

Outlook of 2024 Sargassum blooms



A perspective for the Caribbean Sea and Gulf of Mexico*

January 6, 2025, by University of South Florida Optical Oceanography Lab

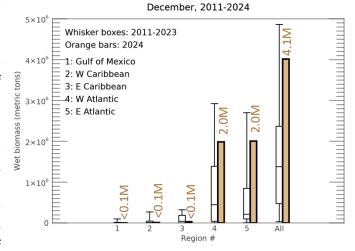
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The map below shows average Sargassum abundance for the month of December 2024, with warm colors representing higher abundance. The Sargassum abundance for each region is compared with historical values in the same month of 2011 - 2023 in the whisker box plot below, where horizontal bars in each vertical box indicate minimum, 25%, 50%, 75%, and maximal historical values, respectively.

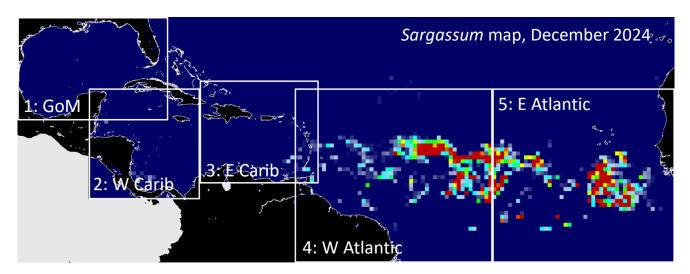
Total *Sargassum* amount in the Gulf of Mexico, western Caribbean Sea, and eastern Caribbean Sea continued to remain negligible in December, but increased substantially in the western Atlantic and eastern Atlantic, with the increases way over our "slight increase" prediction. In particular, a 6-fold increase was found in the western Atlantic, a result of east-west transport and local growth. Compared

to most previous years since 2011, Sargassum amount in the western Atlantic and eastern Atlantic as well as in the combined region all exceeded each region's 75 percentile. During the last week of December, small amounts of Sargassum already reached the Lesser Antilles.

Looking ahead: As in most previous years, January is expected to see increased *Sargassum* from December. Likewise, more *Sargassum* is expected to be around the Lesser Antilles and in the eastern Caribbean Sea. *Sargassum* in the western Caribbean Sea and the Gulf of Mexico will likely remain very low. However, because of



the relatively high amounts of *Sargassum* in the tropical Atlantic, 2025 is likely another major *Sargassum* year. We will closely monitor and track *Sargassum* throughout the central Atlantic. Meanwhile, all previous monthly bulletins as well as daily updates through near real-time imagery can be found under the *Sargassum* Watch System (SaWS, https://optics.marine.usf.edu/projects/saws.html).



Disclaimer: The information bulletin is meant to provide a general outlook of current bloom condition and future bloom probability 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.