

Outlook of 2025 Sargassum blooms



A perspective for the Caribbean Sea and Gulf of Mexico* March 31, 2025, by 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 March 2025, with warm colors representing higher abundance. 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, the *Sargassum* amount in each of the 5 regions increased in March, with most increases in the eastern Caribbean Sea and tropical Atlantic. Such increases are due to both local growth and physical transport. What is noteworthy is that the total *Sargassum* amount in the tropical Atlantic as well as for all regions combined reached a new historical record for the same month of

March. The amount in the Gulf is still low but there are signs that some of the *Sargassum* will be transported to the Straits of Florida in the coming weeks. There is a relatively large amount in offshore waters east of Florida, but the probability of this *Sargassum* reaching the east coast is low because the strong Gulf Stream may serve as a barrier.

Looking ahead: April is expected to see continued increases. More *Sargassum* is expected to enter the Caribbean Sea through the Lesser Antilles, and to enter the Gulf through the Yucatan. *Sargassum* inundation



will likely occur in most of the Caribbean nations and islands as well as in the Florida Keys. The year of 2025 will be another major *Sargassum* year. All previous monthly bulletins as well as daily imagery updates can be found under the *Sargassum* Watch System (SaWS). Finally, a NOAA-funded effort led to the development of higher-resolution *Sargassum* maps for the <u>lower Florida Keys</u> and <u>upper Florida</u> Keys. These new maps will be combined with circulation models to have a short-term forecast of *Sargassum* transport, and such a capacity will be expanded to other regions in the near future.



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.