Experimental Weekly Sargassum Inundation Report (SIR v1.2)

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

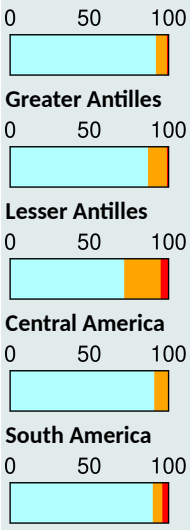
Status: Jan 4-10, 2022

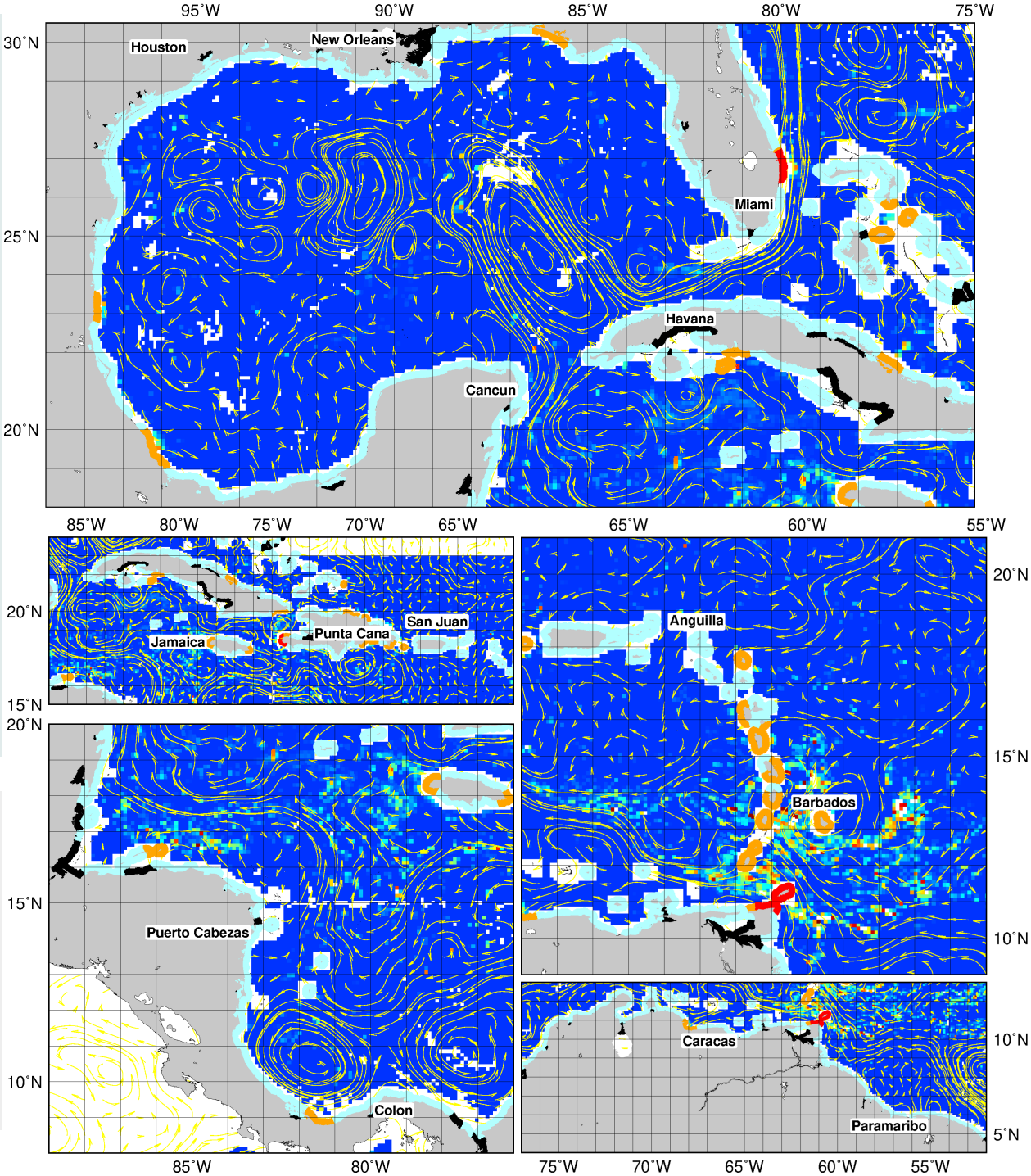
Since 2011, large accumulations of Sargassum is a recurrent problem in the Caribbean Sea, in the Gulf of Mexico and tropical Atlantic. These events can cause significant economic, environmental and public health harm. These experimental Sargassum Inundation Reports (SIR) provide an overview of the risk of sargassum coastal inundation in the Caribbean and Gulf of Mexico regions. Using as core inputs the AFAI (Alternative Floating Algae Index) fields generated by the University of South Florida (USF), the algorithm analyses the AFAI values in the neighborhood (50 km) of each coastal pixel and, computing the difference between those values and a multiday baseline, classifies the risk into three categories: low (blue), medium (orange) and high (red). In black are areas with not enough data. The two ad-hoc thresholds used for classification are 0.001 and 0.003. The vectors in the images represent the geostrophic currents. SIR is the result of the collaboration between the Atlantic Oceanographic and Meteorological Laboratory (NOAA/AOML), NOAA/CoastWatch/OceanWatch, and USF.

Risk Levels

- High
- Medium
- Low
- No Data

% of shoreline per risk level





Sargassum Inundation Report

Contact Information:

NOAA/AOML

4301 Rickenbacker Causeway, Miami, FL 33140, USA

Joaquin Trinanes

Joaquin.Trinanes@noaa.gov

Gustavo Goni

Gustavo.Goni@noaa.gov

USF, College of Marine Science

140 7th Avenue S, MSL119 St. Petersburg, FL 33701

Chuanmin Hu

huc@usf.edu

Created and maintained by Joaquin Trinanes, Chuanmin Hu, and Gustavo Goni.

References: [USF Sargassum Watch System]() [Atlantic OceanWatch]()

Disclaimer: This is an experimental product and still subject to validation by NOAA/AOML, NOAA/CoastWatch/OceanWatch, and USF.