Daily Sargassum Inundation Risk (SIR v1.5)

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

Status: Sep 30, 2026

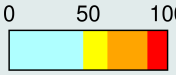
Since 2011, large amounts of Sargassum is a recurrent problem in the Caribbean Sea, in the Gulf of America and tropical Atlantic. These events can cause significant economic, environmental and public health harm. These Sargassum Inundation Risk (SIR) fields provide an overview of the risk of sargassum coastal inundation in the Caribbean and Gulf of America 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 (50-100 km) of each coastal pixel and, computing the difference between those values and a multiday baseline, classifies the risk into four categories: low (blue), warning (yellow), medium (orange) and high (red). In black are areas with not enough data. 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. The methodology to compute these fields is under development and, therefore, these fields are experimental and to be used as a reference and for research purposes only.

Coastal Risk Levels

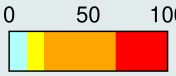
- High
- Medium
- Warning
- Low
- No Data

% of shoreline per risk level

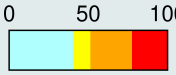
Gulf of America



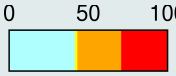
Greater Antilles



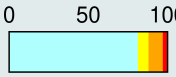
Lesser Antilles

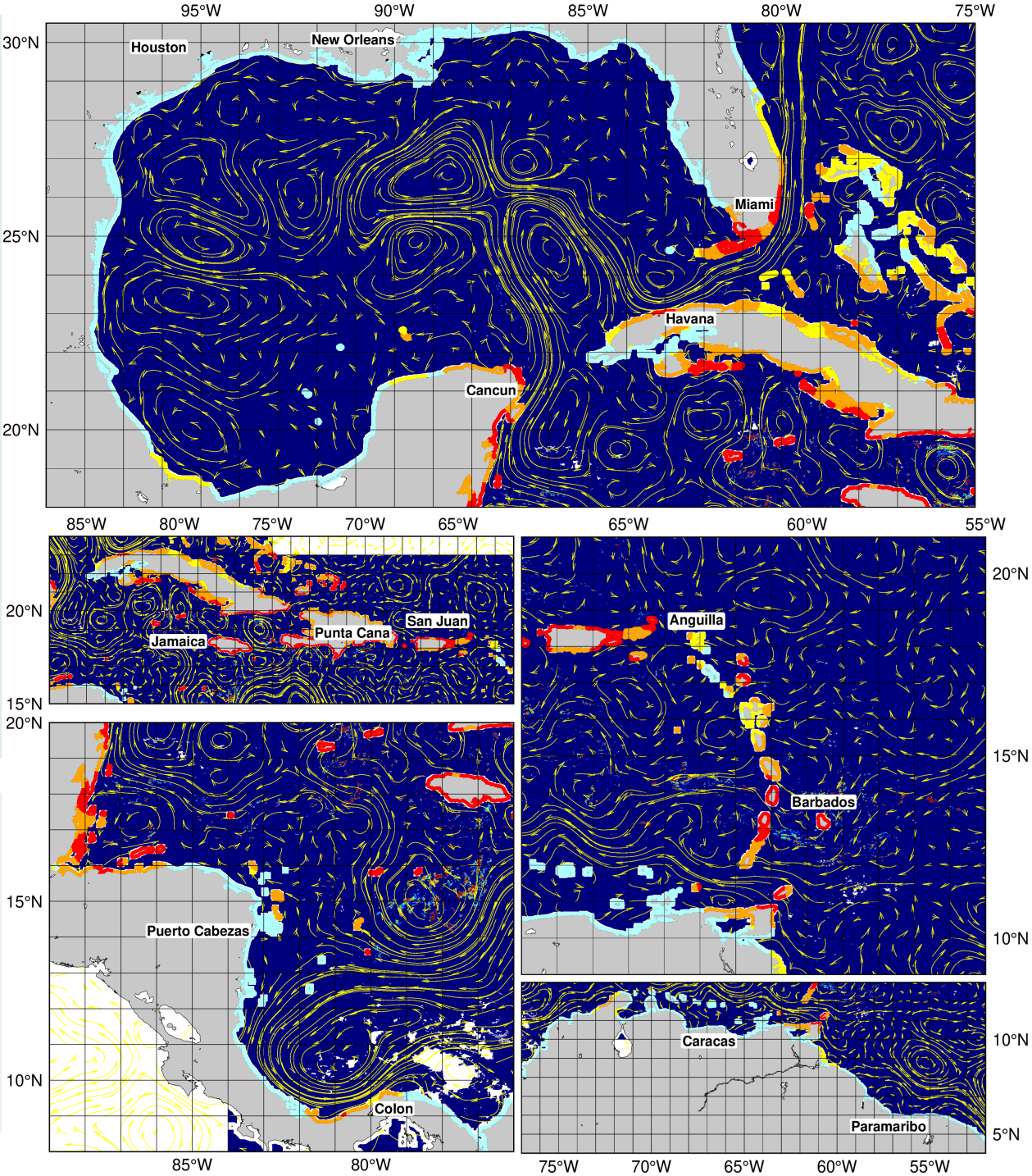


Central America



South America





Sargassum Inundation Risk

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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.