

Outlook of 2024 *Sargassum* blooms

A perspective for the Caribbean Sea and Gulf of Mexico*

August 1st, 2024, by University of South Florida Optical Oceanography Lab

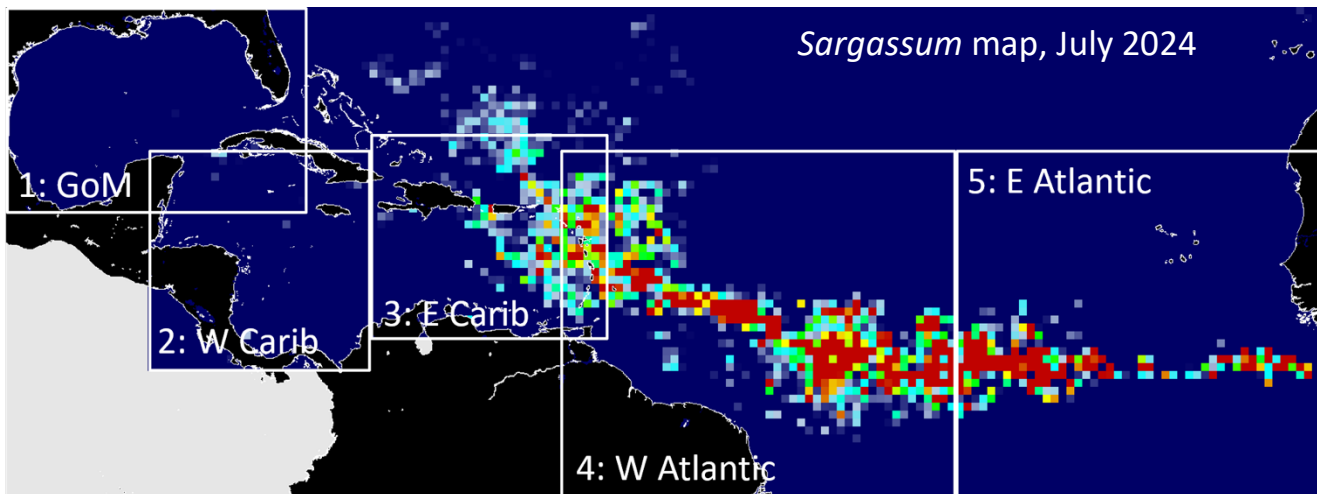
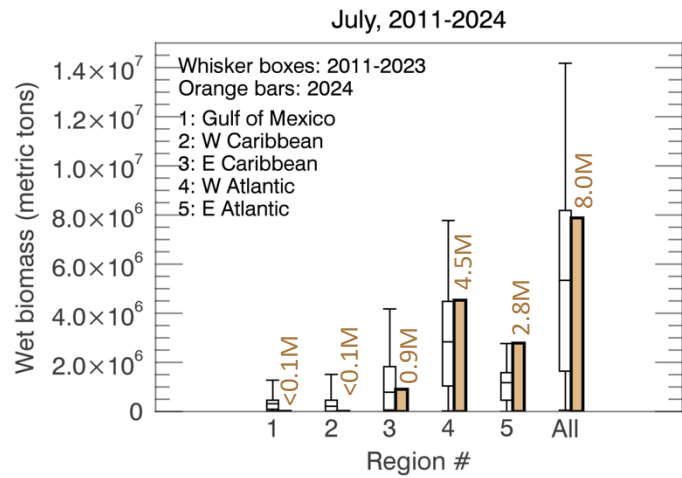
(bbarnes4@usf.edu, yuyuan@usf.edu, huc@usf.edu)

The map below shows average *Sargassum* abundance for the month of July 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 slightly decreased in July but remained relatively high (75 percentile). While the spatial distribution patterns remained stable from June to July, the Gulf of Mexico (GoM) and western Caribbean Sea (CS) were nearly free of *Sargassum*, and *Sargassum* amount in the western Atlantic was nearly halved. The eastern Atlantic showed a sharp increase, but this was likely due to dramatic changes in cloud cover.

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: The findings in July confirmed our earlier prediction of the lack of momentum of *Sargassum* growth. Thus, total *Sargassum* amount in the coming months will continue to decline, as observed in previous years. The western CS and the GoM (including Florida) will continue to be *Sargassum* free. *Sargassum* inundation in the eastern CS will continue but to a lesser degree. The southern portions of the Bahamas may 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>).



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.