

## Outlook of 2025 Sargassum blooms



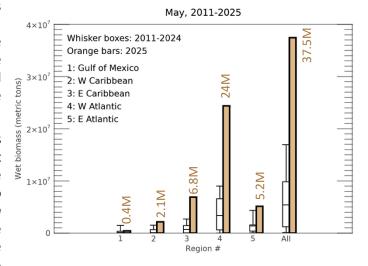
A perspective for the Caribbean Sea and Gulf of Mexico\*
May 31, 2025, by the University of South Florida Optical Oceanography Lab
(bbarnes4@usf.edu, yuyuan@usf.edu, huc@usf.edu)

The map below shows average *Sargassum* abundance for the month of May 2025, with warm colors representing higher abundance. The top color (red) indicates that 0.4% of the ocean surface is covered by *Sargassum*, meaning that *Sargassum* clumps and mats are scattered here and there in the location. The *Sargassum* abundance for each region is compared with historical values in the same month of 2011 – 2024 in the whisker box plot below, where horizontal bars in each vertical box indicate minimum, 25%, 50%, 75%, and maximal historical values, respectively.

As predicted last month, while the spatial distribution patterns of *Sargassum* remained stable, *Sargassum* amount in each region increased in May considerably. In every but the Gulf of Mexico region, *Sargassum* amount exceeded its historical record. In particular, total *Sargassum* amount from all regions combined further increased from 31M tons in April to 37.5M tons in May, making a new record. Most of these increases are due to both local growth and physical transport. Corresponding to these increases, significant *Sargassum* inundation events

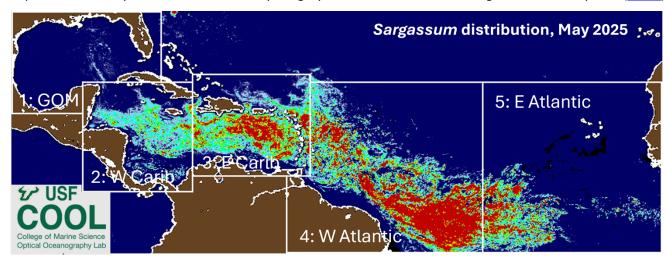
may have occurred around most Caribbean nations and islands, including the Mexican Caribbean coast. Small to moderate amount of *Sargassum* may have reached some of the Florida beaches along the Florida Keys and southeast coast of Florida. Small amount of *Sargassum* was also observed in the Mississippi delta and along Texas coast.

**Looking ahead:** As in most previous years, June is expected to see continued increases in most regions. More *Sargassum* is expected to be transported to the west Caribbean Sea and then to the Gulf through the Yucatan. *Sargassum* inundation will continue to occur in most of the Caribbean nations and islands as well as along the southeast coast of Florida. However, although 2025



is a record year in terms of *Sargassum* amount, whether a beach or small region receives record-high *Sargassum* inundation depends not only on the offshore *Sargassum* amount, but also on local factors that are difficult to predict, including winds and ocean currents.

All previous monthly bulletins as well as daily imagery can be found under the Sargassum Watch System (SaWS).



Disclaimer: The bulletin is meant to provide general outlooks of current and future bloom conditions for the Caribbean Sea and Gulf of Mexico. By no means should it be used for commercial purpose or used for predicting bloom conditions for a specific location or beach. The authors of this bulletin, as well as USF and the Federal funding agencies, take no responsibility for improper use or interpretation of the bulletin. Credit for the images and information should be given to the Optical Oceanography Lab at the USF College of Marine Science.