USF COOL
College of Marine Science
Optical Oceanography Lab

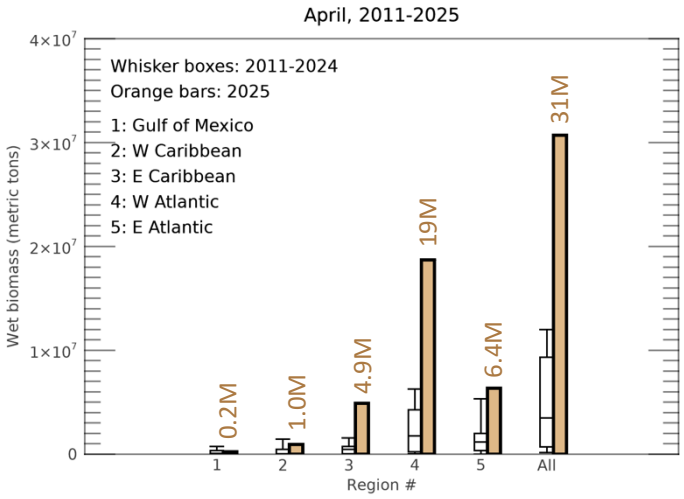
Outlook of 2025 *Sargassum* blooms

A perspective for the Caribbean Sea and Gulf of Mexico*

April 30, 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 April 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 region but the east Atlantic increased in April. The increases in the Gulf of Mexico and western Caribbean Sea were typical as in most previous years, but total amounts in the eastern Caribbean Sea and west Atlantic reached surprisingly high levels – they were both 200% higher than their historical records in April. Similarly, the total amount in all regions combined was 150% higher than the historical record in April. Furthermore, this total amount was 40% higher than the all-time high in June 2022, which makes 2025 a new record year. Most of these increases are due to both local growth and physical transport, but the exact reasons behind these new historical records need to be investigated. Corresponding to these increases, *Sargassum* beaching events have been reported around the Caribbean and along the southeast coast of Florida.



Looking ahead: As in most previous years, May 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.

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 lower Florida Keys and upper Florida 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.