



SARGASSUM WORKING GROUP

April 2025
Updates for UNESCO/IOC/ARIBE

Since 2011, large blooms of pelagic Sargassum have affected the tropical Atlantic, causing major disruptions. To mitigate these impacts, remote sensing, in situ data, and predictive models are used for monitoring and early warning. A working group of 44 experts from 17 countries is coordinating international efforts. The group operates through four task teams focusing on information sharing, community tools, observation systems, and organizing a Sargassum forum.

Background and Rationale

Since 2011, massive blooms of **Pelagic *Sargassum*** have occurred in the tropical Atlantic and swept through the western tropical Atlantic, Caribbean Sea, Gulf of Mexico, and the west coast of Africa. These recurring events have caused **significant disruptions to coastal communities throughout the region**.

Remote-sensing and *in situ* data are needed to continuously detect and track pelagic *Sargassum* rafts in the regions above, particularly when they are approaching the coastal areas. Modelling enables the prediction of inundations at different timescales.

These data facilitate the development of accurate **early warning systems** at the regional scale and provide decision-makers and other users with the **information** required to better **prepare for and mitigate the impacts of *Sargassum* inundations on coastal communities**.

Objectives

The main goal of this Working Group is to support the successful development of operational monitoring and early warning systems for *Sargassum* for all impacted regions of the Tropical Atlantic involving international and regional partners. The working group fosters **coordination to deliver a common and comprehensive response from the international scientific community to bridge the gap between *Sargassum* monitoring and prediction and decision making**.

Composition

The working group is composed of about 44 experts from **technical, cooperation and policy backgrounds**. Co-chairs for 2025 remain Dr. Joaquin Trinanès (NOAA, USA) and Dr. Marc Lucas (CLS, France)

Our 44 members from 17 different countries are representing 35+ entities including universities (Barbados, Chile, France, Ghana, Mexico, USA, UK, Spain, Venezuela), government institutes (Trinidad and Tobago, Barbados,) regional programmes (Association of the Caribbean States, IOCARIBE), the UN Environment Programme (Cartagena Convention, SPAW RAC), the Food and Agriculture Organisation, the European Commission (EEAS, DG RTD and INTPA), Copernicus (Marine Service and LAC-Chile), National Oceanic and Atmospheric Administration (NOAA, USA), Institut de Recherche et Développement (IRD, France) and the private sector. Over 20% of our members are Early Career Ocean Professionals (ECOPs).

Activities

Members meet monthly at 2pm UTC on the second Wednesday (schedule may vary). Each meeting includes two member presentations on recent advances and time for task teams to share updates. In January 2024, the working group endorsed its terms of reference and validated the 2024 implementation plan involving four Task Teams (TT):

TT1. Sargassum Information Hub

The Sargassum Information Hub (SIH) is a website designed to be the one stop shop for all Sargassum surveillance information with direct access to near real time and forecast views, research updates and national pages.

The SIH is in the process of being updated to answer better the identified needs of users and in collaboration with the European Commission Global Gateway strategy and the SARGCOOP'II project. This task team also provides technical content to ensure up-to-date scientific information.

TT2. Community lead decision support tools

This task team works to define and implement a community Sargassum near-real-time monitoring and coastal risk inundation tool based on available data. This tool will take the form of an online bulletin with specific indicators co-designed with users.

As part of the SARGCOOP'II project, members are working to identify needs including those of fishermen, hotel managers, local beach goers and biodiversity protection agencies.

TT3. A Sargassum Integrated Observing System

This in situ focused TT is now merged with the remote sensing and modelling TTs (2024 Implementation Plan) to promote the integration and interdependence of all observation and prediction platforms.

This task team aims for a coordinated and sustained observing system of Sargassum to fill knowledge gaps and address diverse stakeholder needs with adequate data and information. Present activities include the creation of an *in-situ* monitoring guidance document for biomass associated with Sargassum. This parameter was identified by members as priority for improving detection and forecast.

TT4. Sargassum Forum

This task team works towards the organisation of a dedicated forum that will cluster a wide range of workshops both technical and non-technical under the same roof. The secretariat is currently working on contacting all possible partners outside of the WG.

A preparatory meeting is scheduled during UNOC3 week (9-13 June), in the green zone.