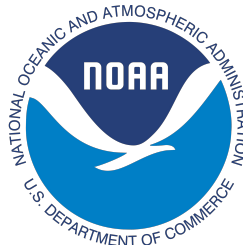
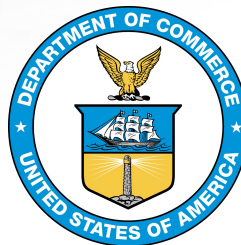


NOAA's National Weather Service



An Overview of the Weather Forecast Office's Role

Ernesto Rodriguez
ernesto.rodriguez@noaa.gov



National Weather Service

Mission and Vision



Mission:

Provide weather, water, and climate data, forecasts, warnings and impact-based decision support services for the protection of life and property and enhancement of the national economy.

Vision:

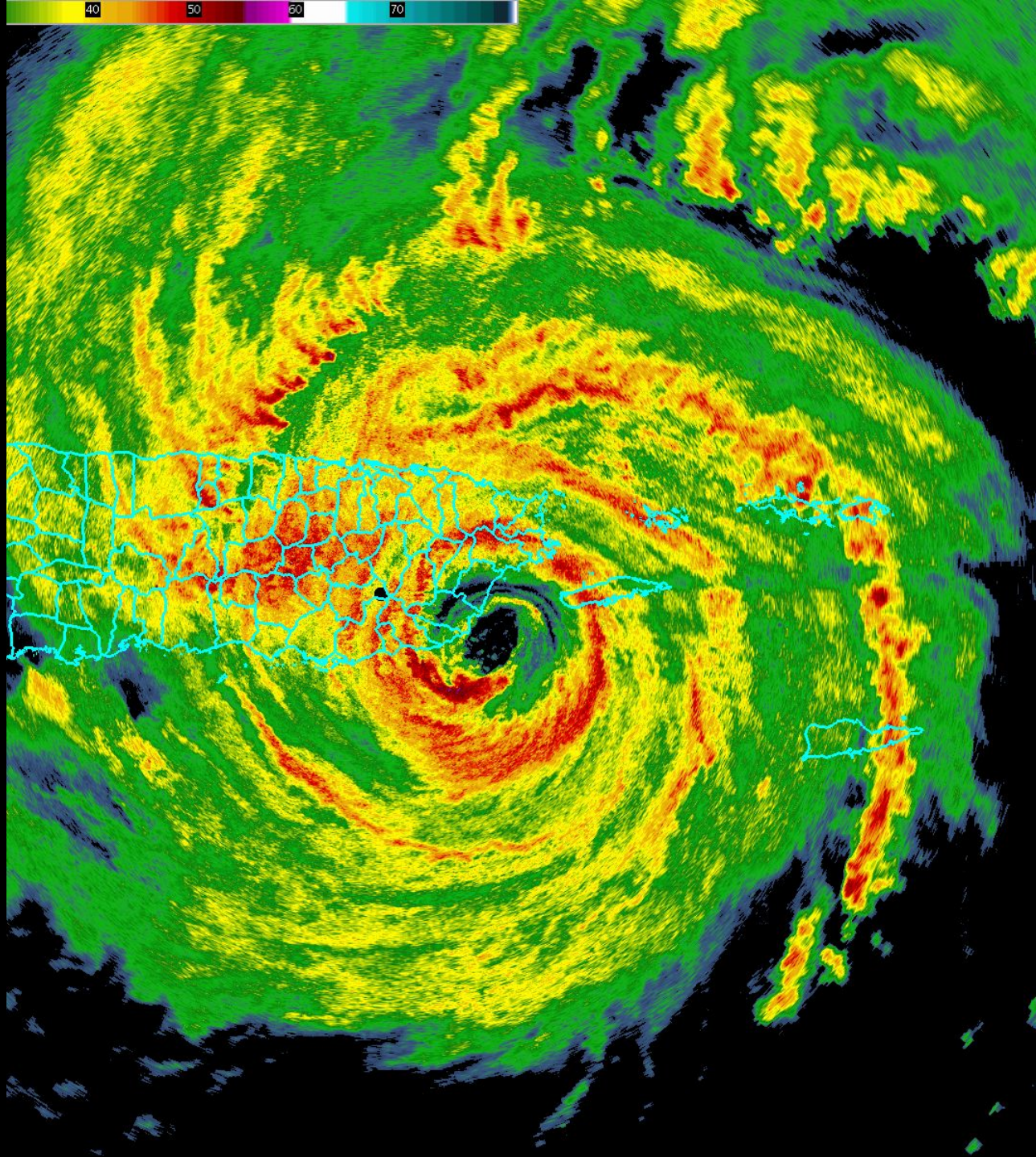
A Weather-Ready Nation Society is prepared for and responds to weather, water, and climate-dependent events.

Hurricane Maria

LANDFALL

Sep 20, 2017 - 1015 Z

Maria made landfall
in Yabucoa, Puerto
Rico as a strong
category 4
hurricane with
maximum sustained
winds of 155 mph.







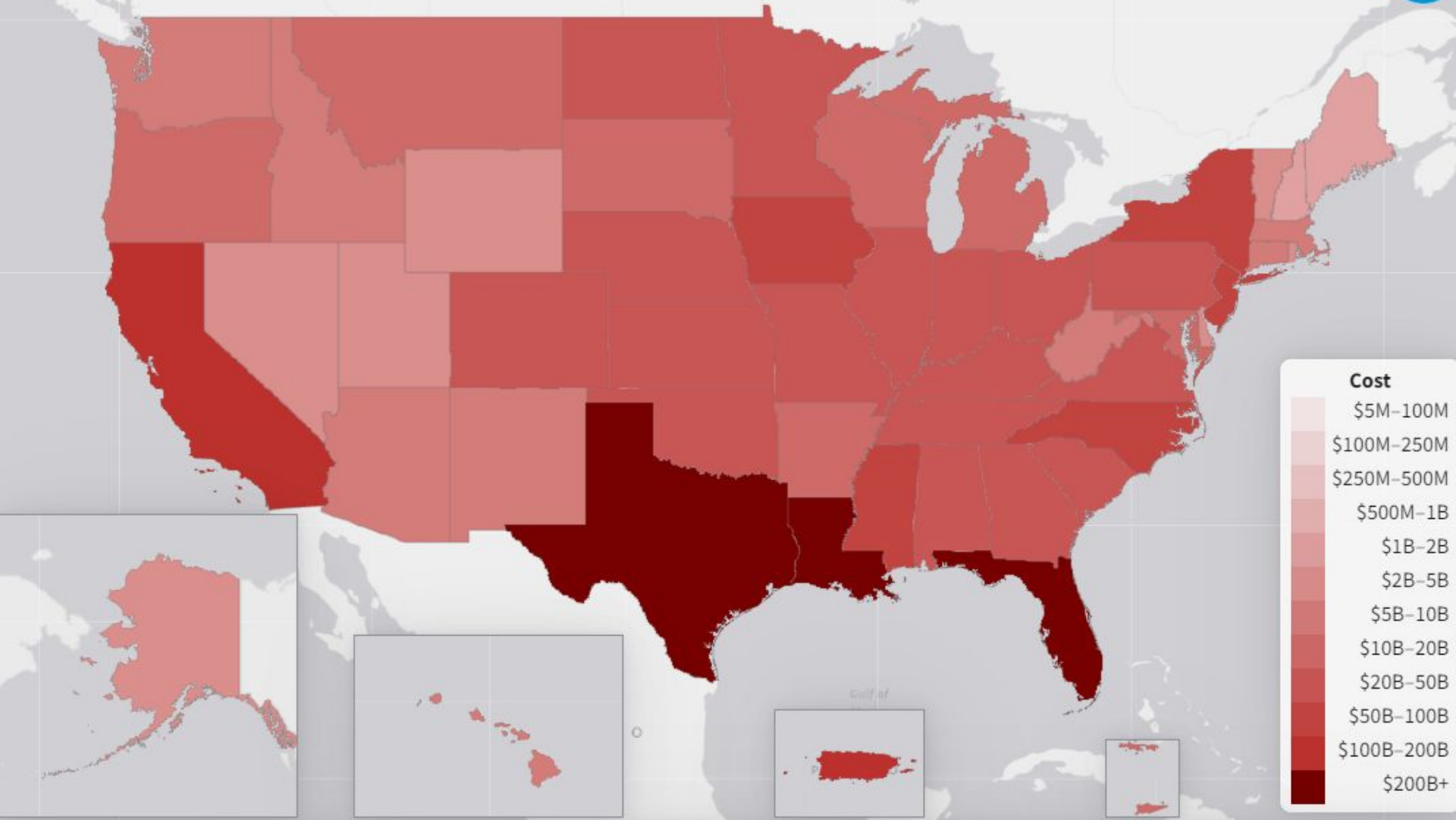




A satellite image of a tropical cyclone, likely a typhoon, over the Pacific Ocean. The storm's eye is visible in the center, surrounded by dense, swirling cloud bands. Overlaid on the image are white outlines of several islands, including a large one on the left and a chain of smaller ones on the right. The text "Vulnerability and Weather Hazards" is written in yellow across the middle of the image.

Vulnerability and Weather Hazards

1980-2022* Billion-Dollar Weather and Climate Disaster Cost (CPI-Adjusted)

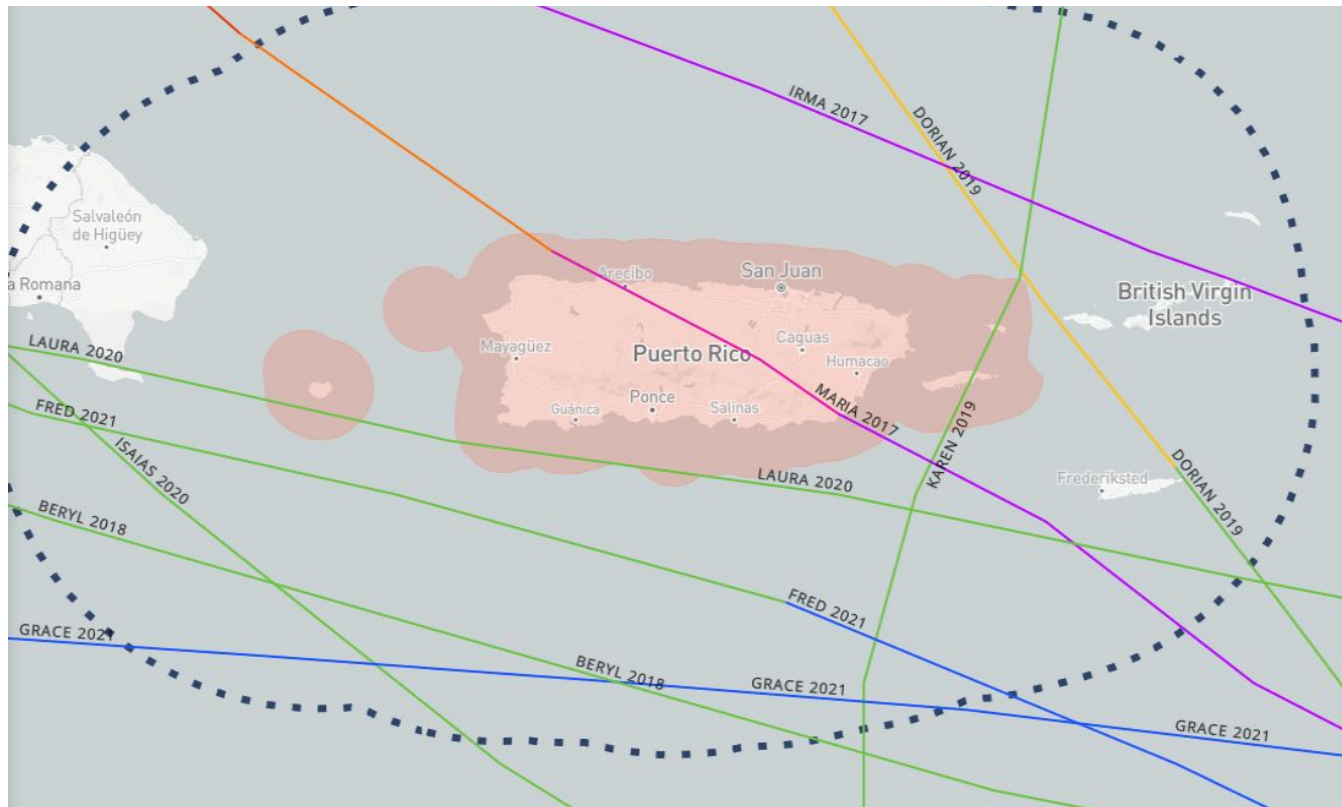


Cost

\$5M–100M
 \$100M–250M
 \$250M–500M
 \$500M–1B
 \$1B–2B
 \$2B–5B
 \$5B–10B
 \$10B–20B
 \$20B–50B
 \$50B–100B
 \$100B–200B
 \$200B+

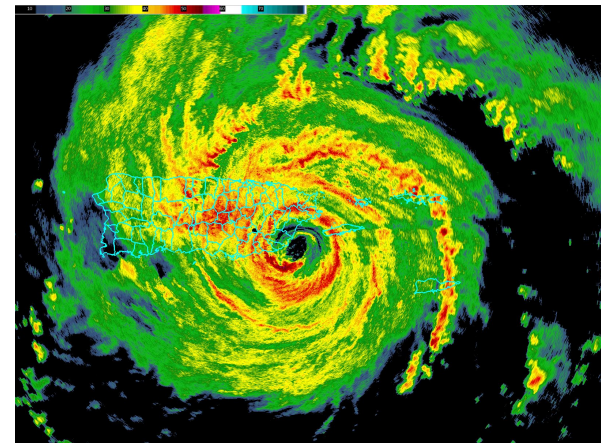
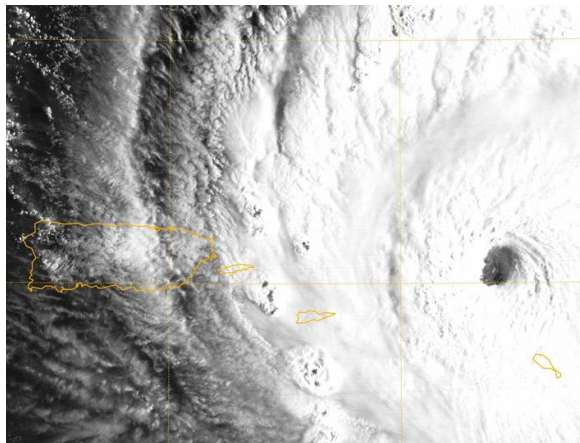
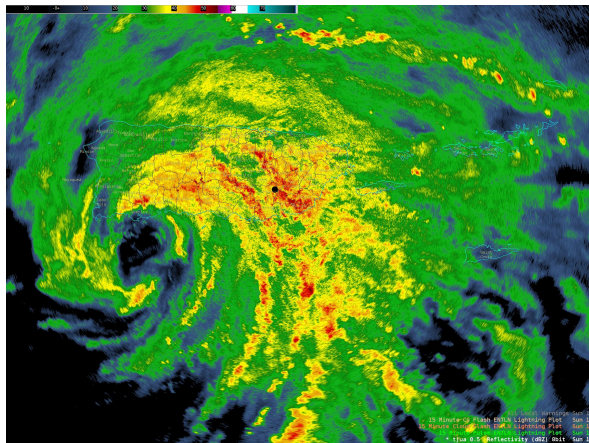
United States

Drought:	\$250B+	Flooding:	\$100B–200B	Freeze:	\$20B–50B	Severe Storm:	\$250B+
Tropical Cyclone:	\$1.1T+	Wildfire:	\$100B–200B	Winter Storm:	\$50B–100B	All Disasters:	\$2.3T+



Tropical Cyclones since 2017:

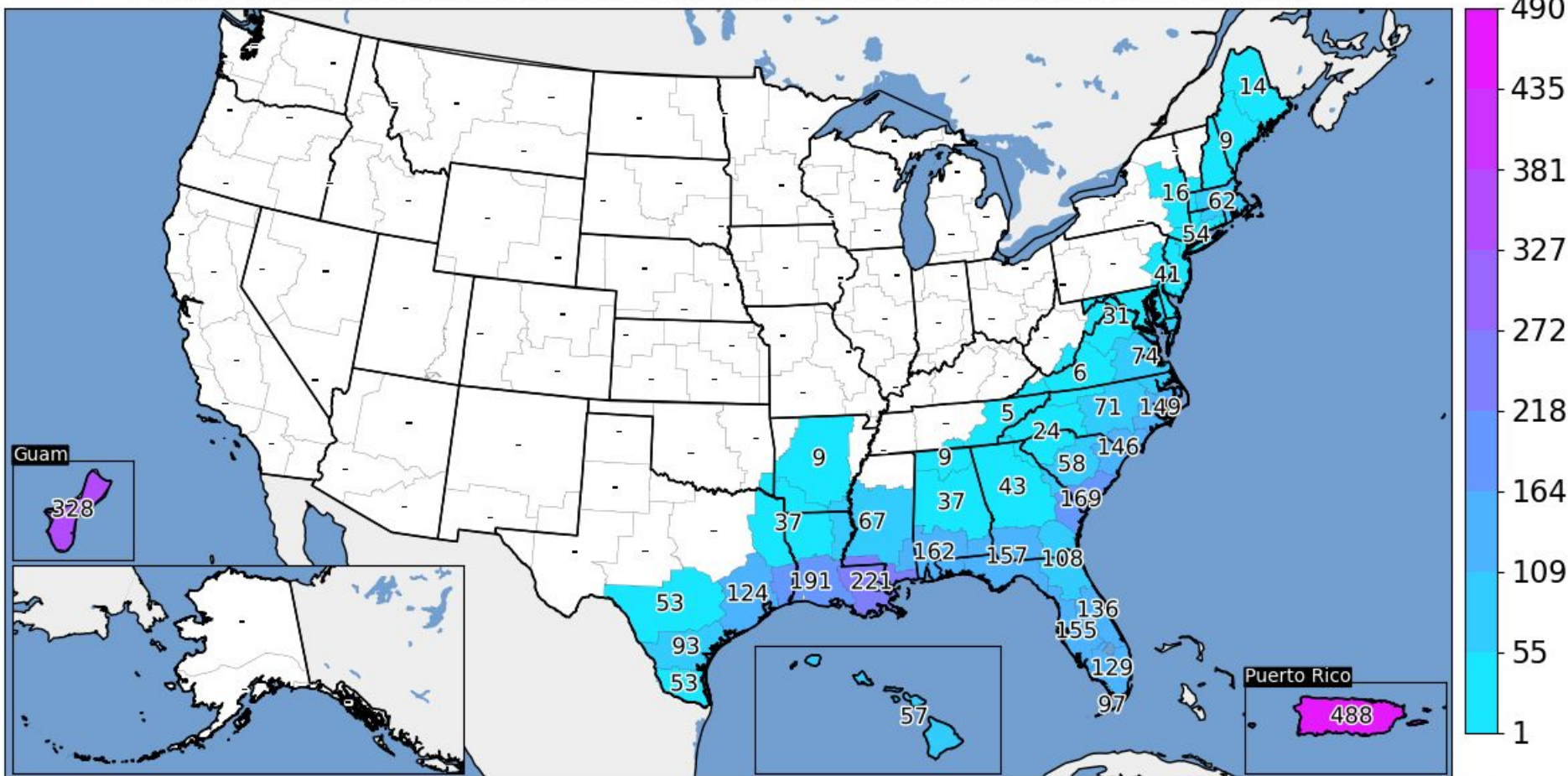
1. Irma
2. Maria
3. Beryl
4. Dorian
5. Kare
6. Laura
7. Isaias
8. Grace
9. Fred
10. Fiona



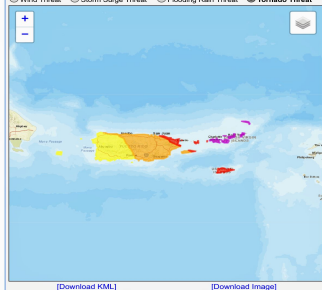


NWS Issuance Count of [HLS] Hurricane Local Statement

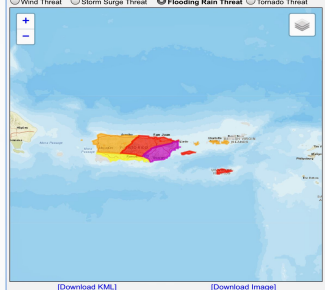
Plot valid between 01 Jan 2017 00:00 UTC and 31 Dec 2022 00:00 UTC, based on unofficial IEM Archives



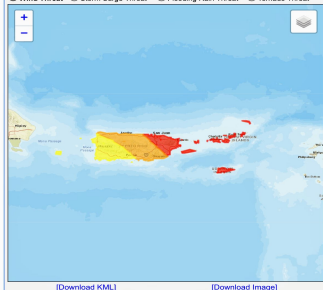
Map of Coastal Threats and Potential Impacts - What's This?



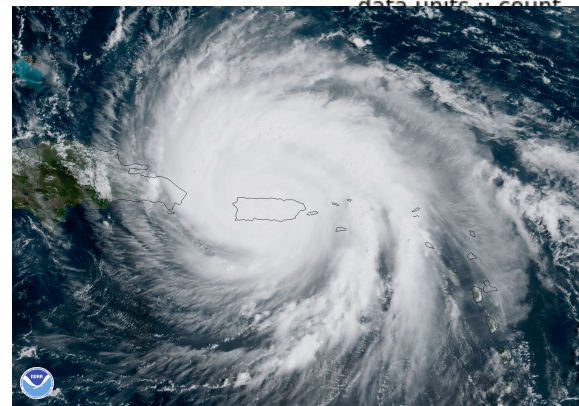
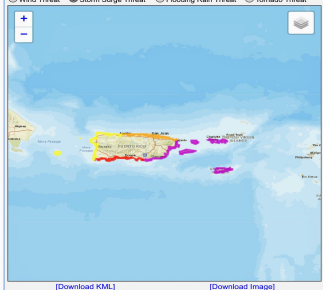
Map of Coastal Threats and Potential Impacts - What's This? (Flooded Rain Threat)



Map of Coastal Threats and Potential Impacts - What's This? (Wind Threat)



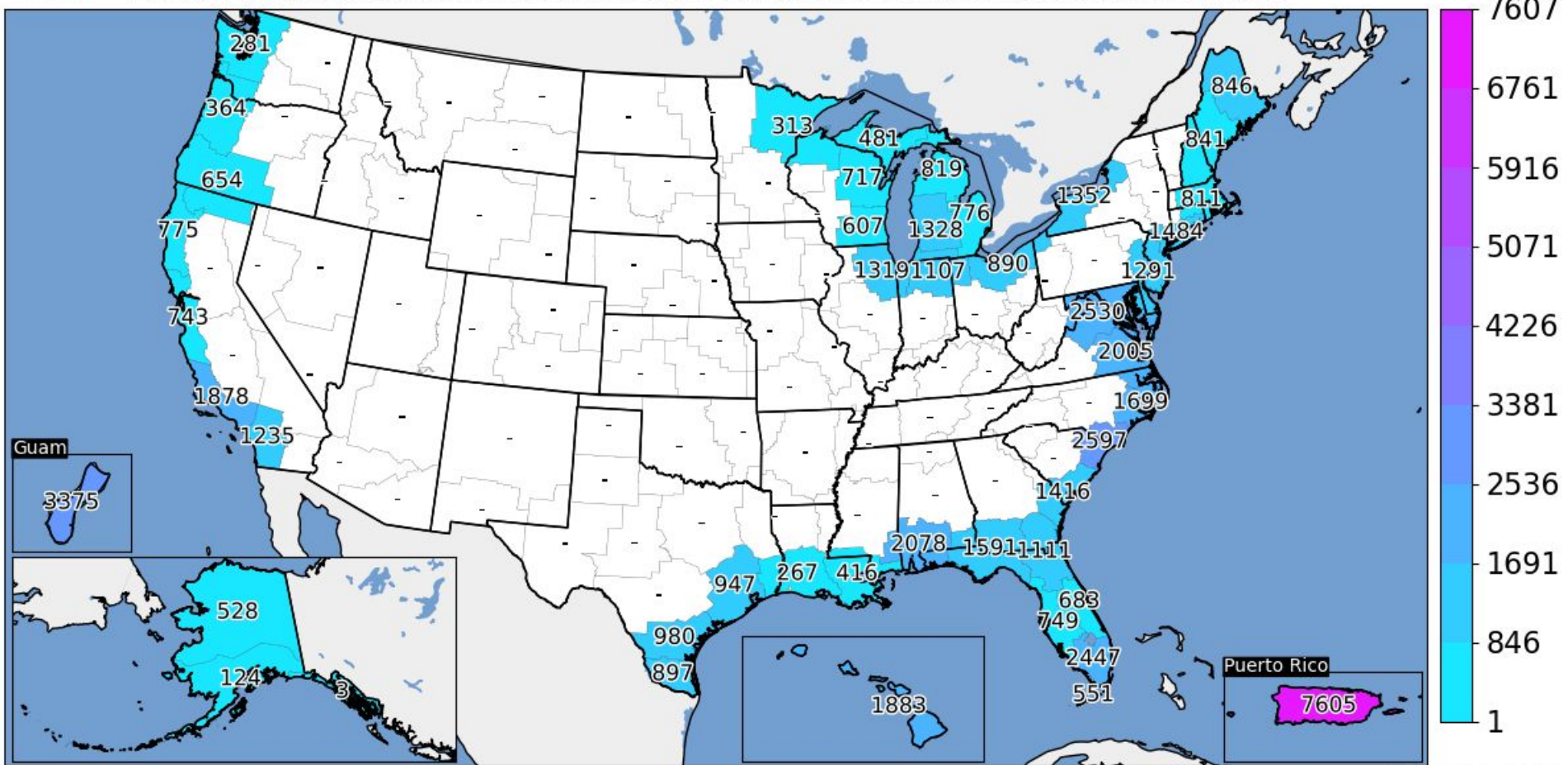
Map of Coastal Threats and Potential Impacts - What's This? (Storm Surge Threat)



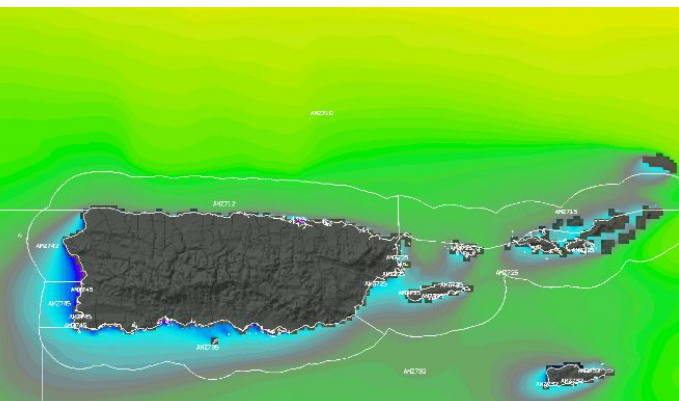


NWS Issuance Count of [CFW] Coastal Message

Plot valid between 01 Jan 2017 00:00 UTC and 31 Dec 2022 00:00 UTC, based on unofficial IEM Archives



data units -- count

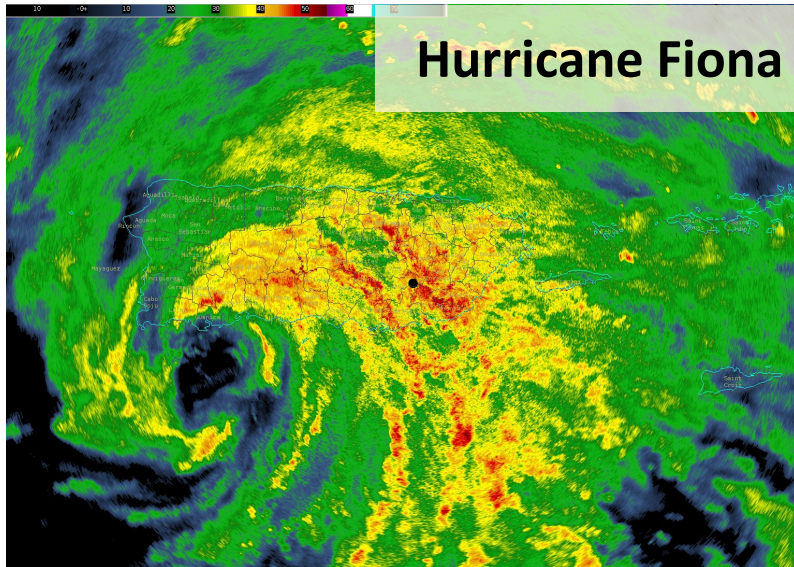


Decision Support Services (IDSS)

A photograph of a meeting room with large windows overlooking a forest. A man in a red shirt stands and points at a large screen on a tripod that displays a map. Three other men are present: one in a dark jacket stands to the left, one in a blue jacket and cap stands in the center, and one in a white shirt sits at a round wooden table in the foreground. The table has a blue folder and two circular logos. A large black fan is on the right. The text "Decision Support Services (IDSS)" is overlaid in yellow.

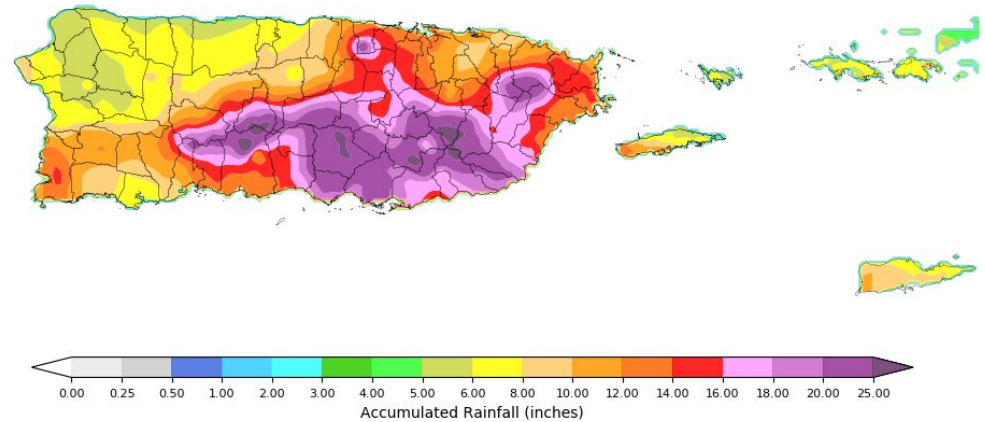
Impact-based Decision Support Services (IDSS)





Preliminary Rainfall Totals for Puerto Rico and the U.S. Virgin Islands

Data Source: MPE (Radar Estimates & Rain Gages)
Valid from 09/16/2022 18Z to 09/20/2022 12Z

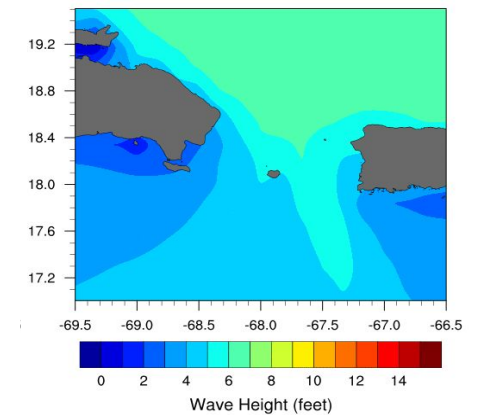
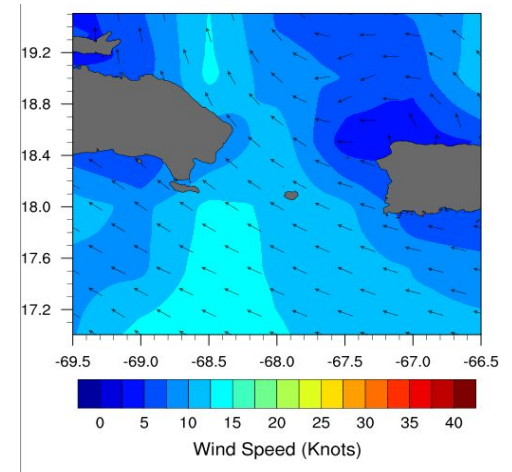
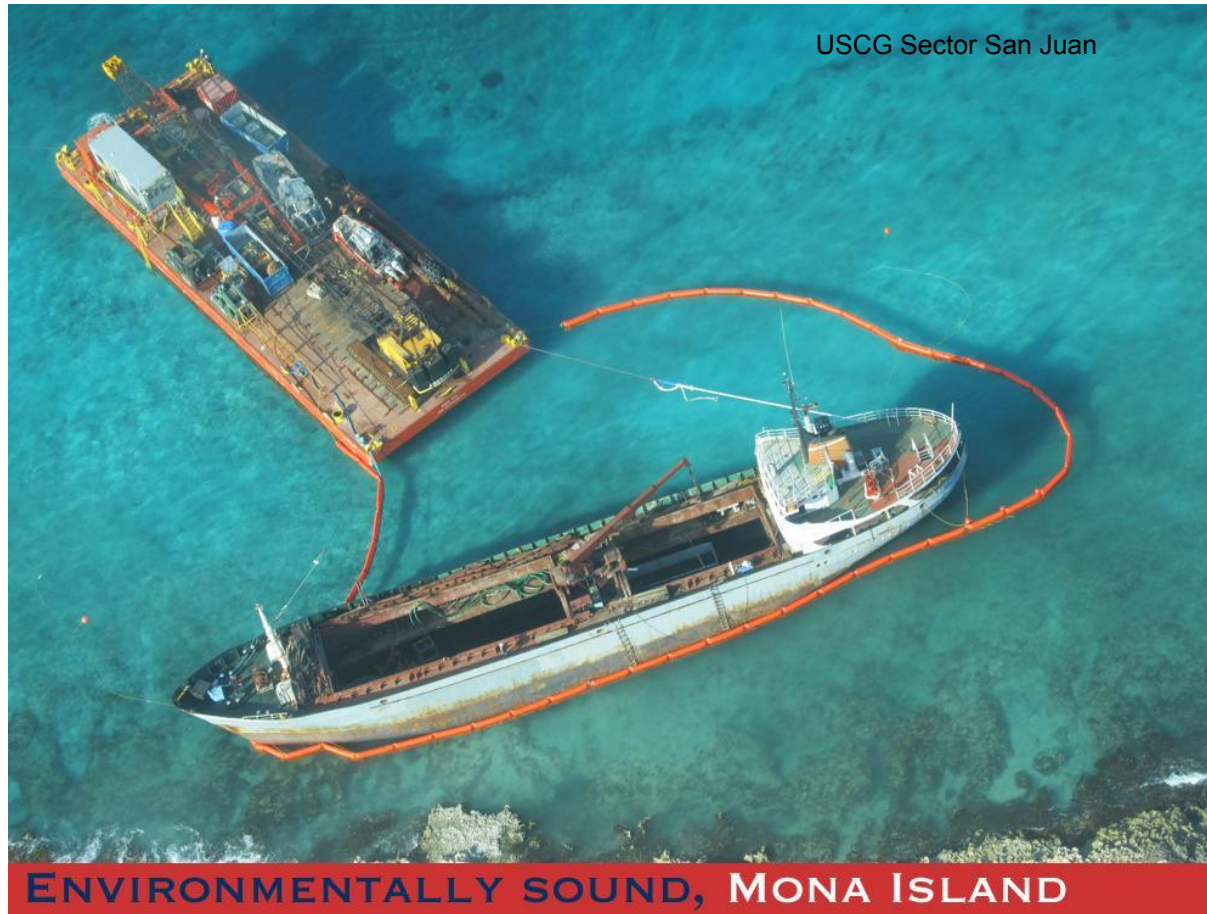


FEMA Administrator Deanne Criswell

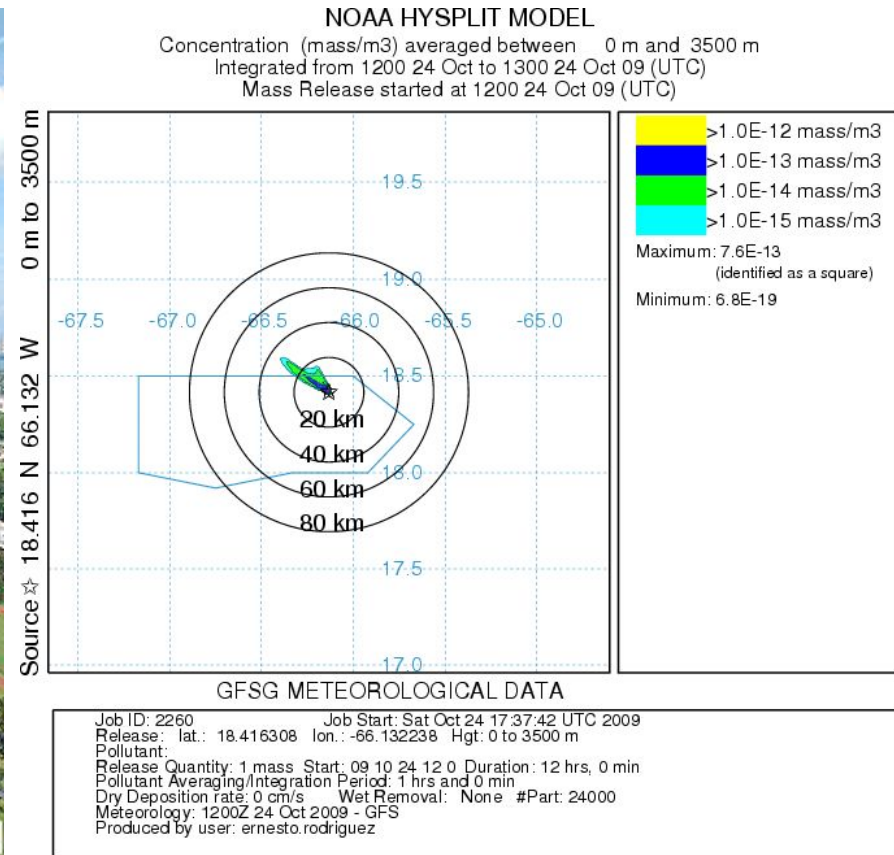


HAZMAT Events

Impact-based Decision Support Services



Decision Support for Non-Weather Incidents



Collaborations

A group of five people are in a meeting room with large windows overlooking a forested area. One man in a red shirt is pointing at a large digital screen that displays a map with a weather overlay. Three other men are standing and looking at the screen, while one man is seated at a round wooden table in the foreground, also looking towards the screen. The room is dimly lit, and a large floor fan is visible on the right side of the frame.



NOAA
SOUTHEAST
& CARIBBEAN



NOAA Southeast and Caribbean Regional Collaboration Team (SECART)

Mission: To identify, communicate, and respond to regional needs, catalyze collaboration, and connect people and capabilities to advance NOAA's mission and priorities in the Southeast and Caribbean Region.

FY23-25 Priorities

- Goal 1: Improve efficiency and effectiveness of NOAA's mission execution through engagement across NOAA line offices and with partners
- Goal 2: Improve Economic, Environmental, and Social Resilience of Communities to Weather, Water, and Climate Impacts
- Goal 3: Promote the sustainability of the region's coastal and marine ecosystems

Recent Key Activities:

- Annual Hurricane Awareness Webinar Series
- NOAA Disaster Resilience Workshops and Guide
- Southeast and Caribbean Disaster Resilience Partnership
- Climate and Equity Roundtable and Pilot Project
- Southeast Seafloor Mapping & Prioritization
- Response to Stony Coral Tissue Loss Disease

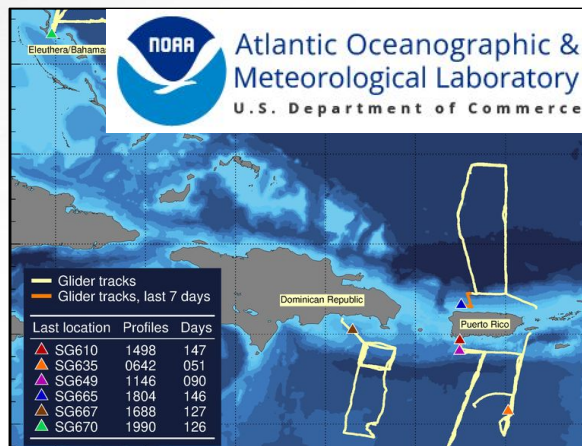
HURACAN FIONA



IOOS
Integrated Ocean
Observing System



A MEMORABLE MOMENT WITH 55 OF OUR COLLEAGUES FROM THE 11 REGIONAL ASSOCIATIONS OF THE U.S. INTEGRATED OCEAN OBSERVING SYSTEM AND IOOS PROGRAM OFFICE THAT PARTICIPATED IN THE NOV 8-10, 2022, IOOS FALL MEETING IN SAN JUAN, PUERTO RICO.



State of the beaches in Puerto Rico after Hurricane Maria (2017)

By

Maritza Barreto-Orta¹, Rafael Méndez-Tejeda², Ernesto Rodríguez³,
Nahir Cabrera⁴, Elizabeth Díaz⁵, and Kevián Pérez⁶

Hurricane Maria: Coastal Geomorphological Impacts at Municipality Level (2017)

