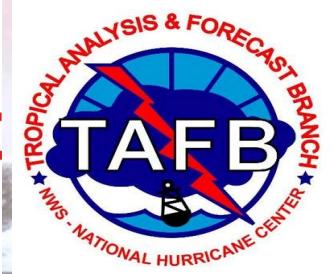


# Keeping Blue Water Mariners Safe - Tropical Analysis and Forecast Branch (TAFB) Marine Products and Services

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



# A Bad Cruise





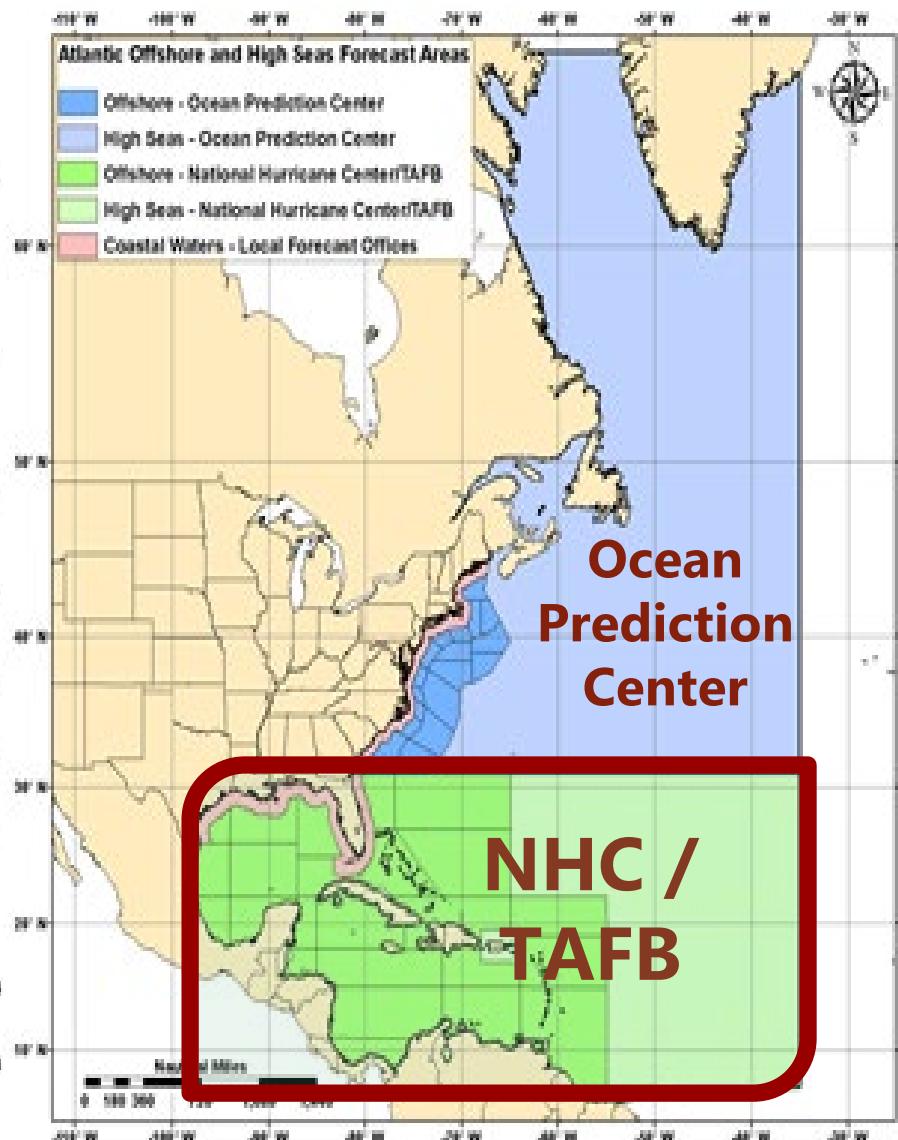
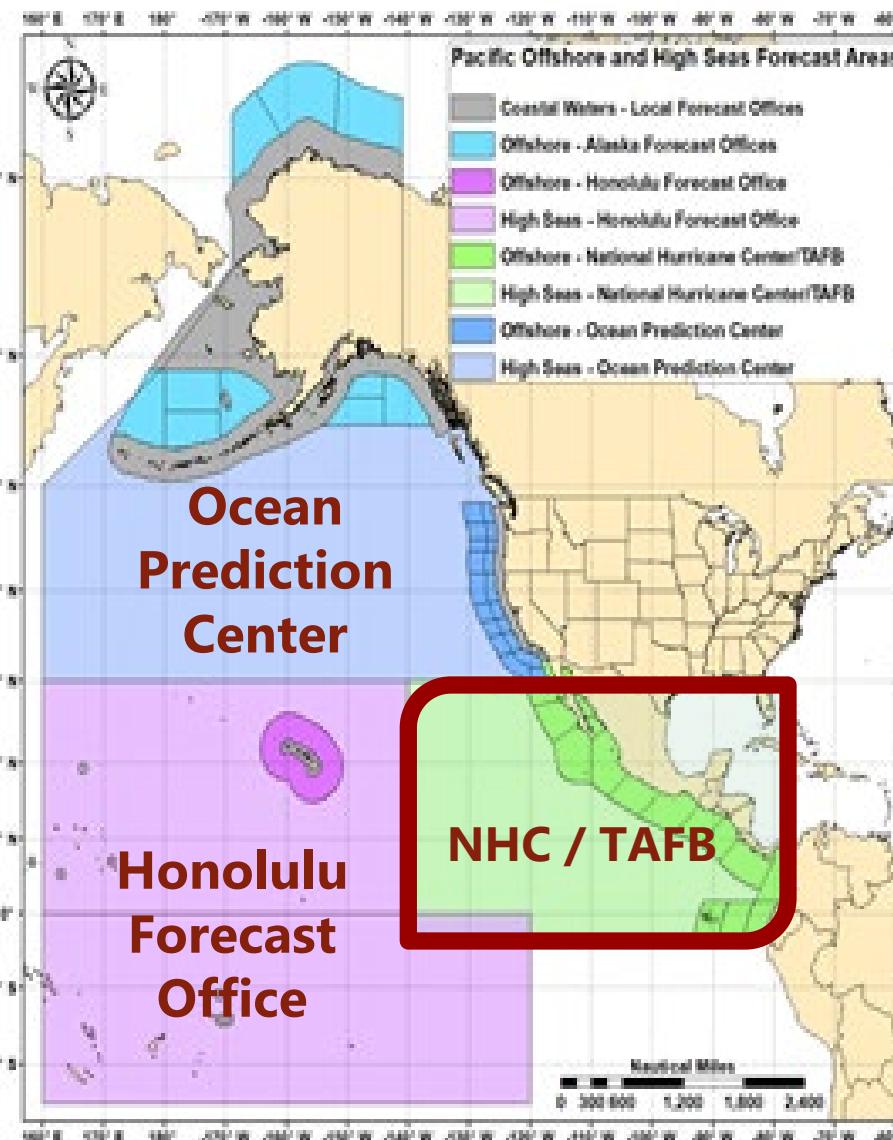
# Global High Seas Forecasts

## - International Maritime Organization

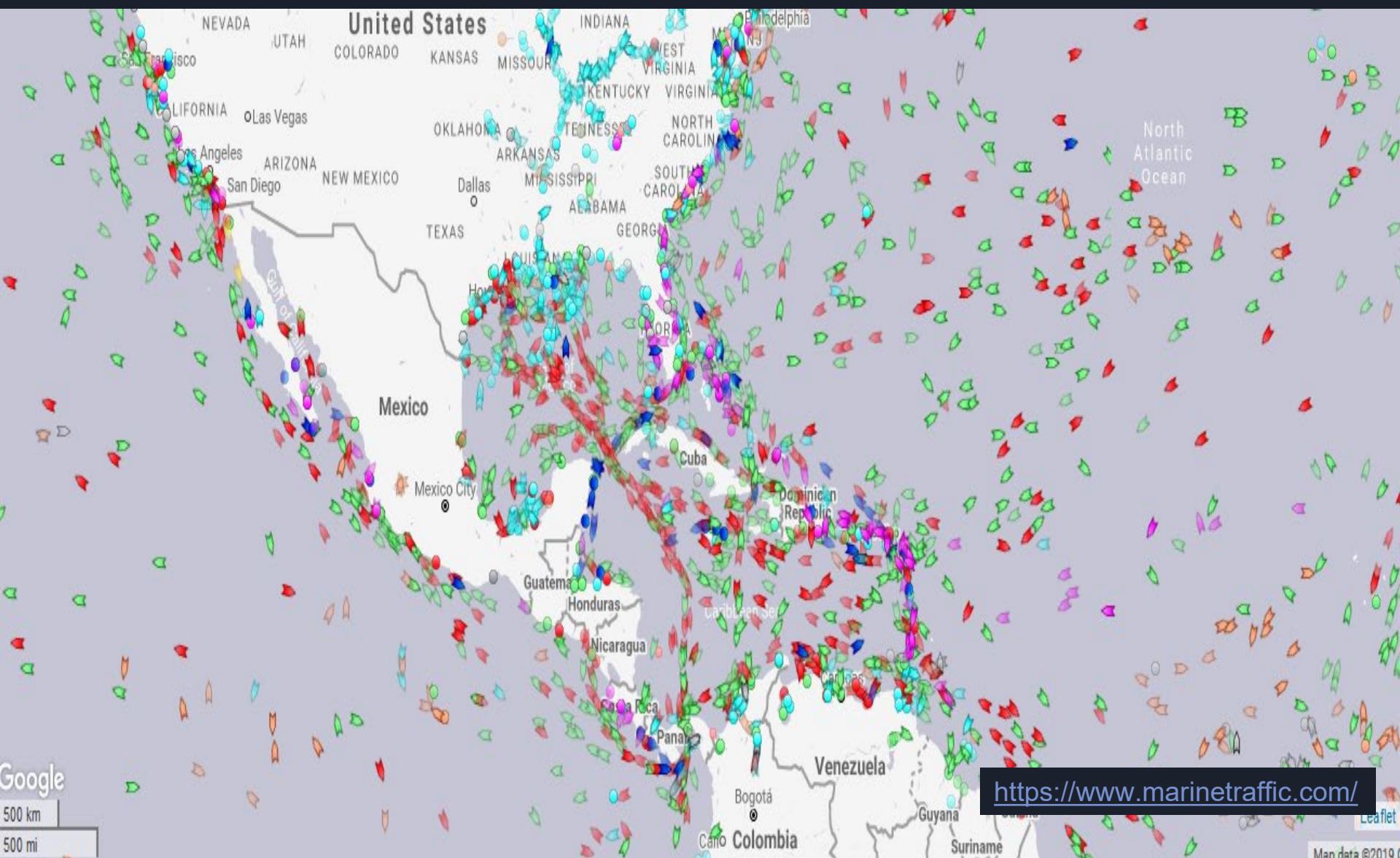




# NHC/TAFB - Areas of Responsibility

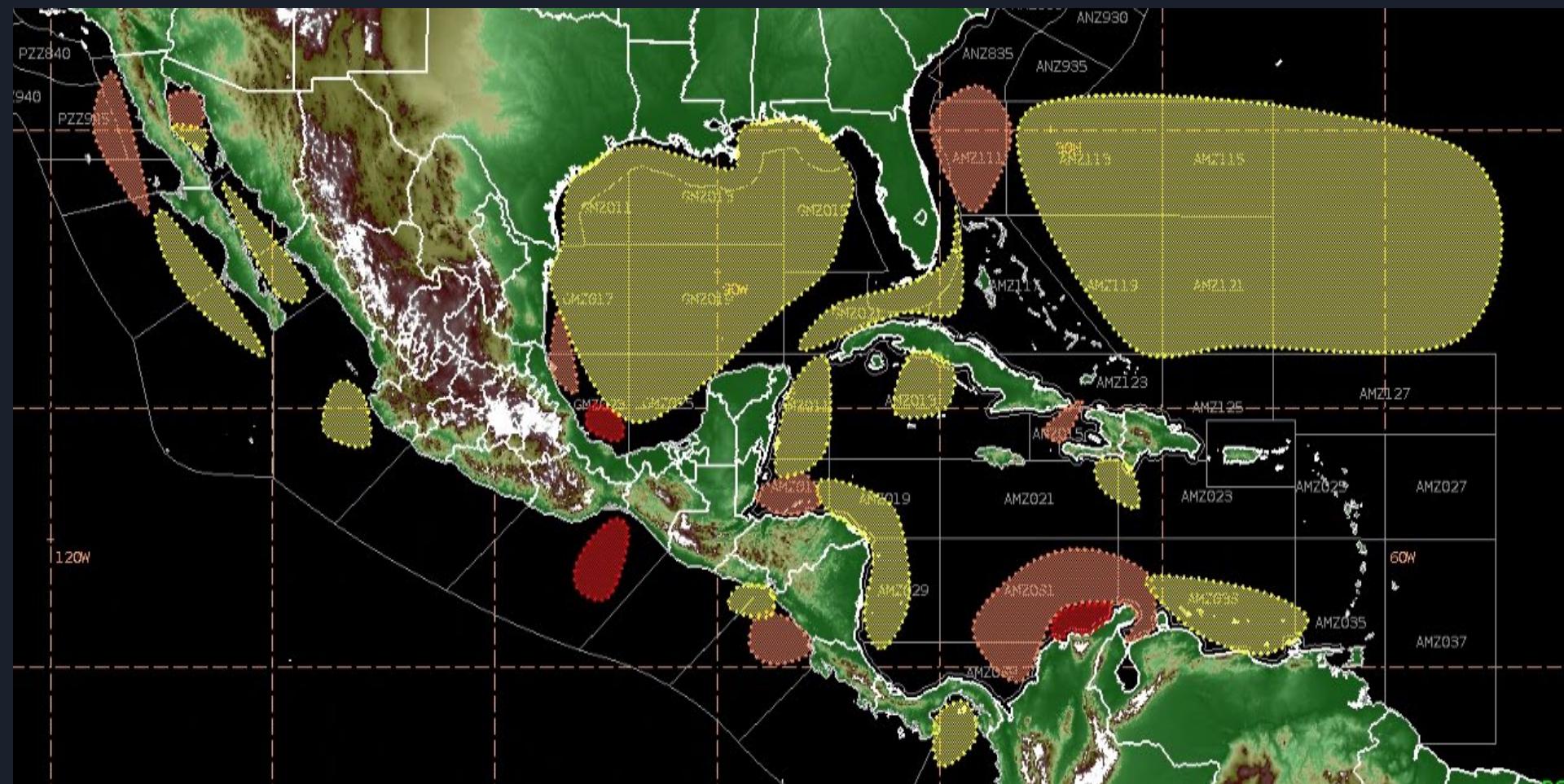


# Ships over the Open Ocean



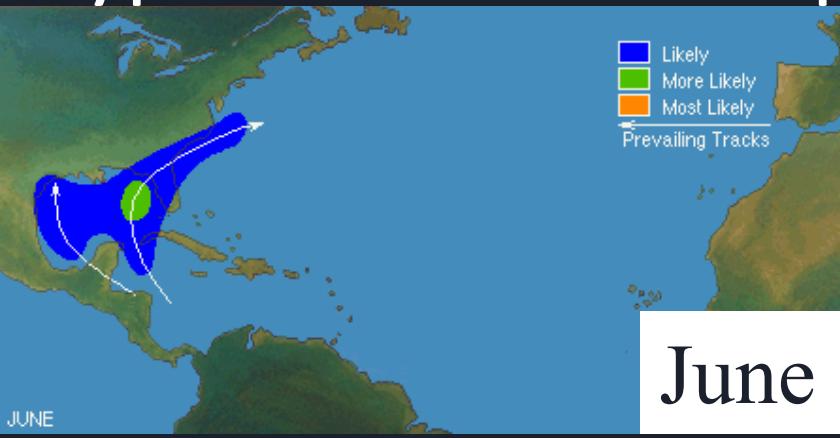
<https://www.marinetraffic.com/>

# Typical areas for gale conditions

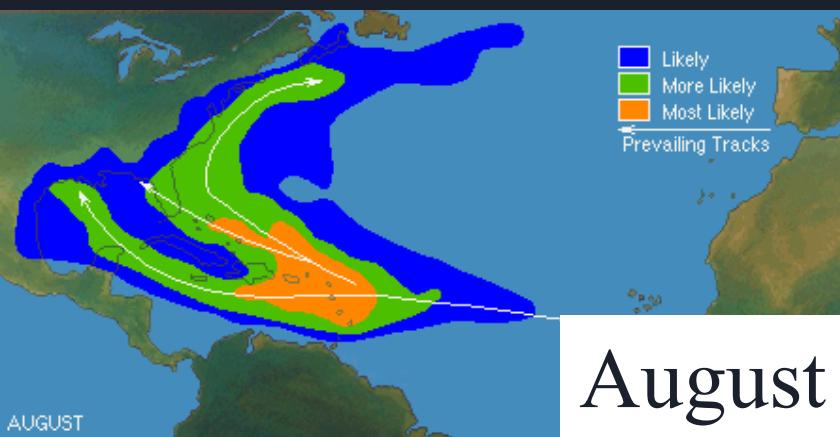


Note that the main areas for gales are near gaps and coastal terrain  
- this is not a coincidence!

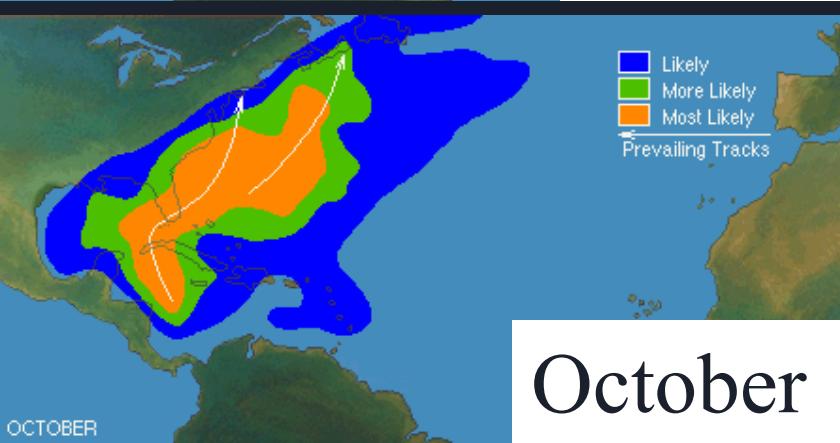
# Typical areas for tropical storms and hurricanes



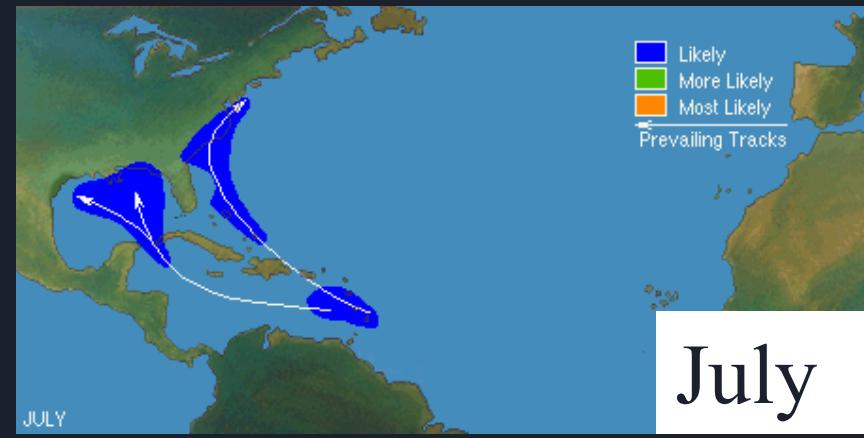
June



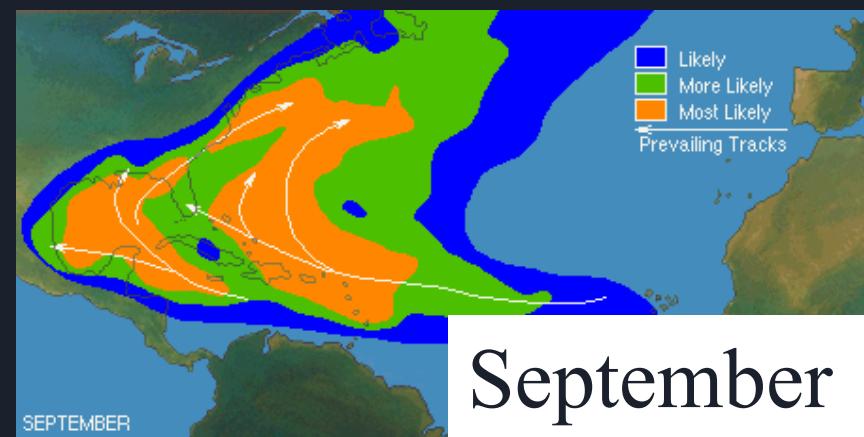
August



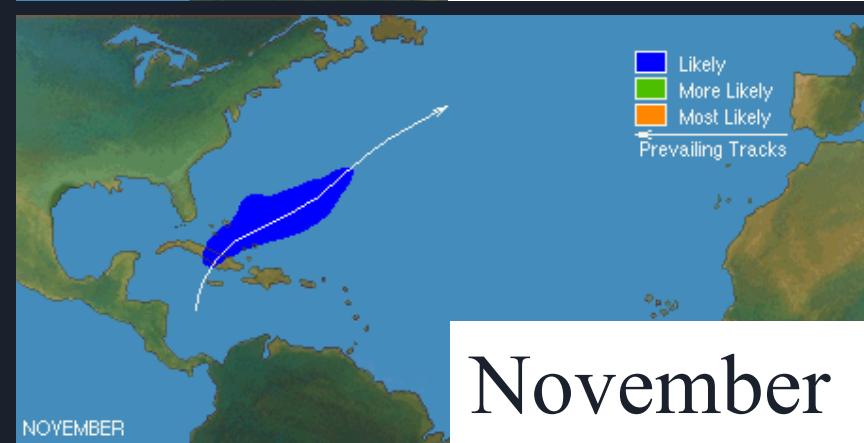
October



July

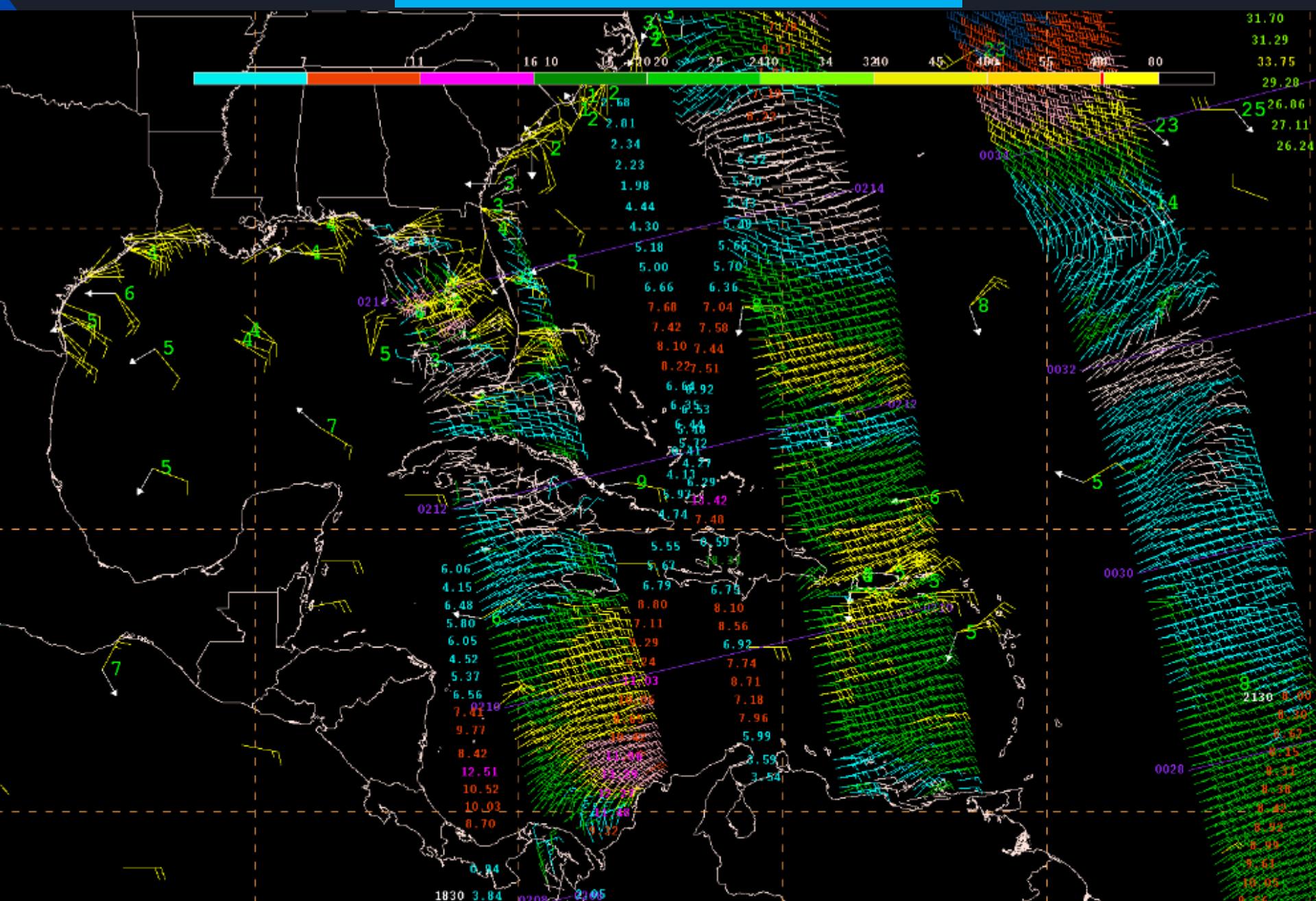


September

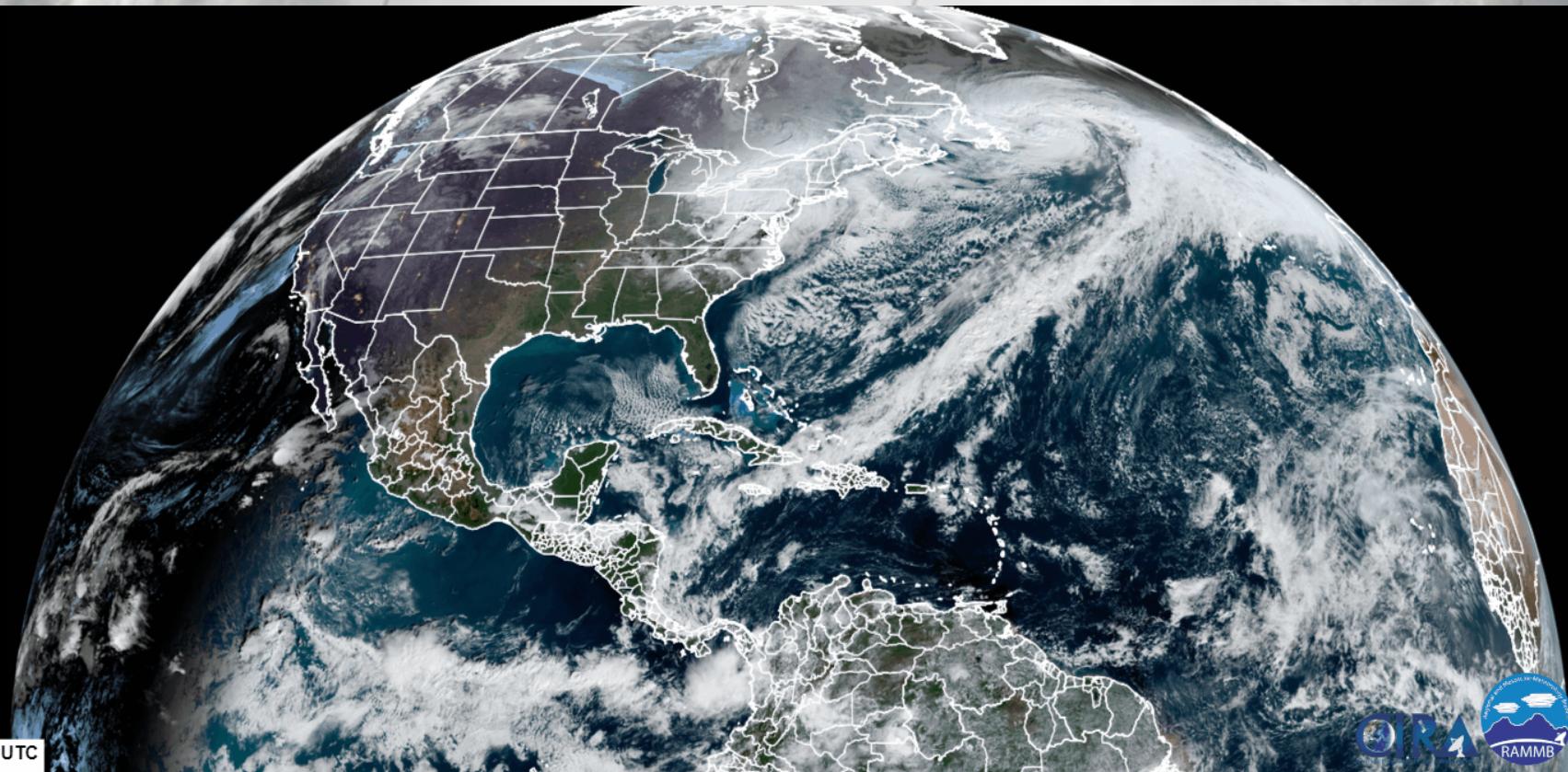


November

## Tools - Observations



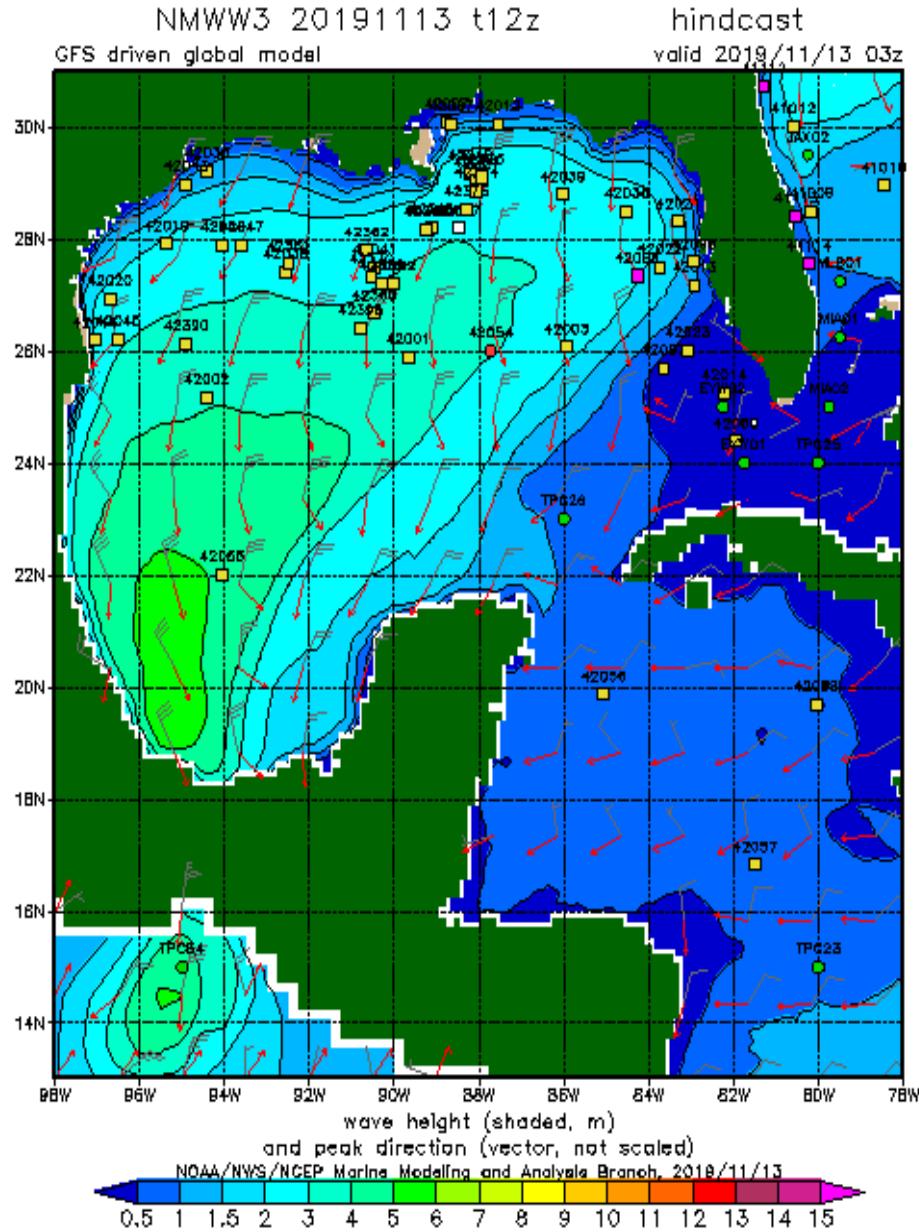
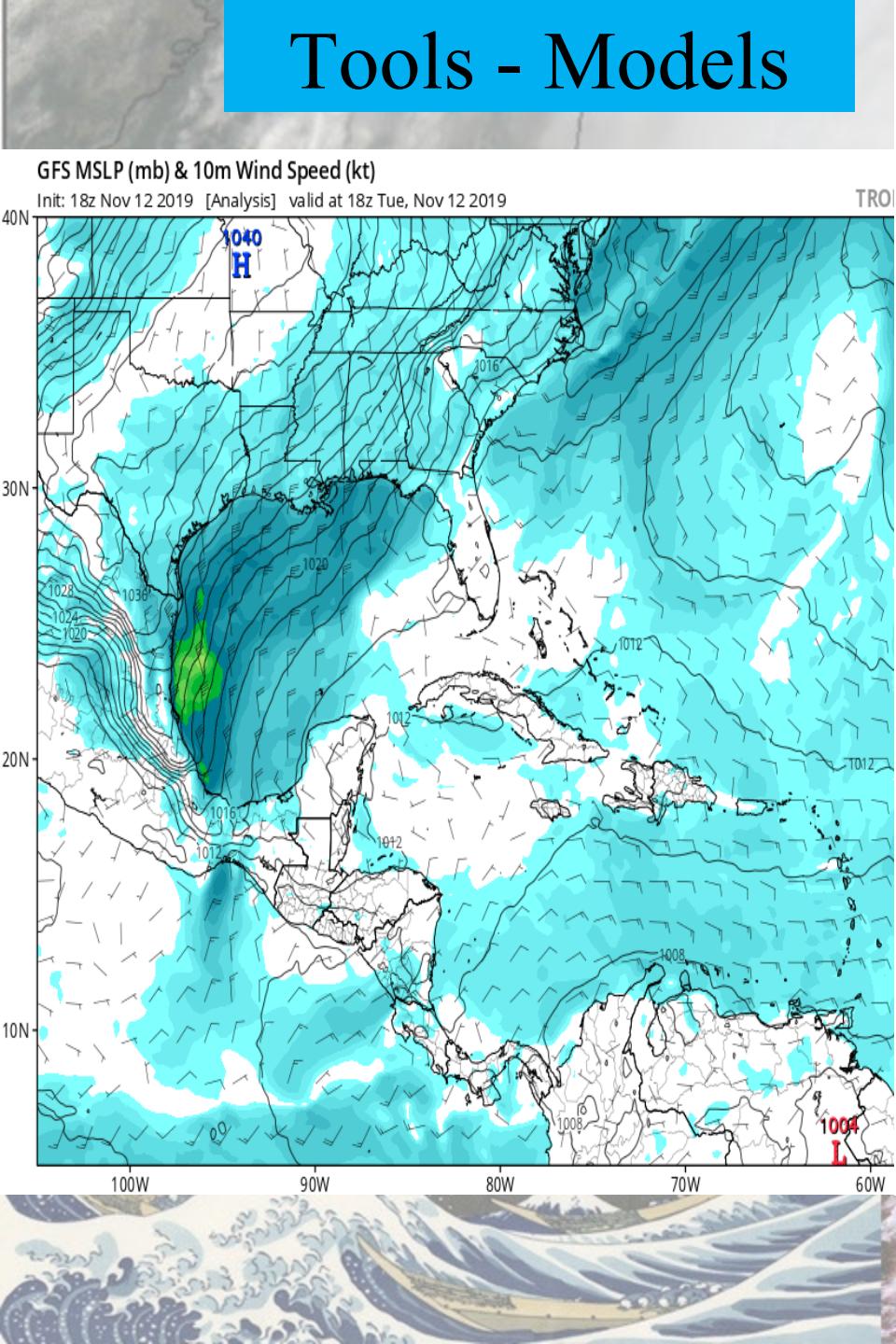
# Tools - Observations



**GOES-16: A new era of geo-stationary satellite imagery and data**



## Tools - Models

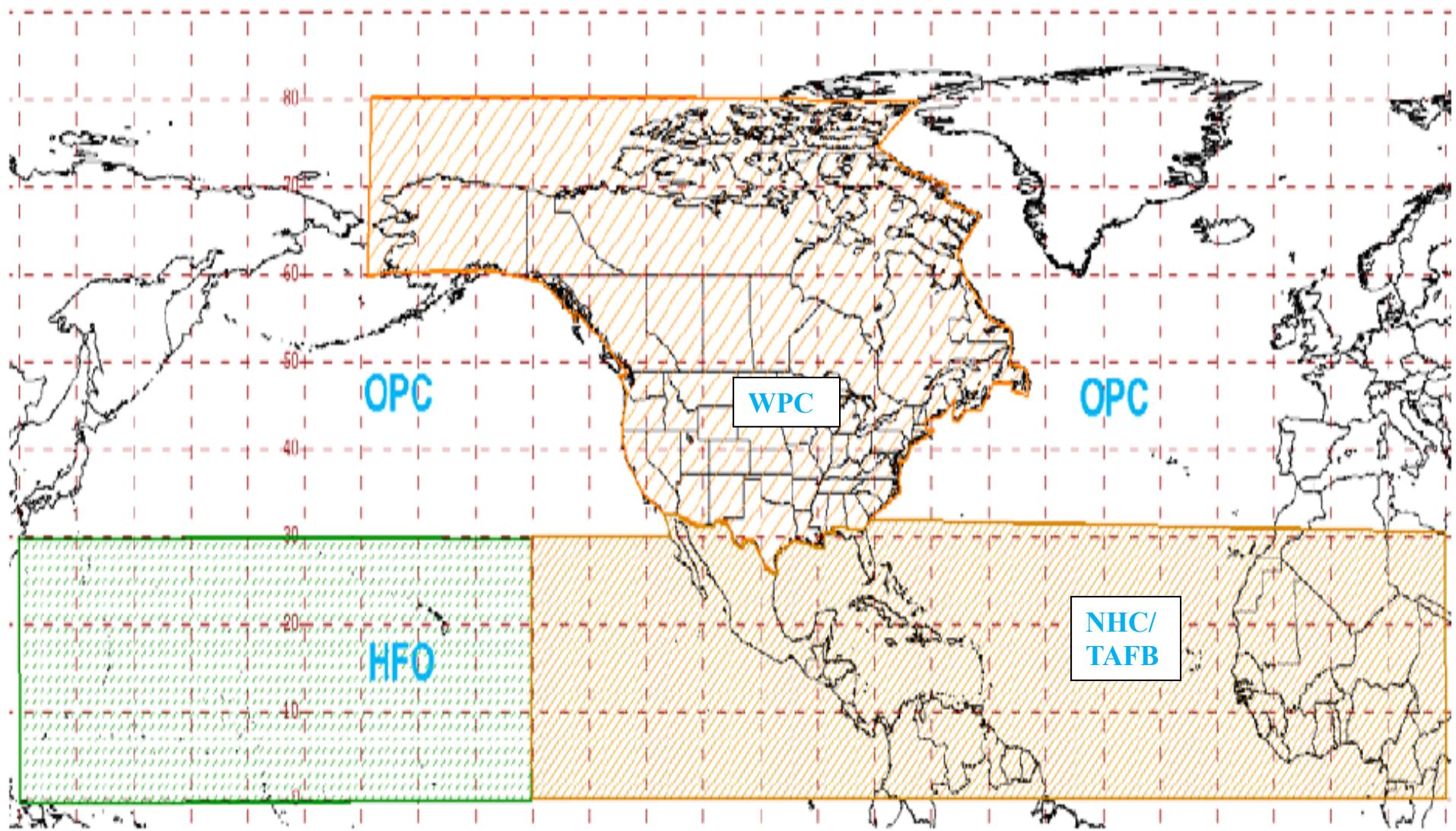


# Tools - Workstations

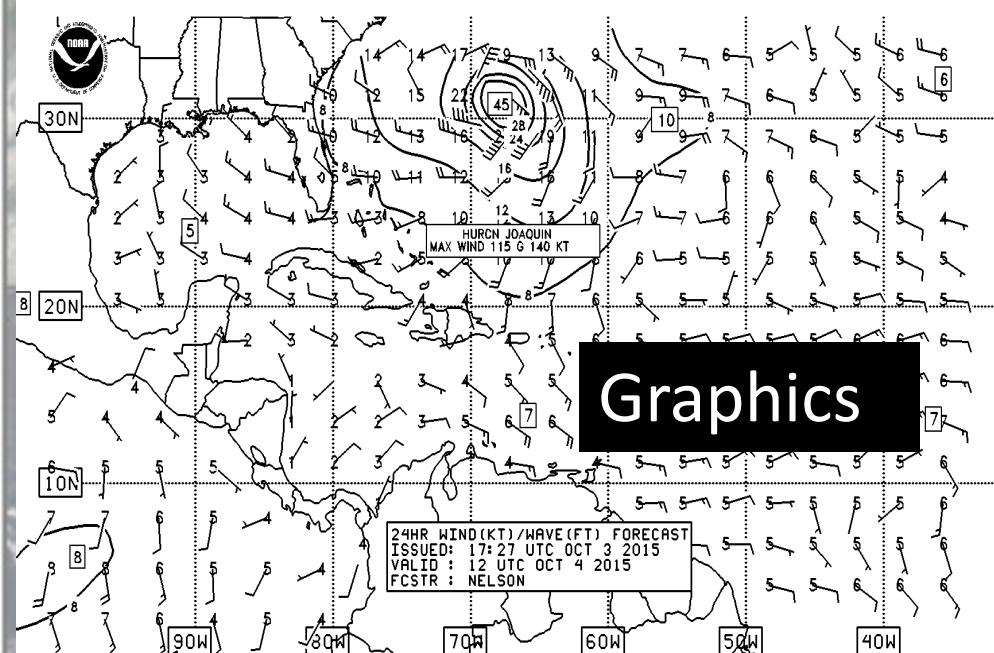


# Unified Surface Analysis Areas of Responsibility

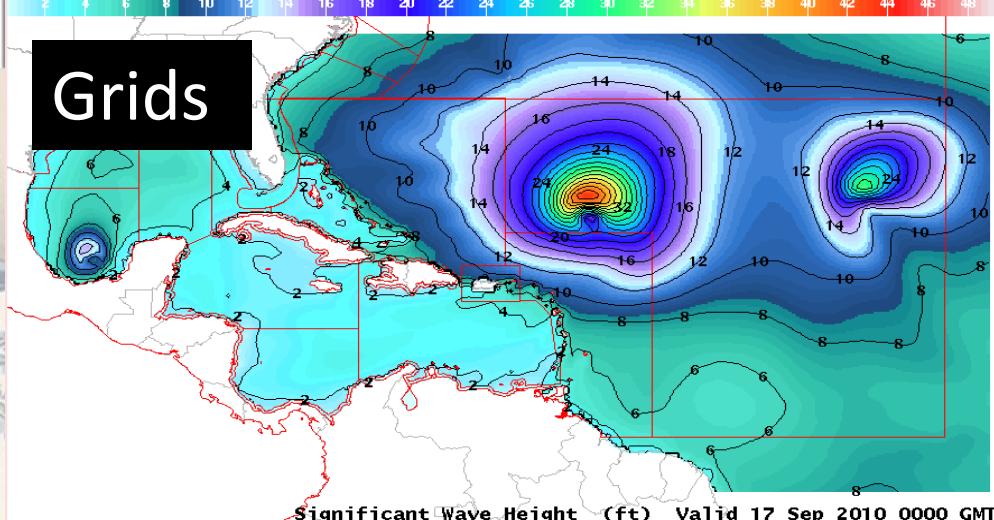
[https://www.nhc.noaa.gov/tafb/latest/USA\\_latest.gif](https://www.nhc.noaa.gov/tafb/latest/USA_latest.gif)



# NHC/TAFB Wind and Wave Forecasts



Grids



## 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.

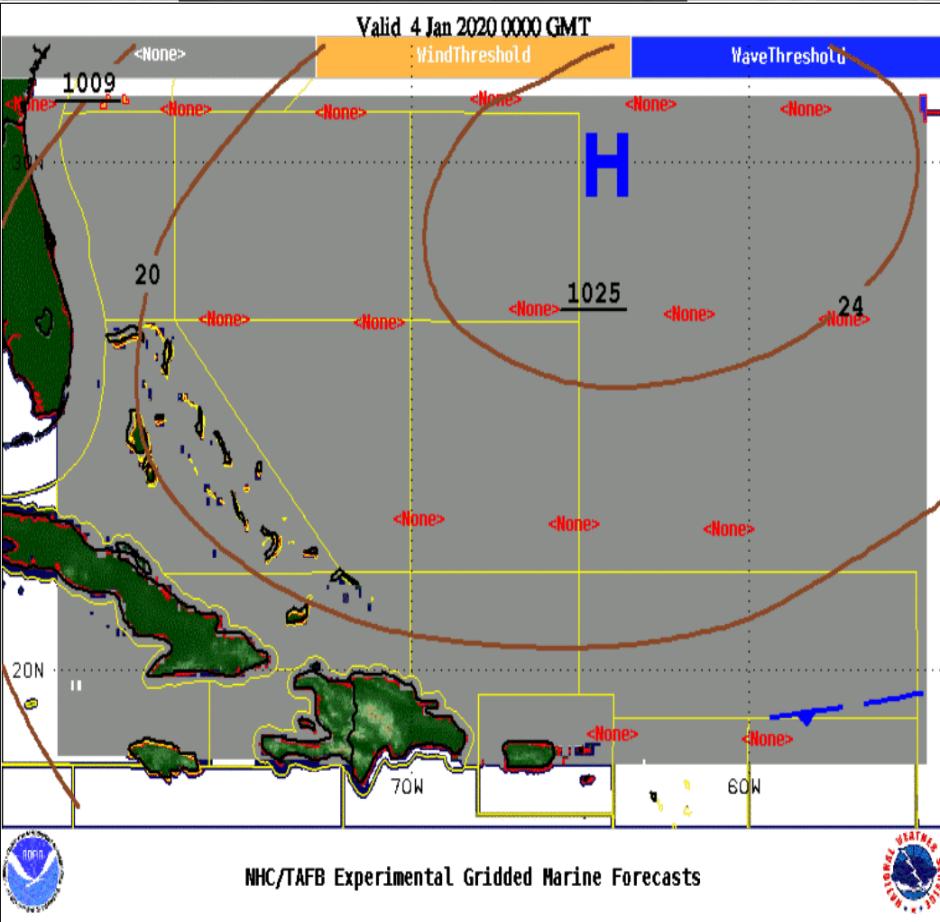
### .WARNINGS.

...HURRICANE WARNING...

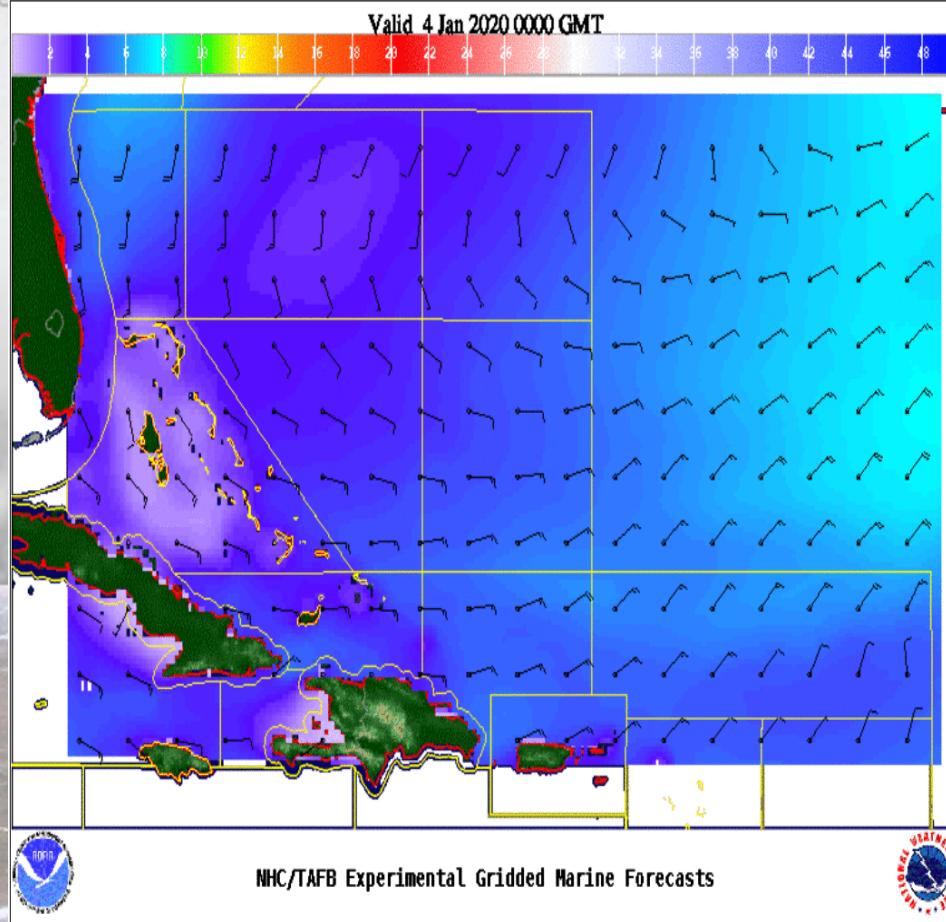
...HURRICANE JOAQUIN NEAR 23.3N 74.7W 935 MB AT 0900 UTC OCT 02  
MOVING NW OR 315 DEG AT 3 KT. MAXIMUM SUSTAINED WINDS 115 KT  
GUSTS 140 KT. TROPICAL STORM FORCE WINDS WITHIN 160 NM W  
SEMICIRCLE...140 NM NE QUADRANT AND 180 NM SE QUADRANT. SEAS 12  
FT OR GREATER WITHIN 400 NM NE QUADRANT...150 NM 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

[https://www.nhc.noaa.gov/marine/forecast/enhanced\\_atlfull.php](https://www.nhc.noaa.gov/marine/forecast/enhanced_atlfull.php)



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)

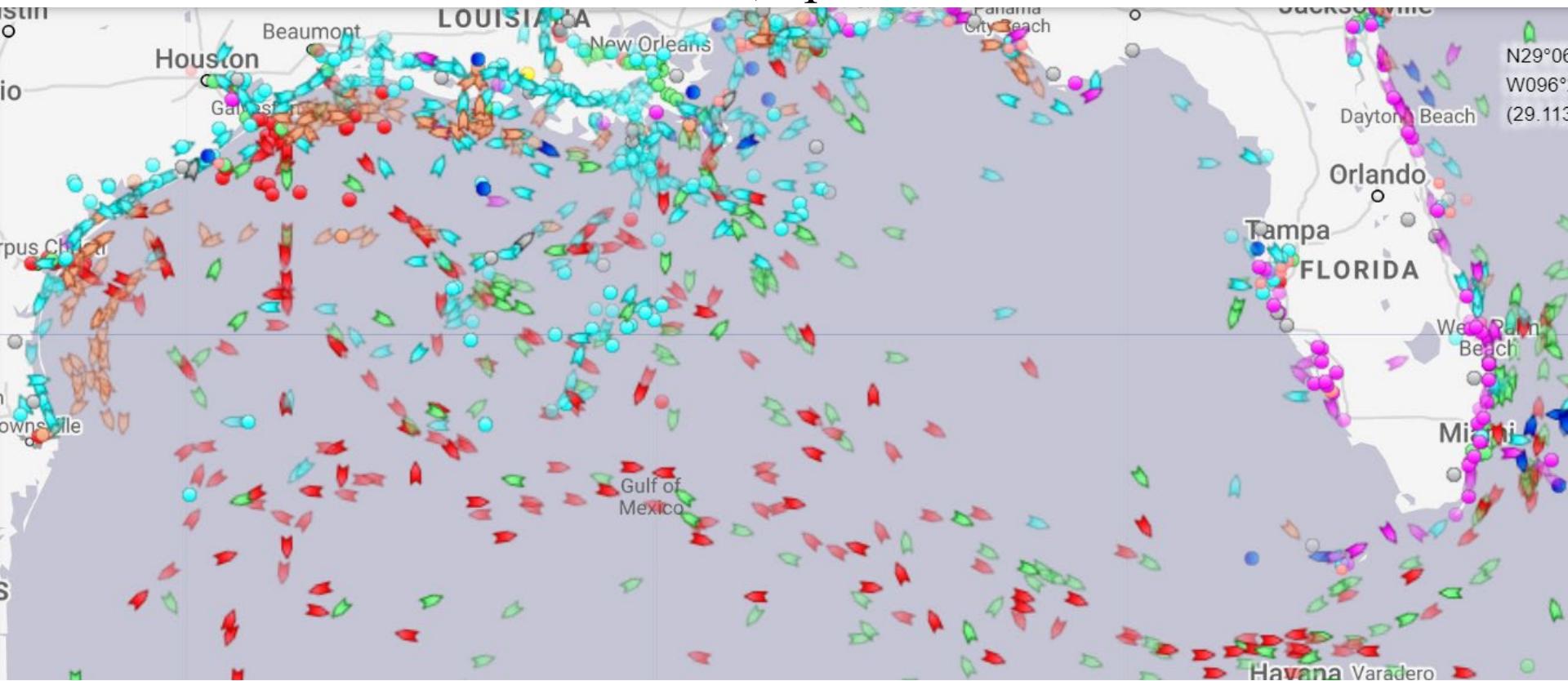
## BOUNTY

2 fatalities when it sank in Hurricane Sandy (2012)

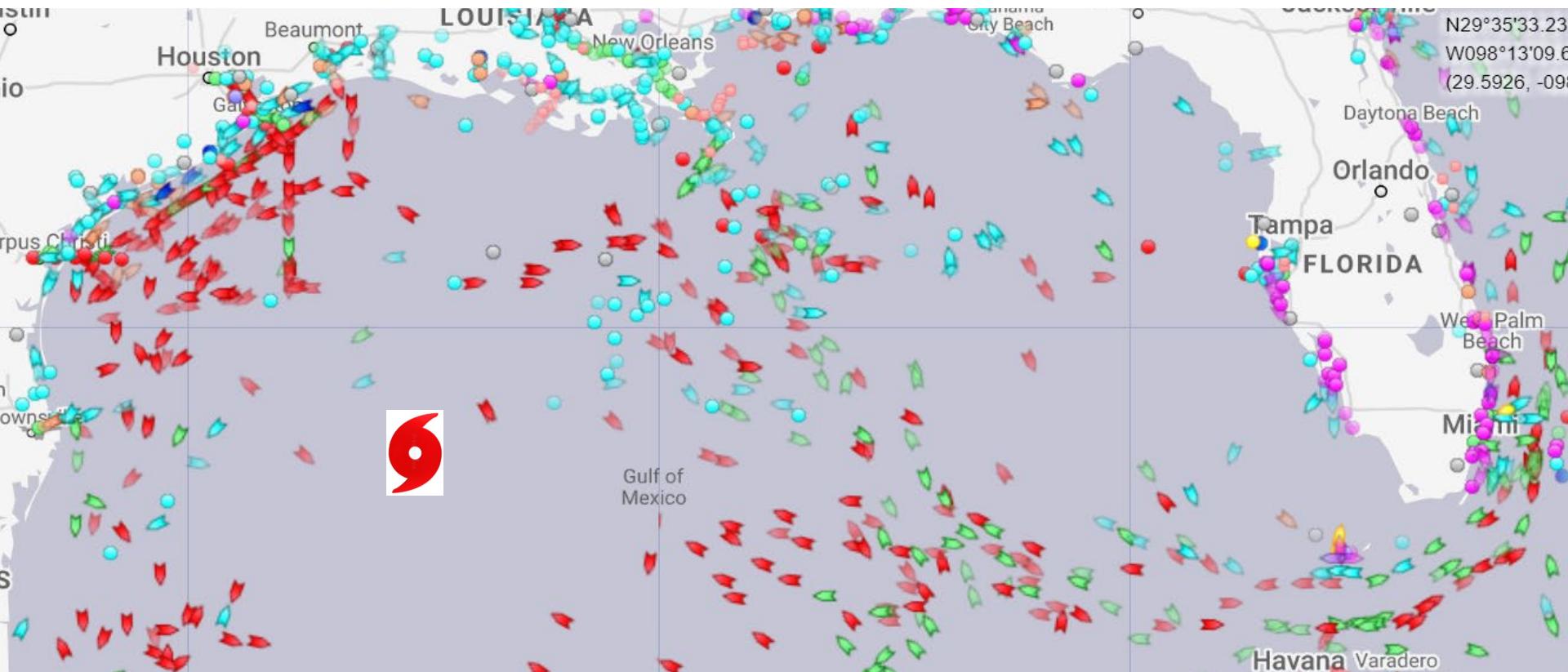
## FANTOME

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 8<sup>th</sup>, 5pm EDT **Weather Avoidance by Ships**



marinetraffic.com



# 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

A handwritten signature in black ink, appearing to read "Louis W. Uccellini".

Louis W. Uccellini  
NOAA Assistant Administrator  
for Weather Services

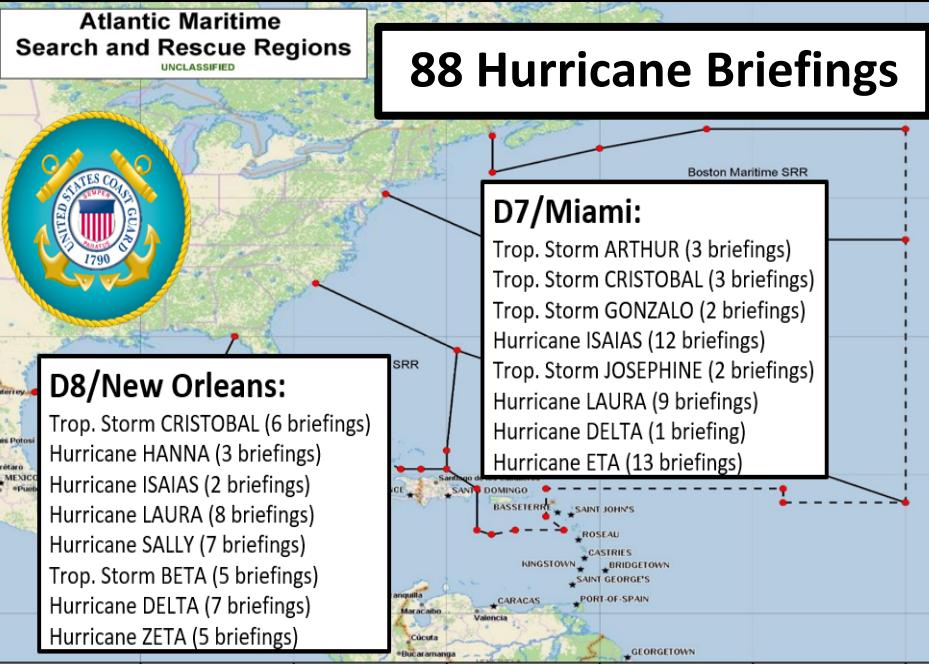
APPROVED: 3/31/20

A handwritten signature in blue ink, appearing to read "RVT".

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

# 2020 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/National Hurricane Center (NHC)

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



"The Spot Forecast is a huge tool year-round for us during search-and-rescue.

Likewise, I really want to thank all those responsible for creating the [Coast Guard weather webpage](#), which is extremely valuable to us. It has so many of the products that we use on a daily basis, so I thank you and the entire team for that."

USCG District 7 Commandant

RADM Eric Jones

"You [NHC/TAFB] are a crucial and critical partner to us. On behalf of all of District 8 with 4,000 men and women that serve here in uniform, we are very, very grateful for the support you have given us. We consider you one of our key partners to ensure that the American public is served well across all of District 8. We're very proud of the relationship that we enjoy with you all."

USCG District 8 Commandant

RADM John Nadeau

National Hurricane Center/Tropical Analysis and Forecast Branch  
<https://www.nhc.noaa.gov/marine/?atlantic>

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



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

1-305-229-4425 –Pacific

On Twitter: [@NHC\\_TAFB](#)