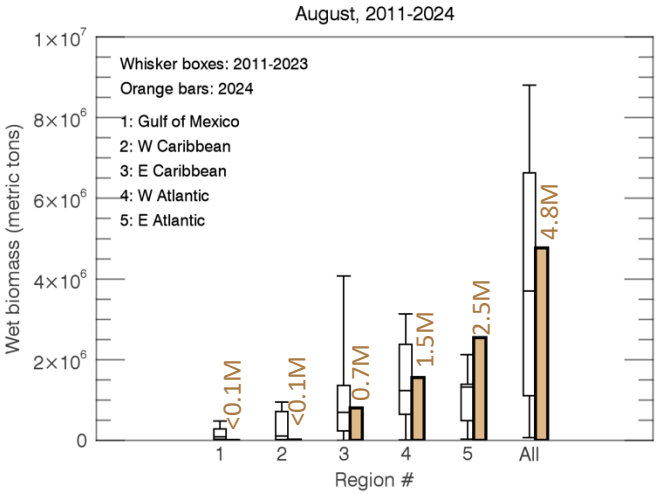
Outlook of 2024 *Sargassum* blooms

A perspective for the Caribbean Sea and Gulf of Mexico*

August 31st, 2024, 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 August 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.

As predicted last month, total *Sargassum* amount in the entire region covered by the map and in each sub-region all decreased in August, with a substantial decline in the western Atlantic (from 4.5M tons in July to 1.5M tons in August). Compared to most previous years since 2011, however, *Sargassum* amount in the eastern Caribbean Sea (CS), western Atlantic, and eastern Atlantic still remained relatively high (all above the 50 percentile). The Gulf of Mexico (GoM) and western CS continued to be mostly free of *Sargassum*.



MODIS has degraded recently. Therefore, although the spatial patterns of *Sargassum* are still valid, the *Sargassum* amounts have been underestimated, which will be corrected once NASA reprocesses the data.

Looking ahead: In all previous years, August is the month of *Sargassum* decline, and this year is no exception. This trend is going to continue in the coming months to at least December. Specifically, the western CS and the GoM (including Florida) will continue to be *Sargassum* free. In other words, *Sargassum* season in these two regions is over this year. *Sargassum* inundation in the eastern CS will continue to decline. The southern portions of the Bahamas may continue to see some drifting mats of *Sargassum* transported from the eastern CS. 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).