

NOAA

*National Oceanic
and Atmospheric
Administration*

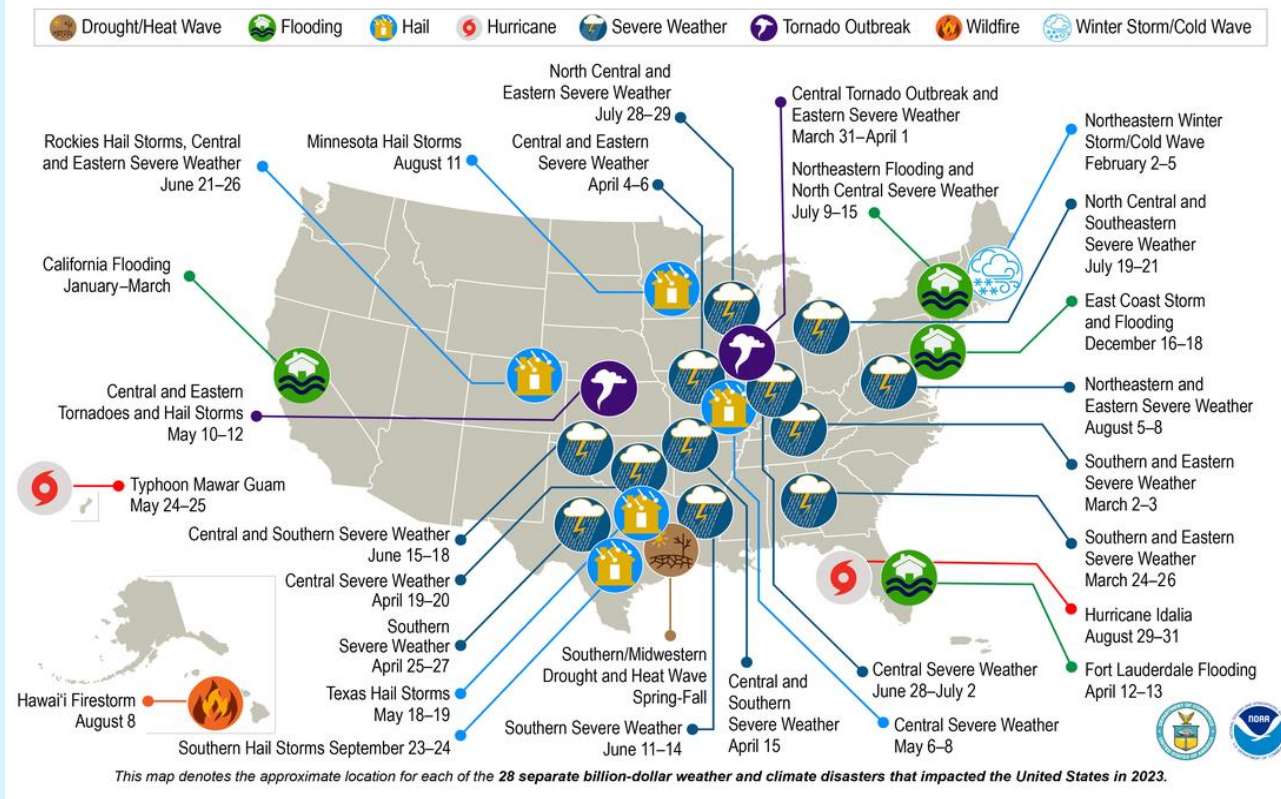
Elizabeth McLanahan
Director, Office of International Affairs

NOAA Research Priorities and Products
to Support Disaster Management



U.S. 2023 Billion-Dollar Disasters

U.S. 2023 Billion-Dollar Weather and Climate Disasters





Research Strategy Goals (2020-2026)



1. Explore the Marine Environment

Increase knowledge of the oceans, coastal areas, and Great Lakes to support resource management and public awareness.



3. Make Forecasts Better

Improve accuracy, precision, and efficiency of forecasts and predictions to save lives and property and support a vibrant economy.



2. Detect Changes in the Ocean and Atmosphere

Produce, analyze, and interpret observation records to understand the Earth system and inform the public.

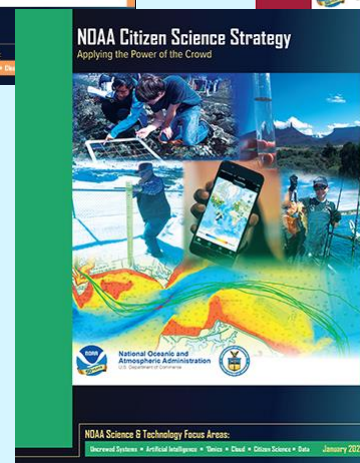
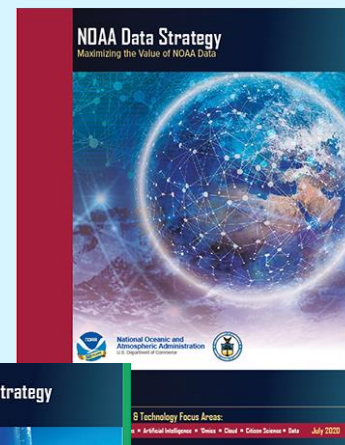
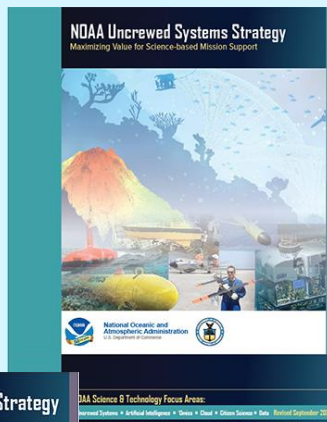
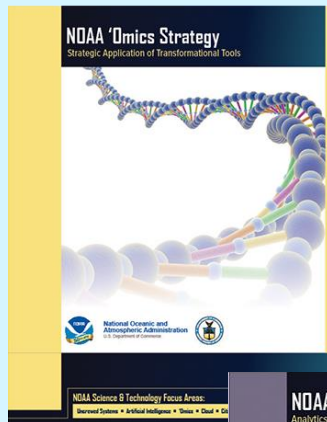
4. Drive Innovative Science

Cultivate and deliver mission-relevant research to lead the environmental science community.

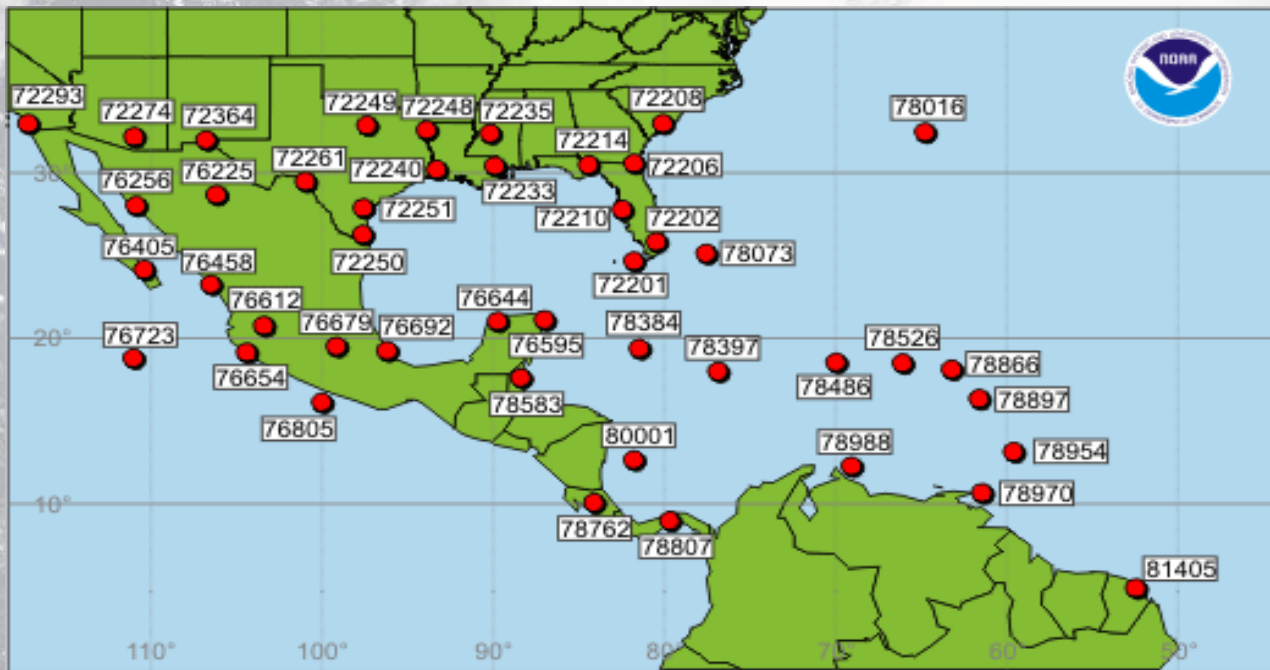




NOAA Science & Technology Focus Areas



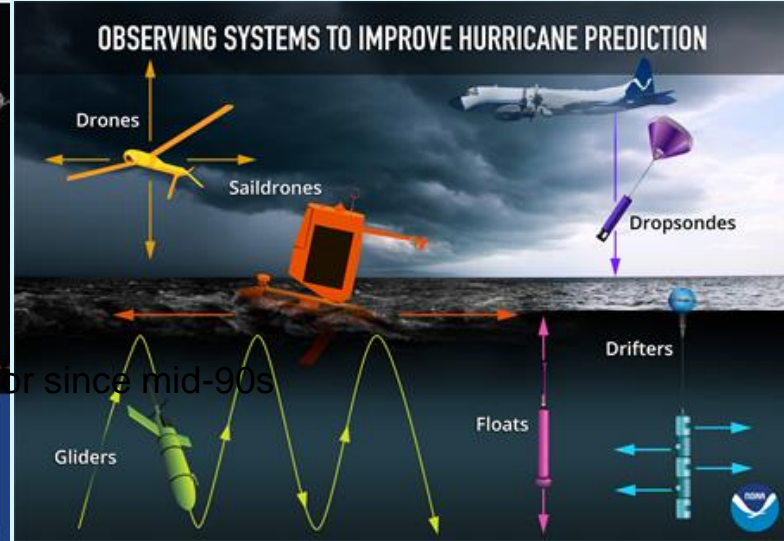
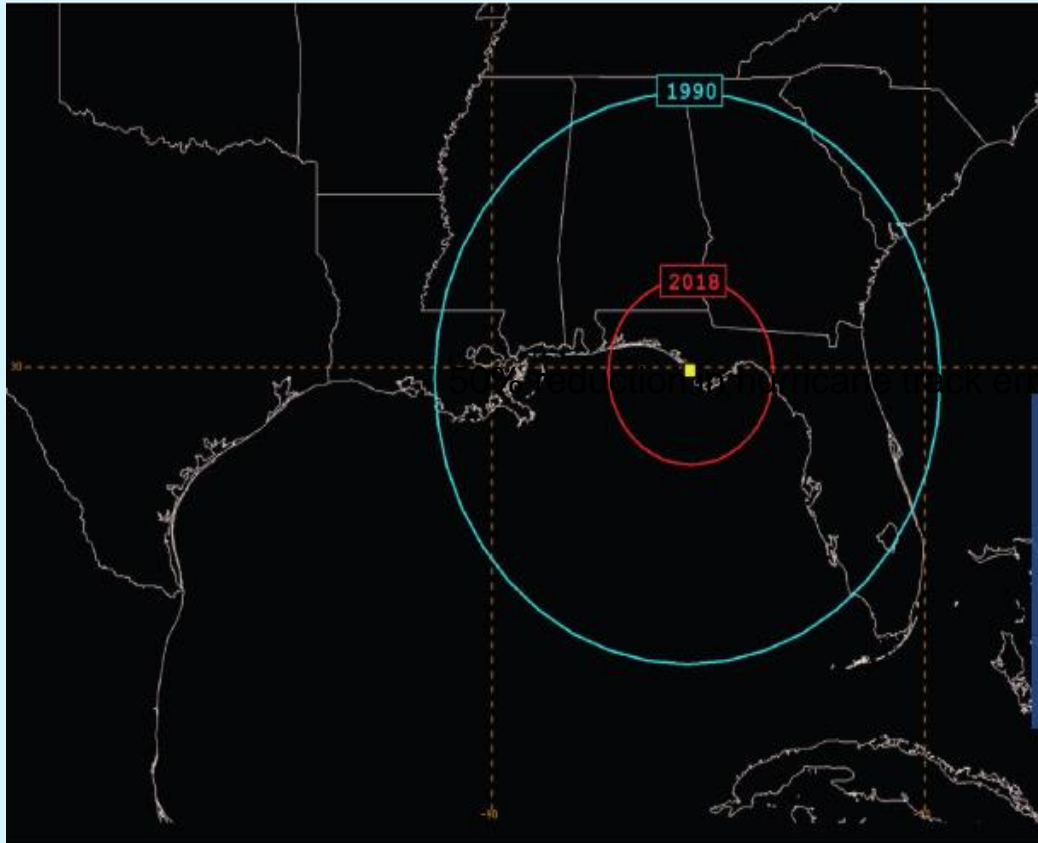
Upper Air Stations in Western Hemisphere



Collaboration for improved accuracy.



Improving Hurricane Forecasts



50% reduction in hurricane track error since mid-90s

50% reduction in hurricane track error since mid-90s.
30% reduction in intensity error in the last decade.





River Flooding



water.weather.gov/ahps/forecasts.php

Auto Refresh: OFF

All Locations

Note: The marker color below depicts the highest forecast values for e

Print this map

Switch Basemap

Reset View

Alaska Hawaii Puerto Rico

USA.gov

Find us on Facebook

water.weather.gov/ahps/long_range.php

Warnings & Forecasts Graphical Forecasts National Maps Radar Water Air Quality Satellite Climate

River Observations River Forecasts Long-Range River Flood Risk Precipitation River Download Other Information

Auto Refresh: OFF

Print this map Permalink

Greater than: 50% chance of exceeding river flood levels during Mar-Apr-May

Switch Basemap

Reset View

Click on the map or select one of the data views below:

- United States
- NWS Weather Forecast Offices
- NWS River Forecast Centers
- Water Resources Regions

2733 total gauges

Show locations with 50% or greater chance of flooding during Mar-Apr-May (238)

- 0 Gauges: > 50% Major Long-Range Flood Risk
- 23 Gauges: > 50% Moderate Long-Range Flood Risk
- 235 Gauges: > 50% Minor Long-Range Flood Risk
- 2353 Gauges: < 50% Long-Range Flood Risk
- 124 Gauges: No forecast within selected timeframe

Show all locations

Last map update: 03/15/2024 at 03:23:03 pm EDT 03/15/2024 at 16:48:40 UTC

3934 total gauges

Show all locations in flood (59)

- 0 Gauges: Major Flooding
- 5 Gauges: Moderate Flooding
- 54 Gauges: Minor Flooding
- 136 Gauges: Near Flood Stage
- 1656 Gauges: No Flooding
- 274 Flood Category Not Defined
- 2 At or Below Low Water Threshold
- 1744 Gauges: Forecasts Are Not Current
- 5 Gauges: No forecast within selected timeframe
- 58 Gauges: Out of Service

Show all locations

Last map update: 03/15/2024 at 12:48:40 pm EDT 03/15/2024 at 16:48:40 UTC

What is UTC time?

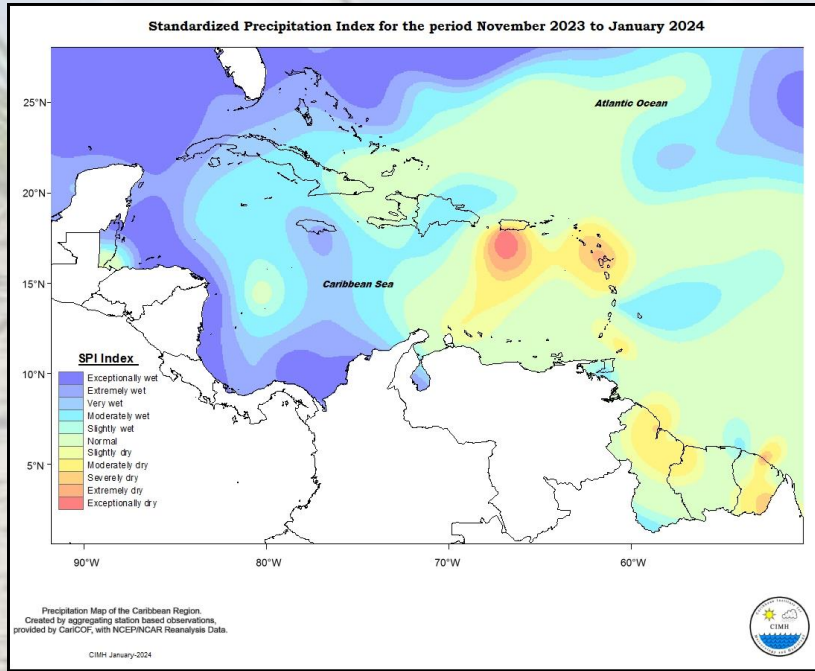
Map Help

12:59 PM 3/15/2024



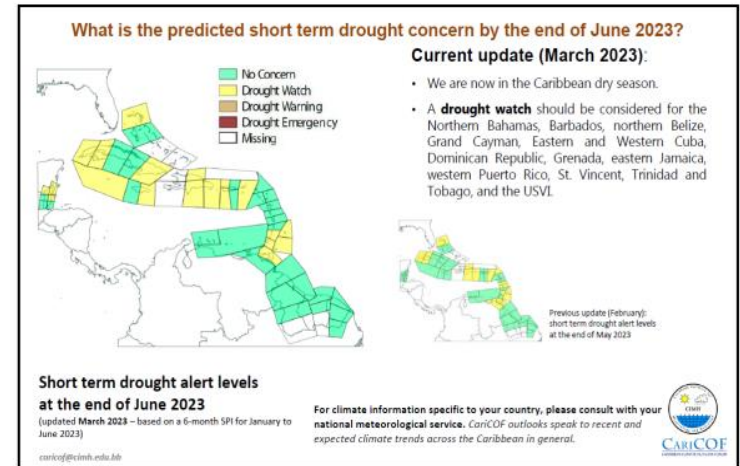


Drought



CariCOF Drought Alert Maps

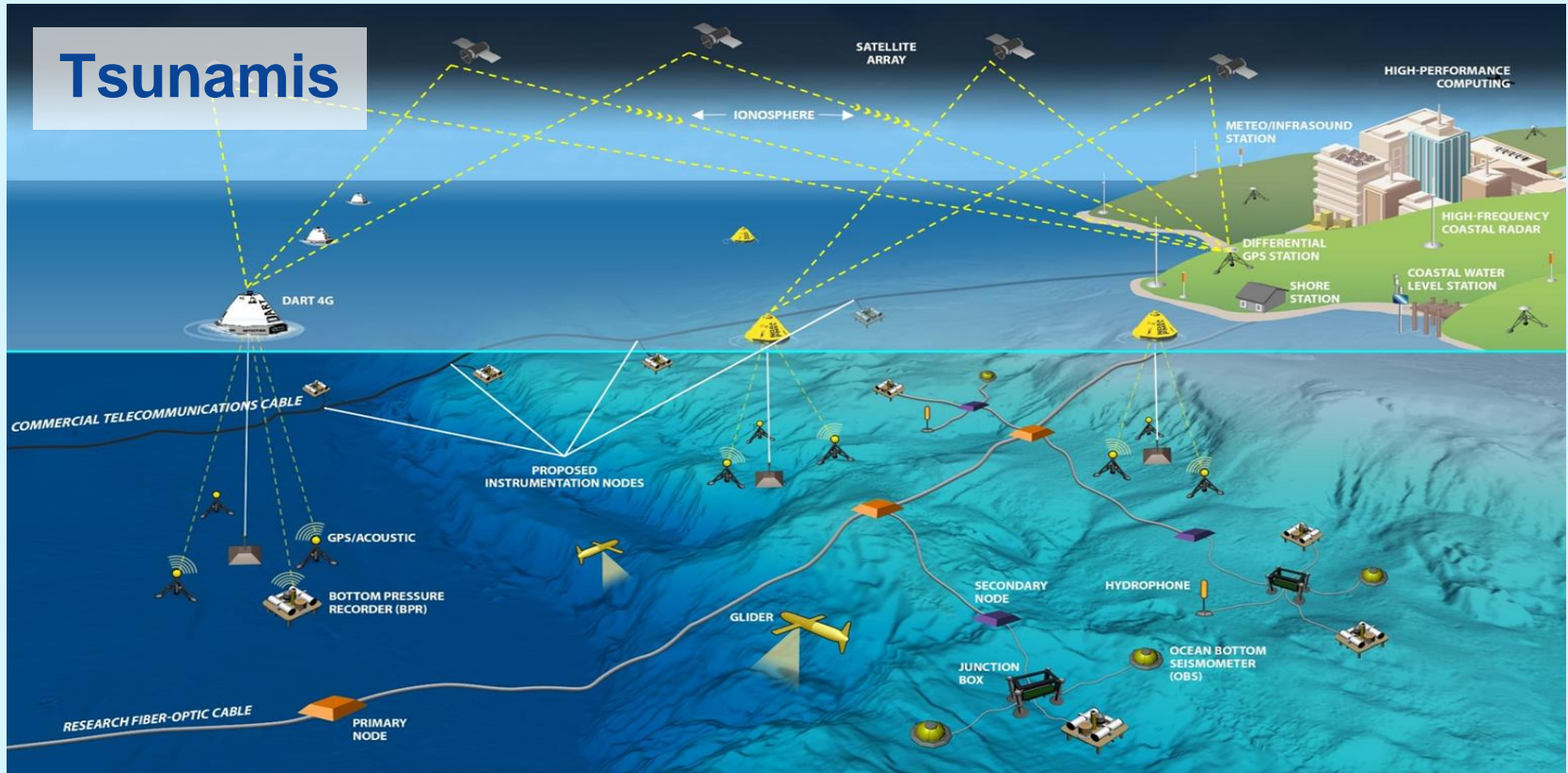
Map of short-term drought by the end of June 2023



Cooperation to provide regional outlooks.



Tsunamis



Overview of different types of sensors and technologies needed to produce reliable forecasts.



Oil Spills



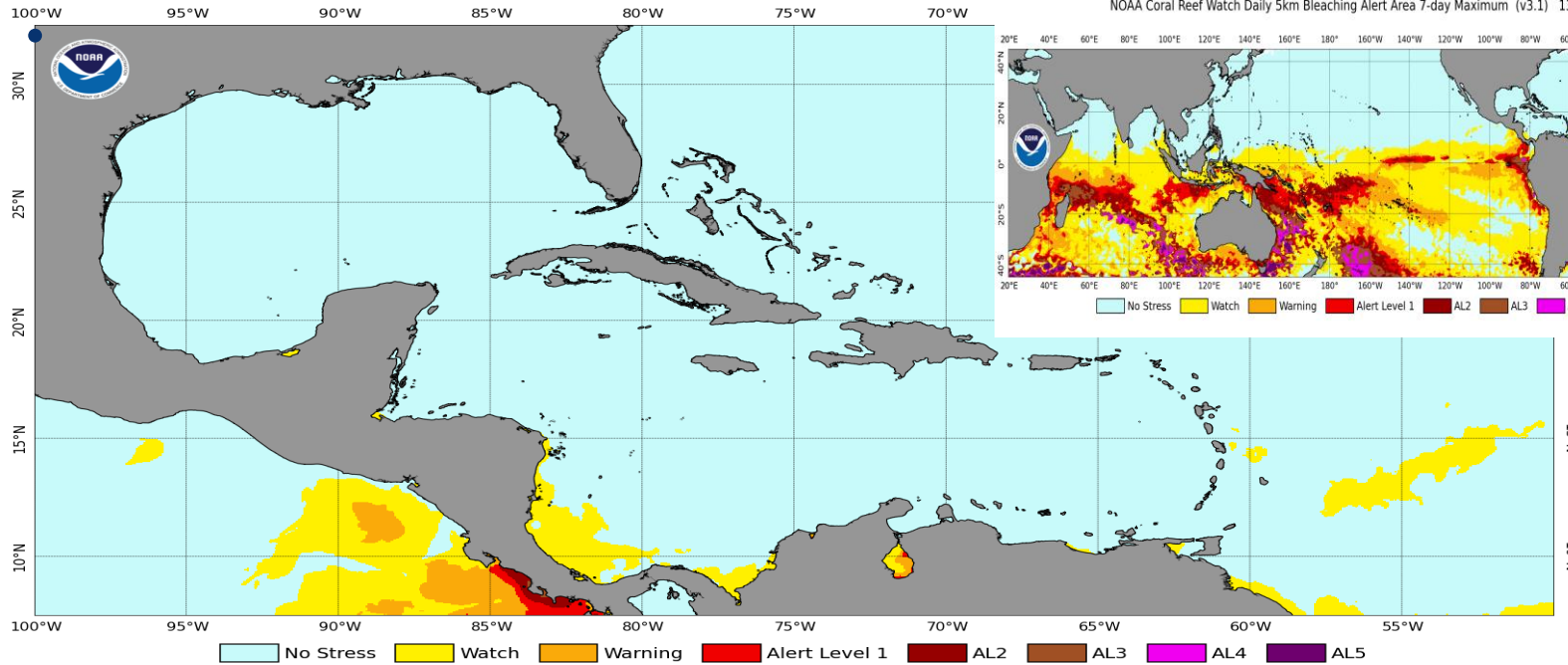
NOAA responds to over 150 oil and chemical spills in U.S. waters each year.



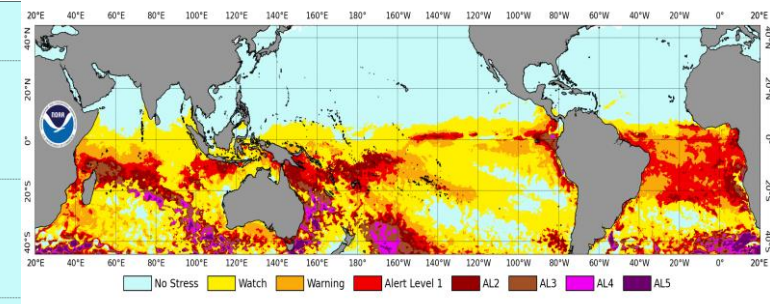


Coral Bleaching

NOAA Coral Reef Watch Daily 5km Bleaching Alert Area 7-day Maximum (v3.1) 13 Mar 2024



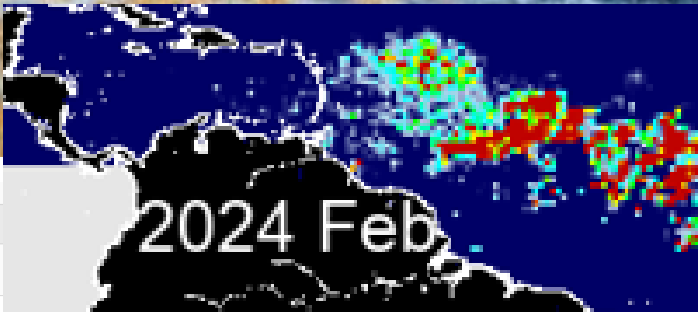
NOAA Coral Reef Watch Daily 5km Bleaching Alert Area 7-day Maximum (v3.1) 13 Mar 2024



Alerts to help managers prepare.



Sargassum Inundation



Sargassum 2.pdf - Adobe Acrobat Pro (32-bit)
File Edit View E-Sign Window Help

Home Tools Sargassum 2.pdf x

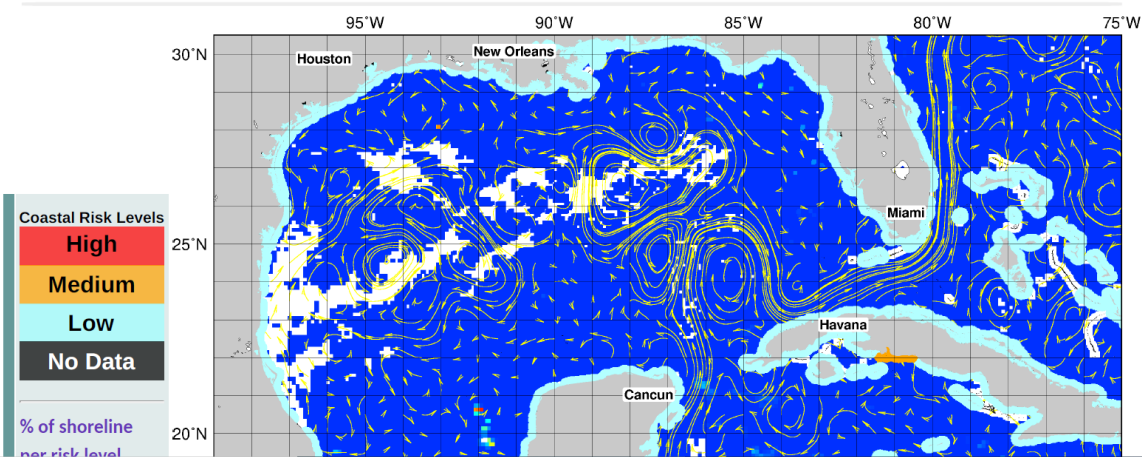
1 / 1 126%



Experimental Weekly Sargassum Inundation Risk (SIR v1.3)

By the National Oceanic and Atmospheric Administration (NOAA), and the University of South Florida (USF)

Status: Mar 5-11, 2024



Coastal Risk Levels

- High
- Medium
- Low
- No Data

% of shoreline per risk level

Type here to search

7:19 AM 3/15/2024





Thank You!

Elizabeth.McLanahan@noaa.gov

