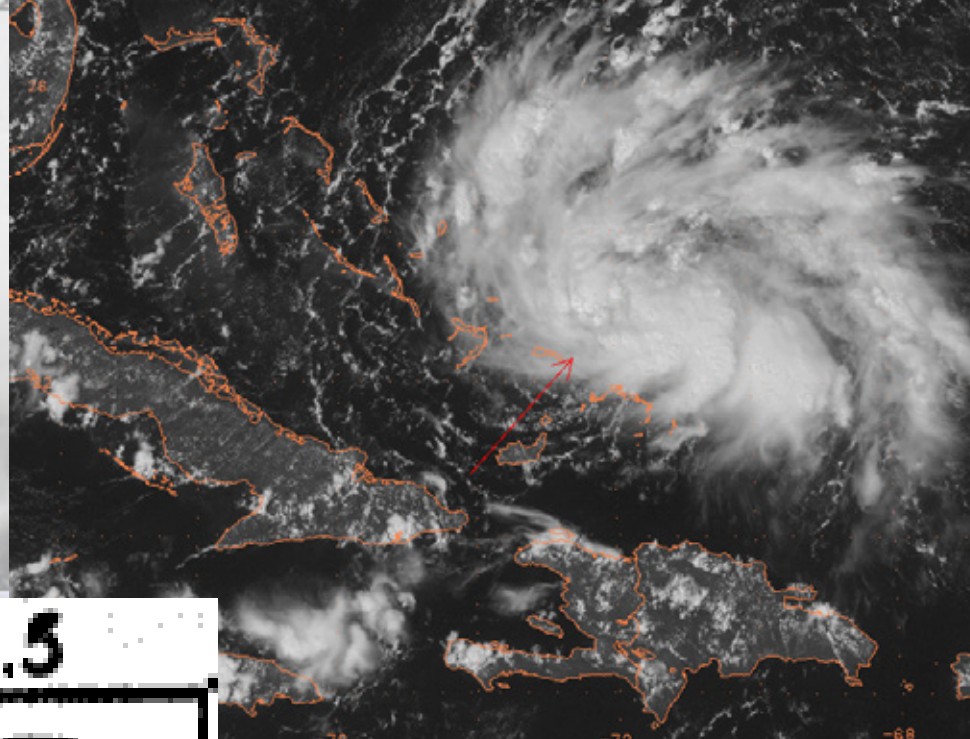
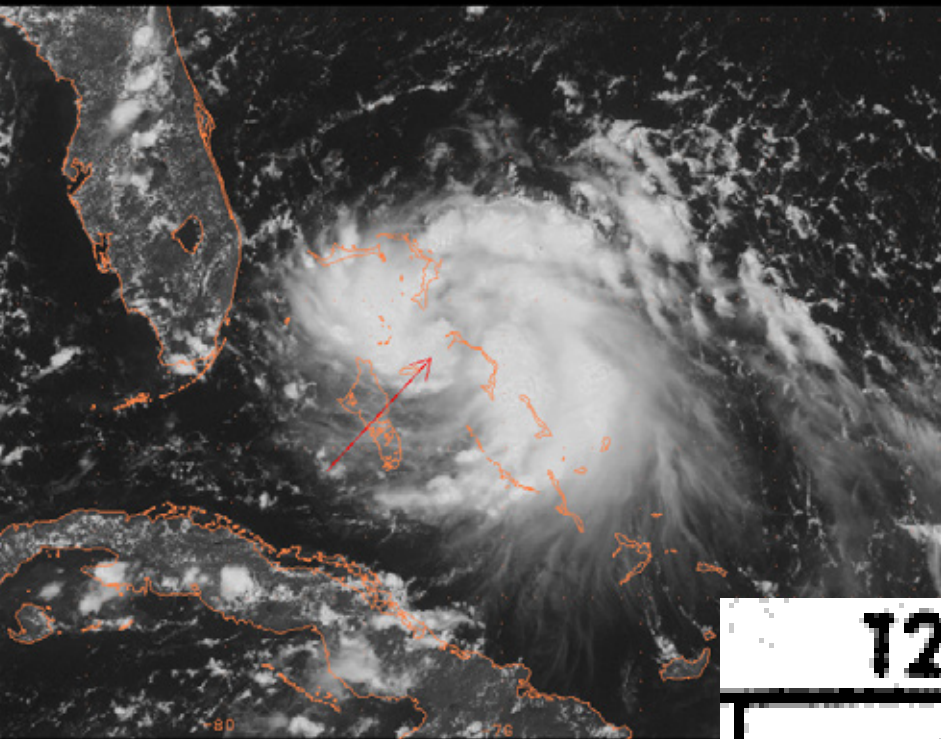
Ships over the Open Ocean



Satellite Imagery – Dvorak Technique

Katrina August 24

Rita September 18



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SUPERSEDED BY NEXT ISSUANCE IN 6 HOURS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.



Graphics



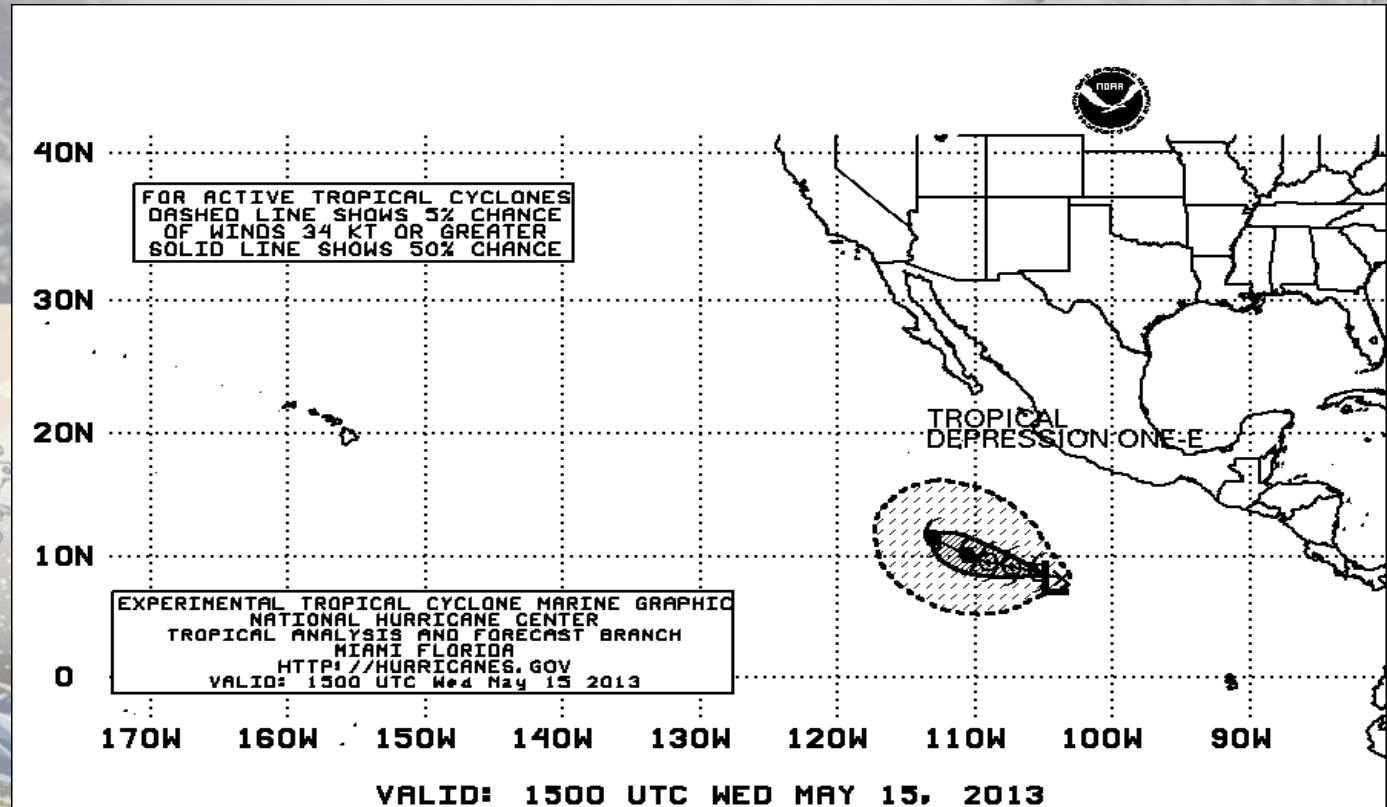
Grids

Significant Wave Height (ft) Valid 17 Sep 2010 0000 GMT

Tropical Cyclone Danger Graphic

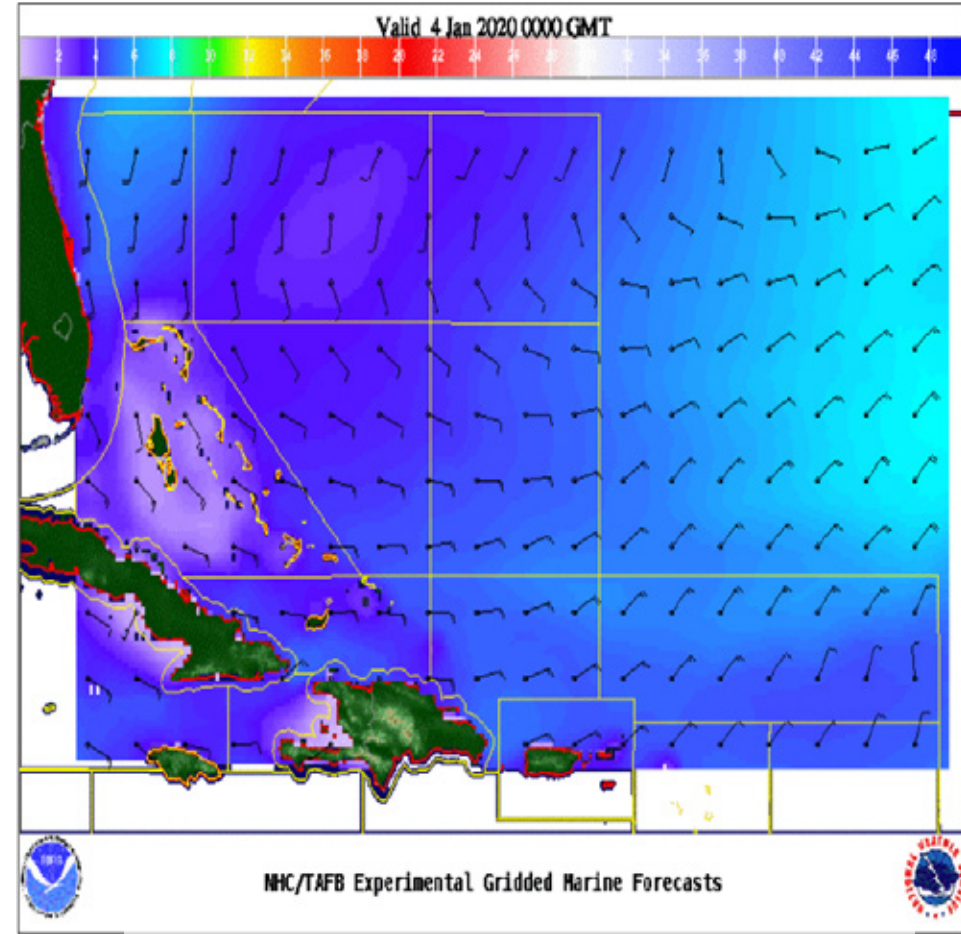
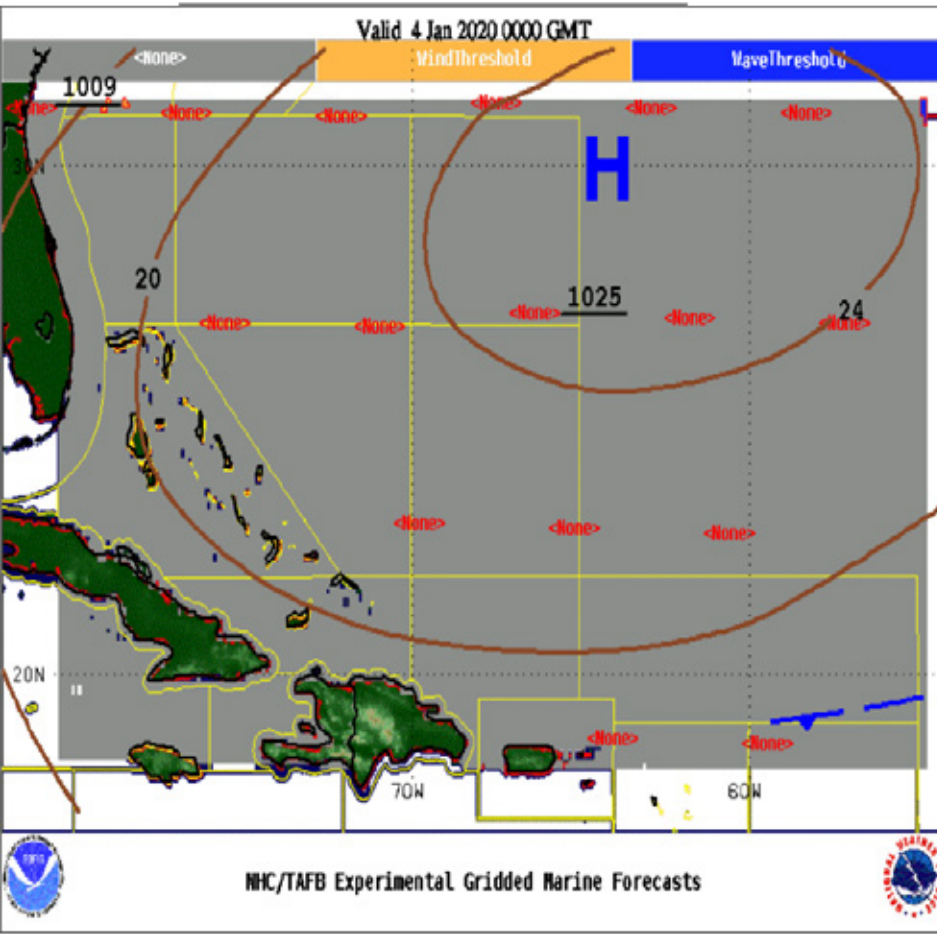
- Wind Speed Probabilities-Based – Uses 5% and 50% chance of 34 kt (tropical storm force winds)
- 5 Day Forecasts
- W. Atlantic, Caribbean, Gulf of Mexico, and E. Pacific
- Issued four times daily during hurricane season

https://www.nhc.noaa.gov/tafb/latest/danger_atl_latestBW.gif



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

https://www.nhc.noaa.gov/marine/forecast/enhanced_atlcfull.php



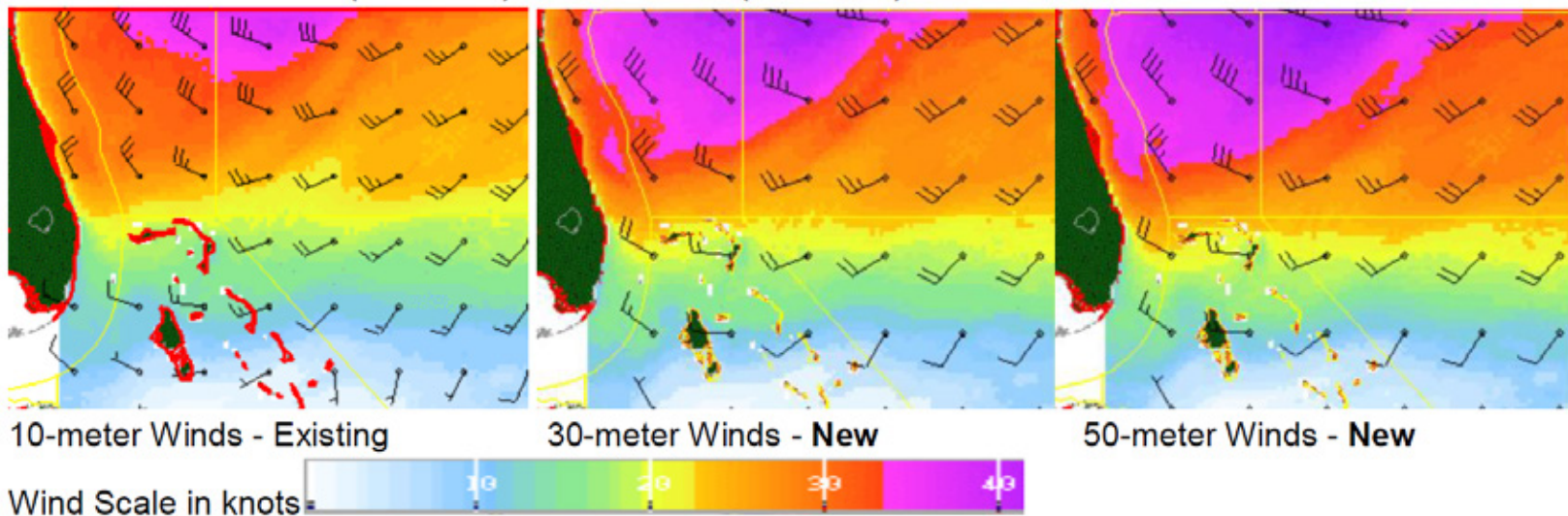
Red: Gale Warning
Orange: Winds > 23 kt Blue: Seas \geq 8 ft

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

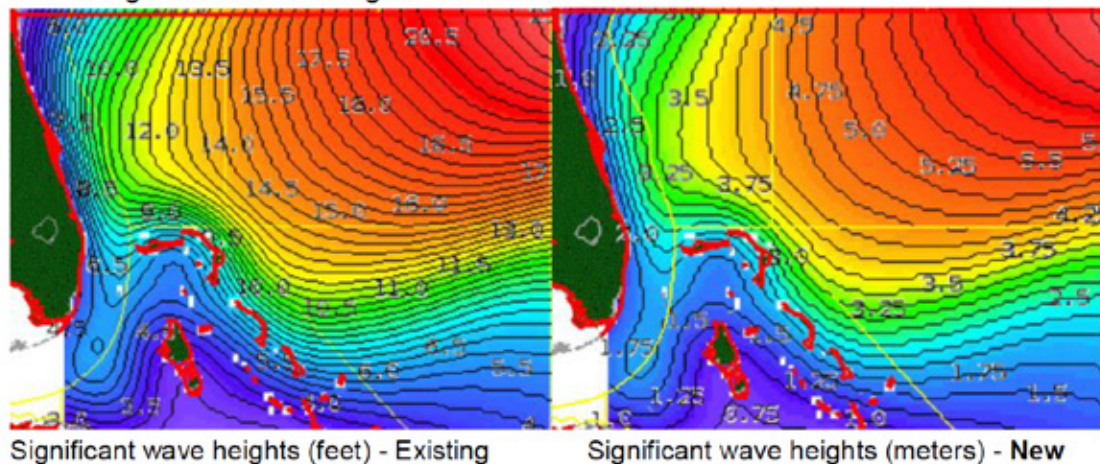
Marine Composite Page – New Features – February 2021

https://www.nhc.noaa.gov/marine/forecast/enhanced_atlcfull.php

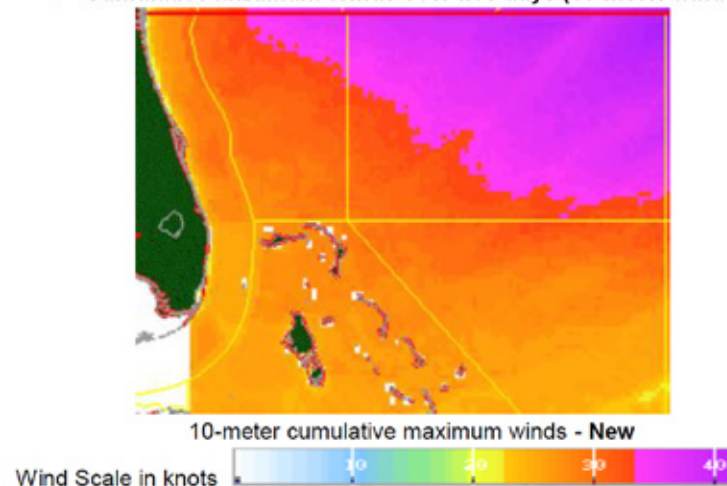
- 30-meter (~100 feet) and 50-meter (~165 feet) Winds:



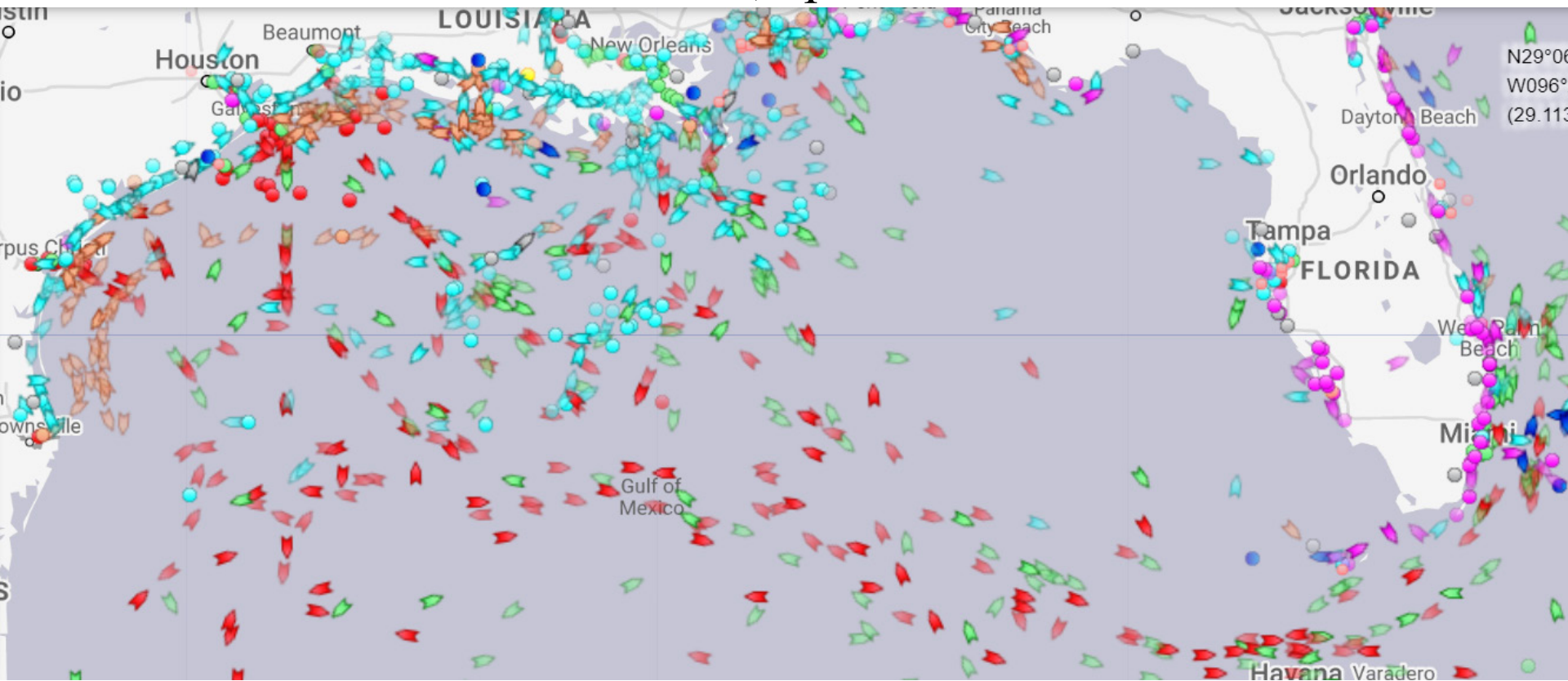
- Significant Wave Heights in meters:



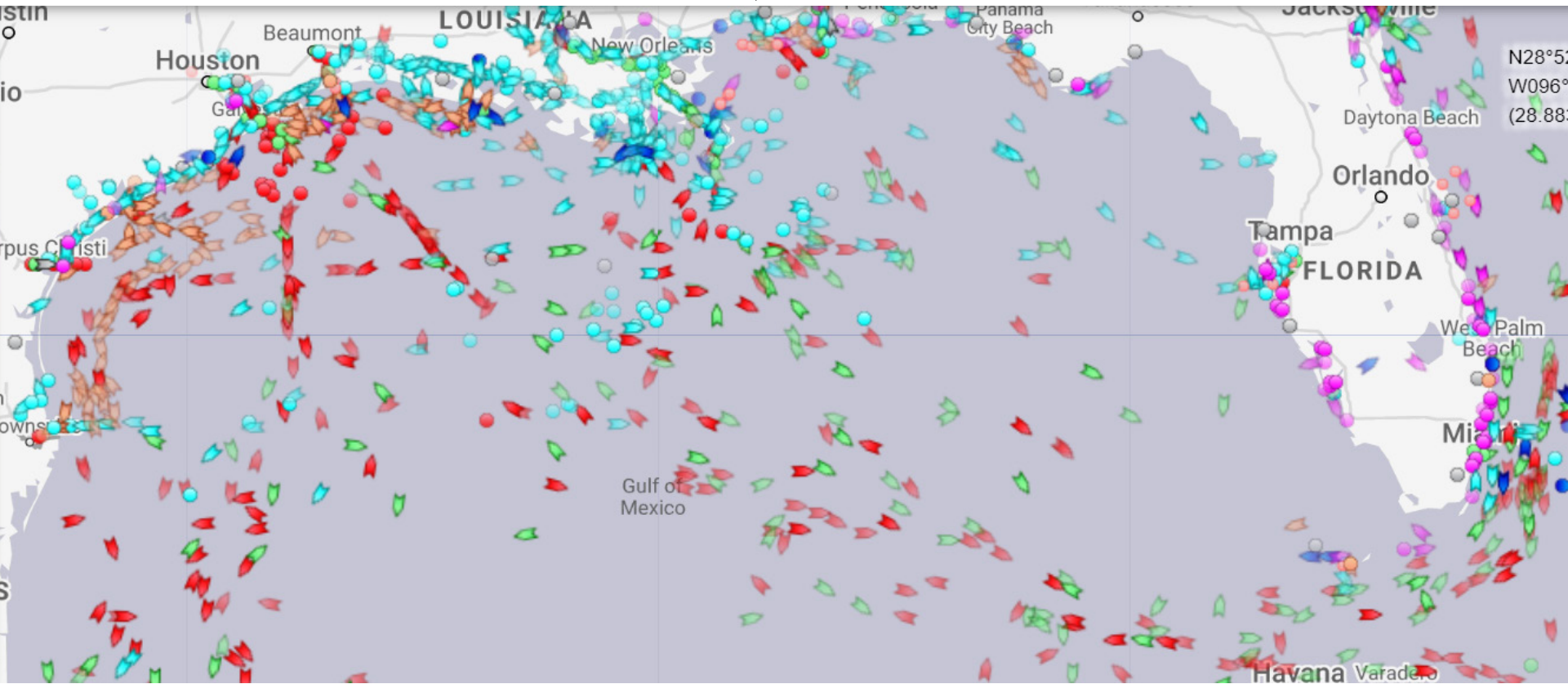
- Cumulative Maximum Winds over five days (10-meter winds):



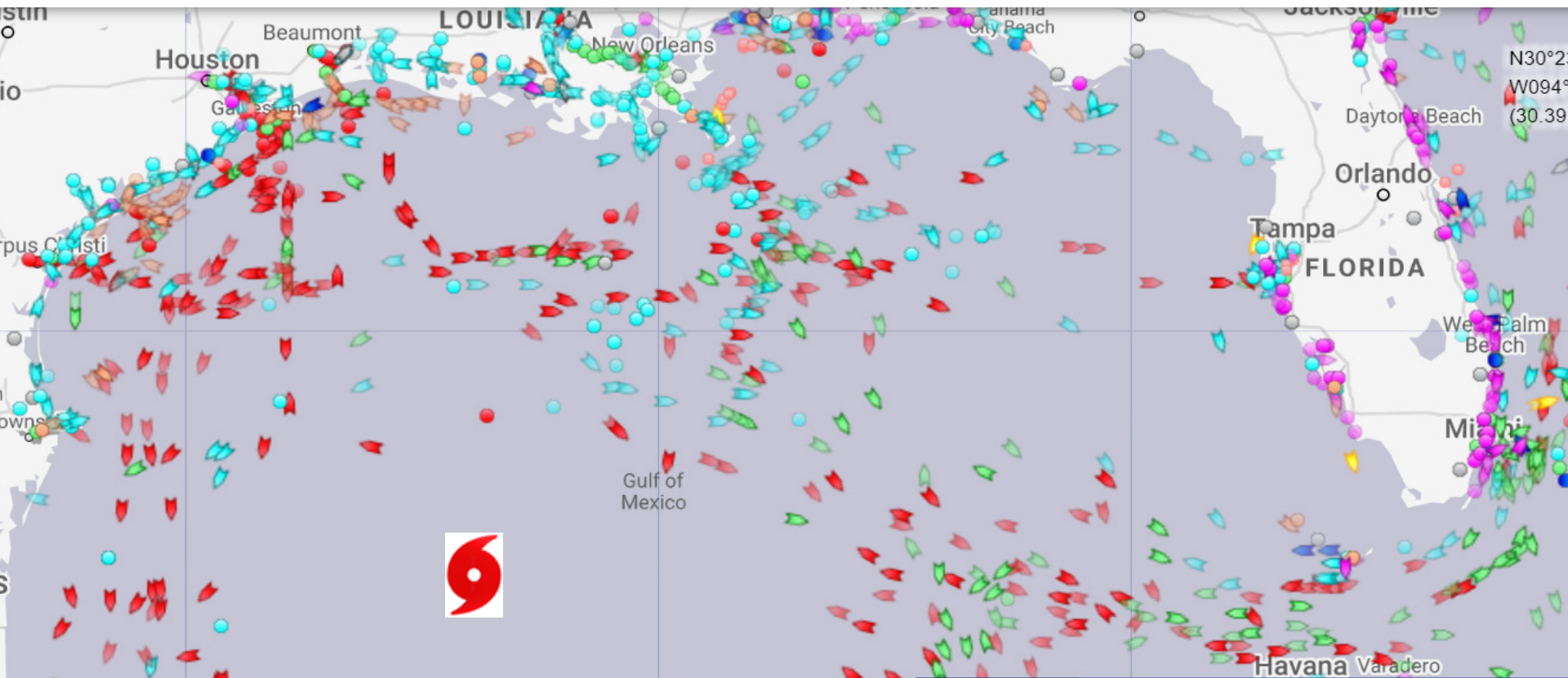
Hurricane Delta - 2020 October 6th, 2pm EDT Weather Avoidance by Ships



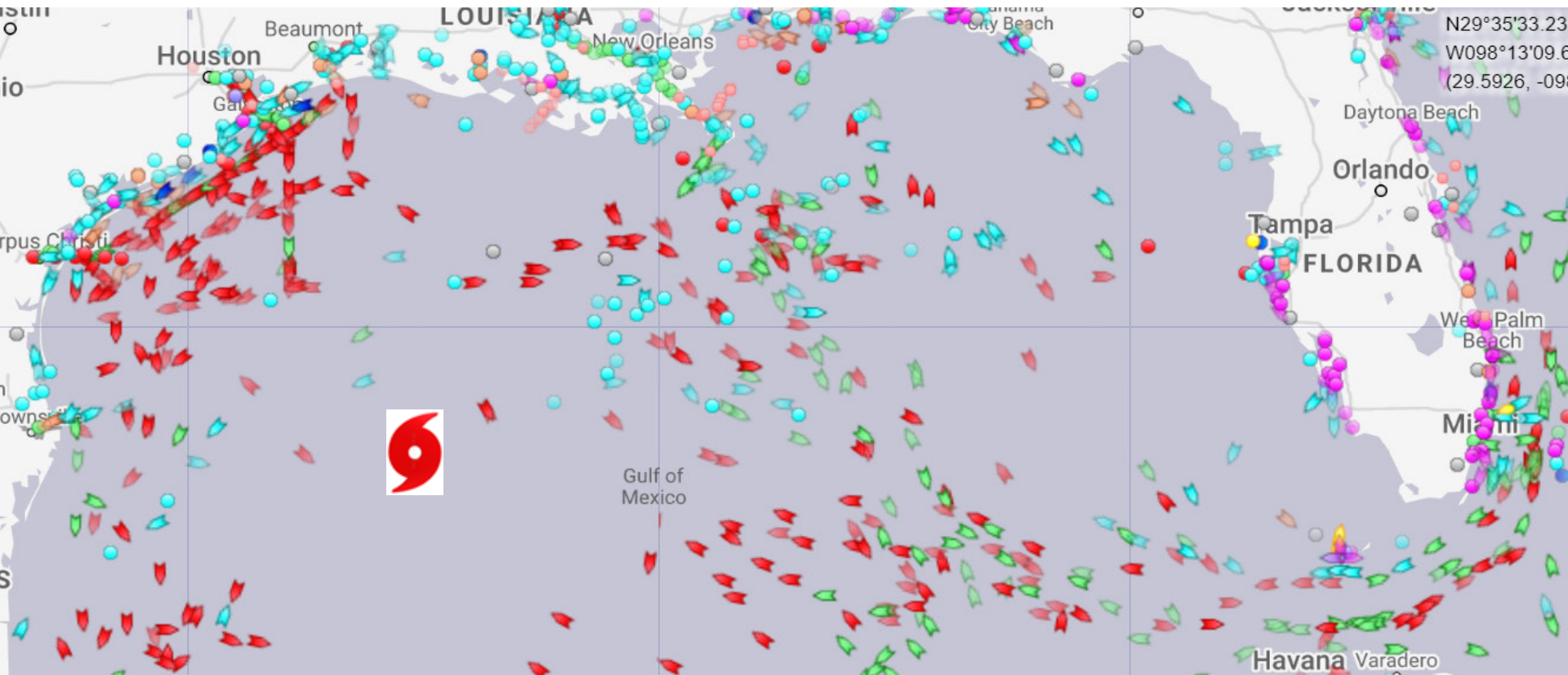
Hurricane Delta - 2020 October 7th, 9am EDT Weather Avoidance by Ships



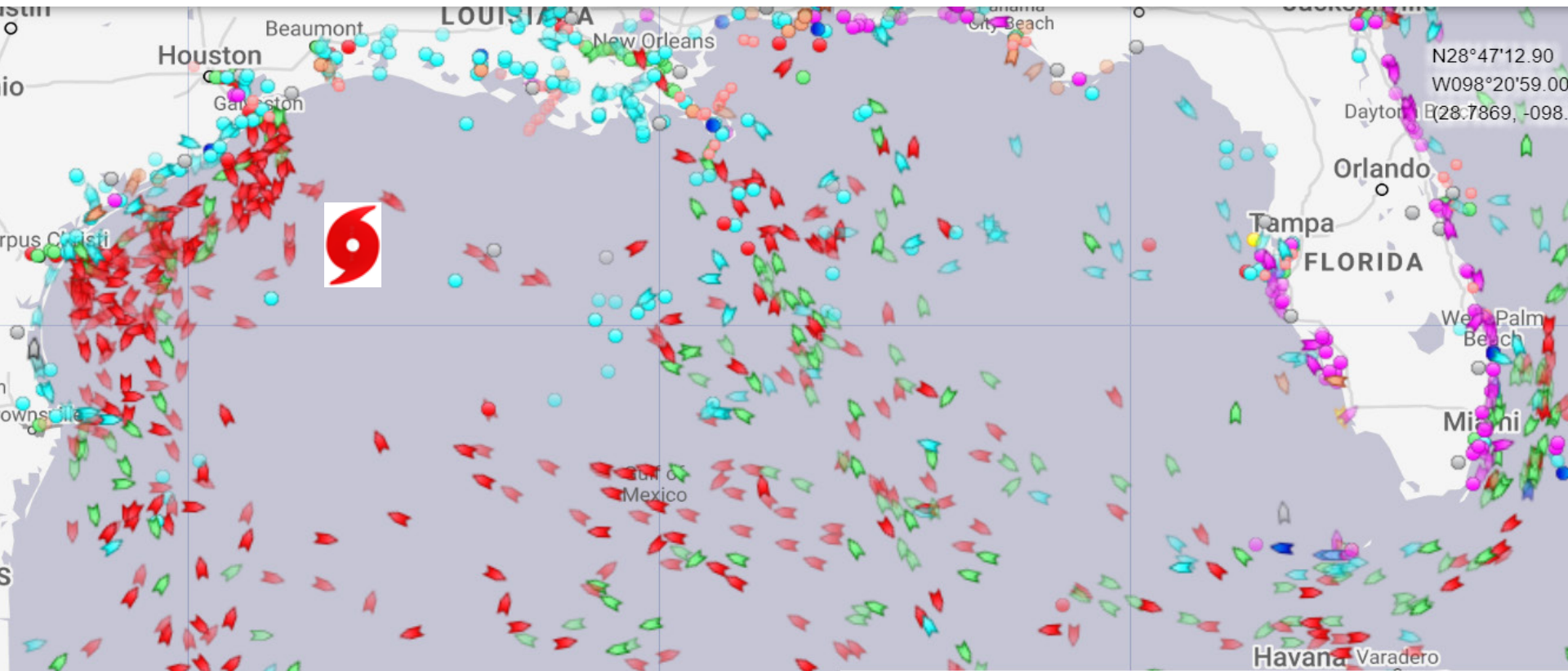
Hurricane Delta - 2020 October 8th, 9am EDT Weather Avoidance by Ships



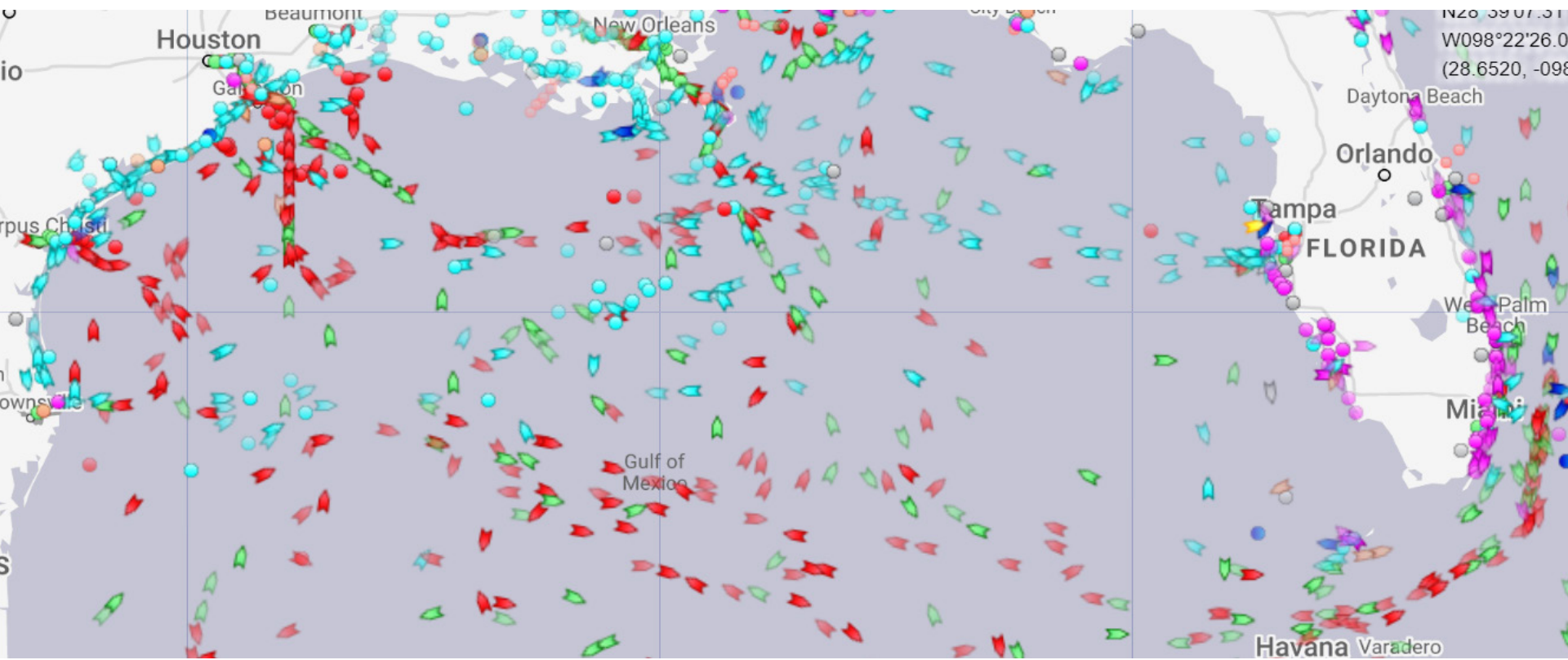
Hurricane Delta - 2020 October 8th, 5pm EDT Weather Avoidance by Ships



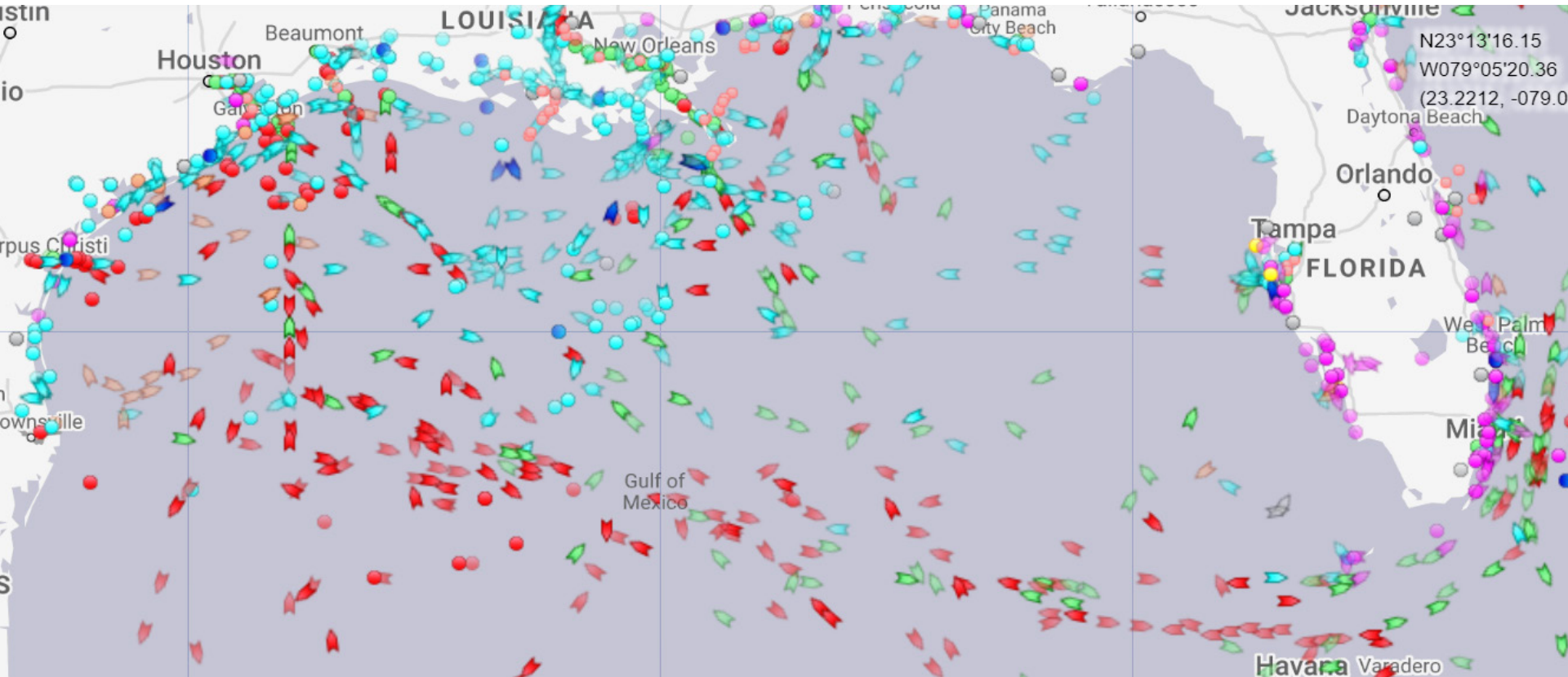
Hurricane Delta - 2020 October 9th, 9am EDT Weather Avoidance by Ships



Hurricane Delta - 2020 **6** October 10th, 1pm EDT Weather Avoidance by Ships




Hurricane Delta - 2020 October 11th, 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

APPROVED: 3/31/20



Louis W. Uccellini
NOAA Assistant Administrator
for Weather Services



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

37 Spot Forecasts by NHC/TAFB for 2020 U.S. Coast Guard District Operations





2020 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

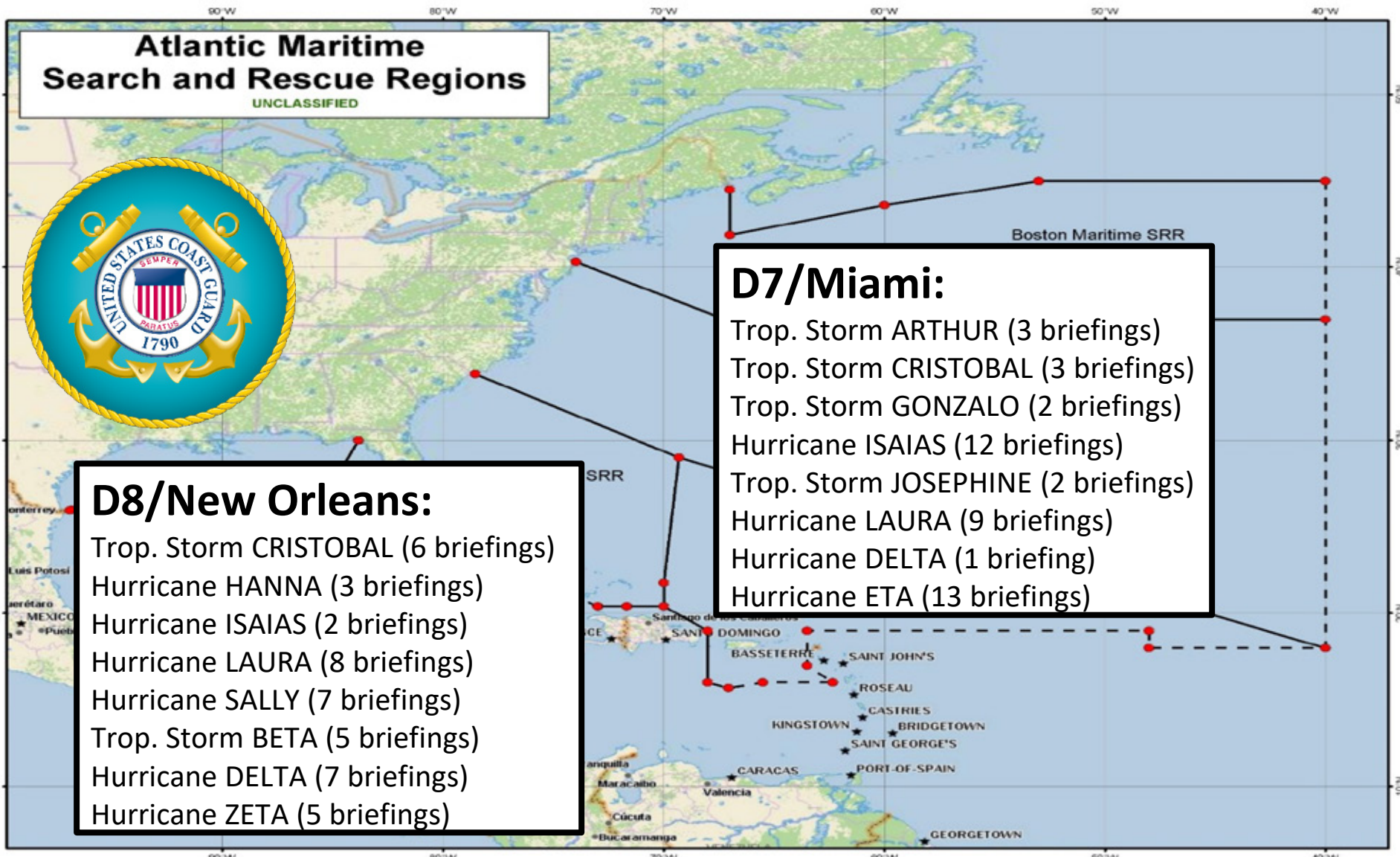


D8/New Orleans:

- Trop. Storm CRISTOBAL (6 briefings)
- Hurricane HANNA (3 briefings)
- Hurricane ISAIAS (2 briefings)
- Hurricane LAURA (8 briefings)
- Hurricane SALLY (7 briefings)
- Trop. Storm BETA (5 briefings)
- Hurricane DELTA (7 briefings)
- Hurricane ZETA (5 briefings)

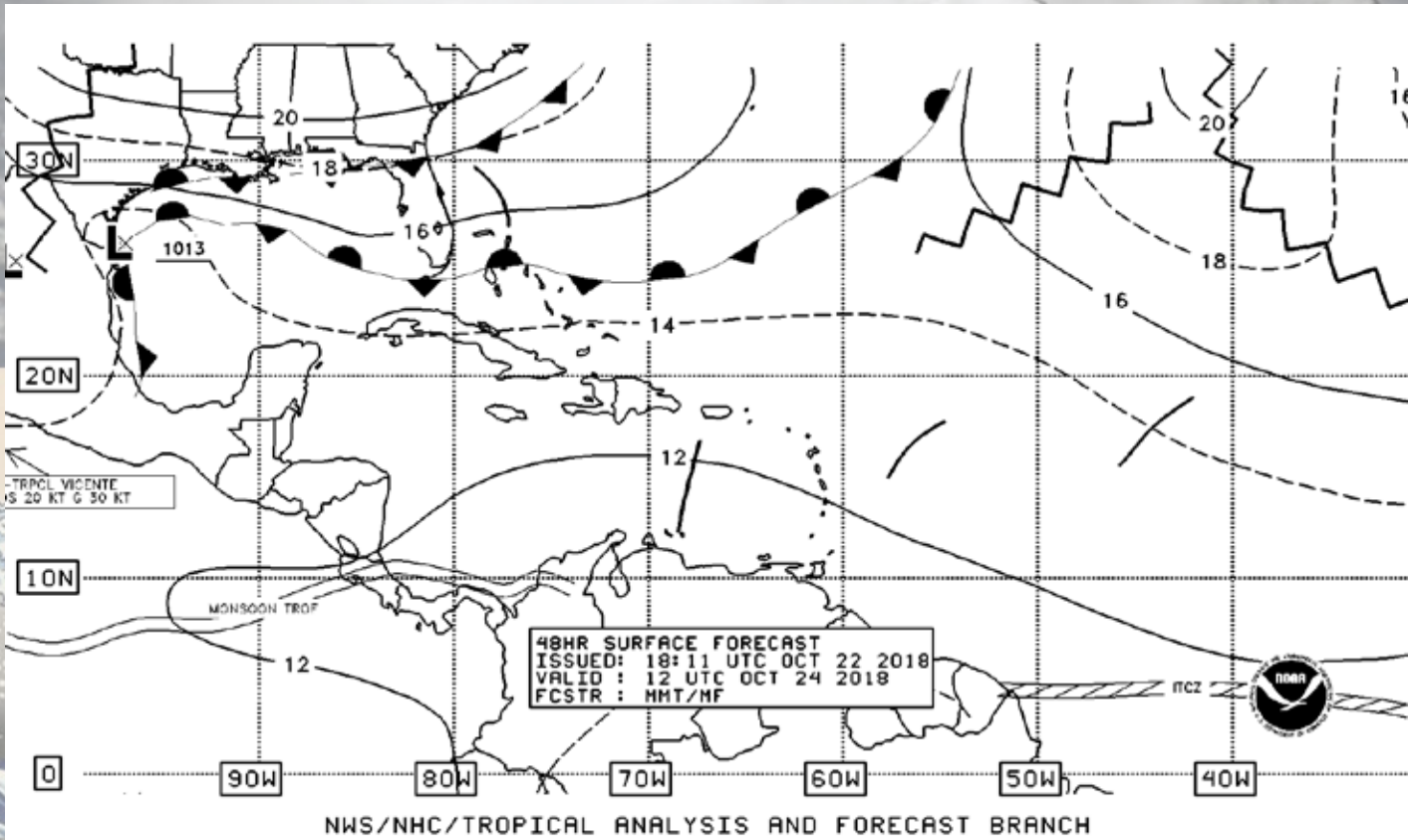
D7/Miami:

- Trop. Storm ARTHUR (3 briefings)
- Trop. Storm CRISTOBAL (3 briefings)
- Trop. Storm GONZALO (2 briefings)
- Hurricane ISAIAS (12 briefings)
- Trop. Storm JOSEPHINE (2 briefings)
- Hurricane LAURA (9 briefings)
- Hurricane DELTA (1 briefing)
- Hurricane ETA (13 briefings)



Surface Prog Graphics

- Fronts, troughs, tropical cyclones, tropical waves, ridges
- 24, 48, and 72 hr Forecasts
- W. Atlantic, Caribbean, Gulf of Mexico, and E. Pacific
- Issued twice daily



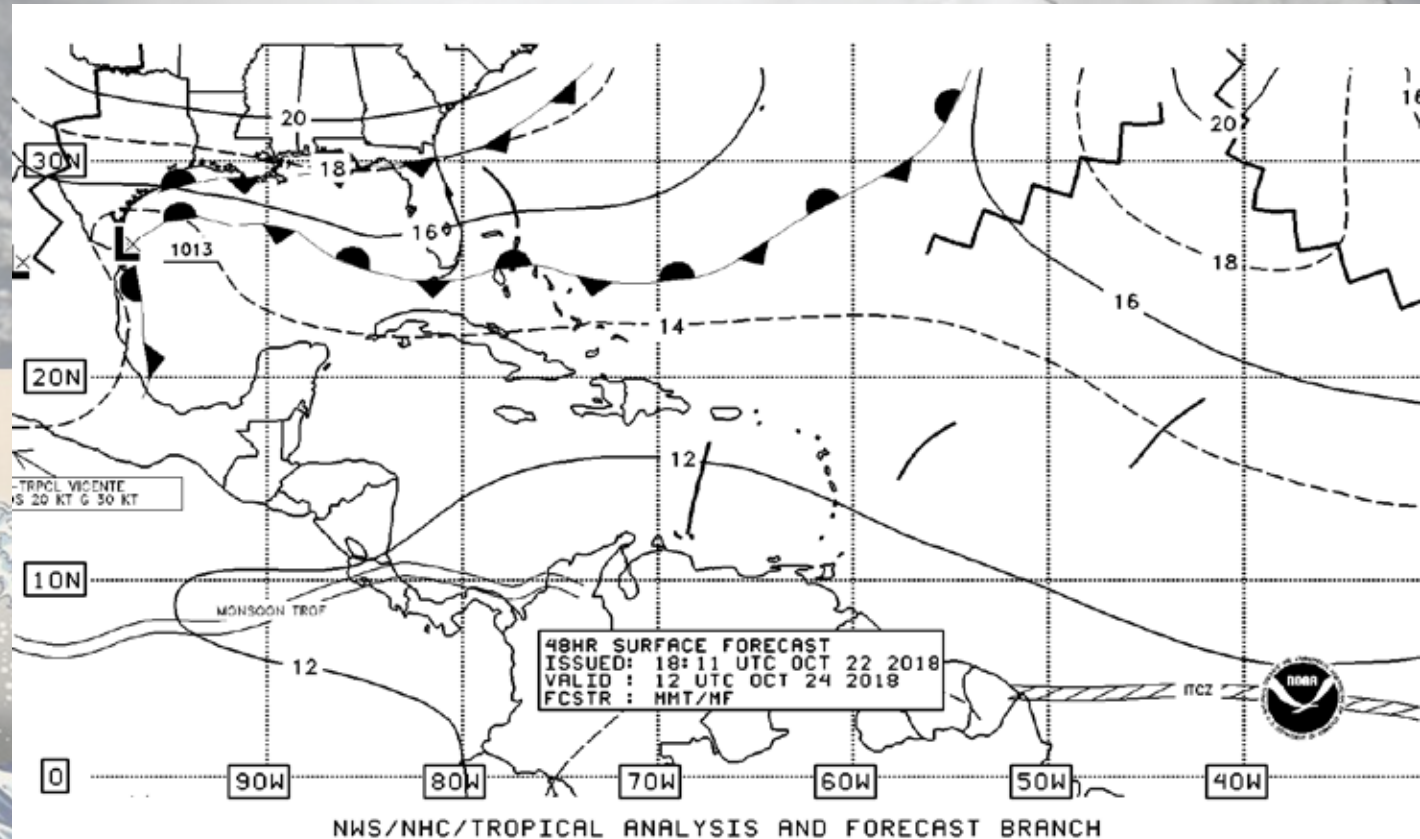
https://www.nhc.noaa.gov/atfb_latest/atlsfc72_latestBW.gif



Surface Prog Graphics

- Fronts, troughs, tropical cyclones, tropical waves, ridges
- 24, 48, and 72 hr Forecasts
- W. Atlantic, Caribbean, Gulf of Mexico, and E. Pacific
- Issued twice daily

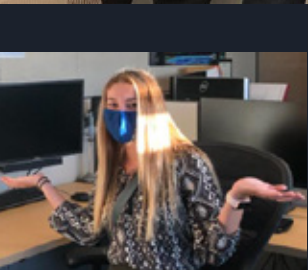
Is there interest/use in going to 5 days? To 7 days?



https://www.nhc.noaa.gov/atfb_latest/atlsfc72_latestBW.gif

National Hurricane Center/Tropical Analysis and Forecast Branch

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



1-305-229-4424 –Atlantic/Gulf/Caribbean

1-305-229-4425 –Pacific

On Twitter: [@NHC_TAFB](https://twitter.com/NHC_TAFB)