



Let's talk about Coastal Challenges

📅 13 June 2025 – 10:30 am - 1:30 pm CEST

📍 Inspire Area – European Digital Ocean Pavilion

🌐 United Nations Ocean Conference 2025

Abstract

Sargassum monitoring

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Since 2011, the Caribbean coasts have witnessed massive strandings of Sargassum brown seaweed, leading to significant environmental and health challenges. Originating from the Sargasso Sea, these algae emerged further south in 2009-2010, likely due to unusual westerly winds observed during that winter. Now, their abundance has increased and these algae drift in form of large rafts, along the Great Atlantic Sargassum Belt (GASB) from Africa to the Americas, driven by wind and ocean currents and they strand when they reach the coast. These rafts, sometimes hundreds of meters long, are visible from space, enabling scientists to track their proliferation and forecast their landings.

To improve alert bulletins searchers developed new algorithms to detect Sargassum and quantify its abundance using satellite imagery. To monitor them, they gathered observations coming from various complementary satellites in databases of Sargassum rafts in the Atlantic. Alongside, they set up measurement campaigns to validate satellite observations and citizen science apps are also available for public reporting sargassum raft observations, while providing access to scientific databases. This work, in particular carried out within the framework of the SargAlert project, will be presented.

