

## Outlook of 2023 Sargassum blooms in the Caribbean Sea and Gulf of Mexico\* June 30, 2023, by University of South Florida Optical Oceanography Lab (bbarnes4@usf.edu, yuyuan@usf.edu, huc@usf.edu)

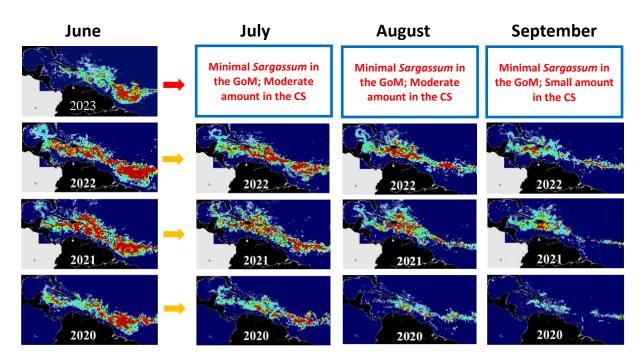


The maps below show *Sargassum* abundance, with warm colors representing higher values. Overall, the *Sargassum* quantity in the Great Atlantic *Sargassum* Belt (extending from west Africa to the Gulf of Mexico) during the month of June 2023 decreased slightly (by a few %) from May 2023, with a total wet weight of about 9 million metric tons. Such a slight decrease is a result of substantial decreases in the Gulf of Mexico (GoM) and Caribbean Sea (CS), balanced by increases in the Central West Atlantic (CWA). In particular, although last month we predicted a decrease in the GoM in June, the magnitude of the decrease (75%) was beyond expectation. Compared to the same month of 2011 – 2022, the quantity in the GoM dropped to the lower 25% percentile but in the CS (about 2 million metric tons) still remained in the top 50% percentile.

The *Sargassum* aggregations in the CWA have continued to move westward with prevailing currents and winds. In the CS, most *Sargassum* was around the Lesser Antilles and along the southern coasts of Hispanola, Jamaica, and Puerto Rico. Minimal *Sargassum* amount was found in the western CS, including waters along the Mexico's Caribbean coast. Very little *Sargassum* was found by the end of June in the Straits of Florida and along the east coast of Florida.

**Looking ahead**, because of the continued decreases of *Sargassum* in the GoM and CS and because the increases in the CWA appeared to have slowed down, we predict that the *Sargassum* amount in the GoM will remain minimal, and in the CS will either decrease or remain stable. This trend may continue in the next 2-3 months, which should be good news to the residents living in the Florida Keys and east coast of Florida as well as in the west coast of the CS. Nevertheless, impacts of *Sargassum* beaching events will continue to be felt throughout some of the eastern CS and possibly western CS regions, although it is difficult to predict exact timing and location for individual beaching events.

We will continue to closely monitor and track *Sargassum* in each region, with more summary updates provided by the end of July 2023. Meanwhile, 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. 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 NASA, take no responsibility for improper use or interpretation of the bulletin.