

SARGASSUM

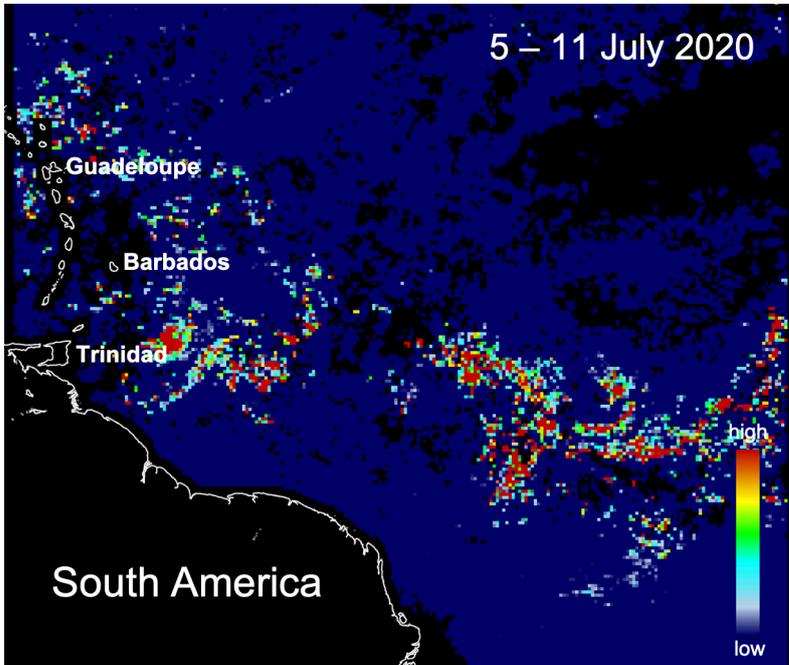
SUB-REGIONAL OUTLOOK BULLETIN



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Supported by:
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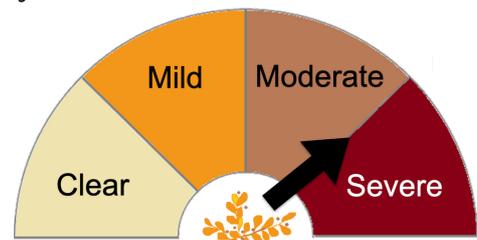


Sargassum image sourced from Optical Oceanography Laboratory USF.
Click on picture above to access the source image.

The map above is a satellite image processed to show sargassum abundance over a 7-day period. Warm colours represent high sargassum abundance. **Sargassum Watch System (SaWS)** website: <https://optics.marine.usf.edu/projects/saws.html>

SARGASSUM INFLUX EVENTS WILL BE MODERATE TO SEVERE OVER THE NEXT 3 MONTHS (JULY-SEPT 2020)

- The Eastern Caribbean islands have seen variable and moderate sargassum influxes over the second quarter of 2020 in the north, middle and southern islands. ([Click here](#))
- The level of sargassum arriving has now increased considerably.
- However, there is 18% less sargassum visible out in the Atlantic than this time last year.

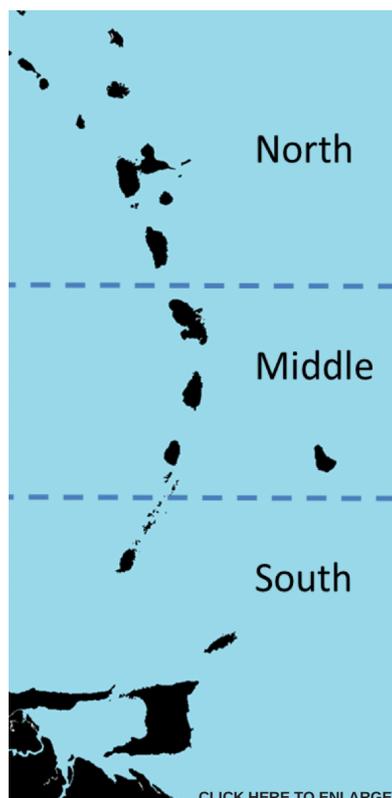


Sargassum abundance intensity level
(based on image 5-11 July 2020)

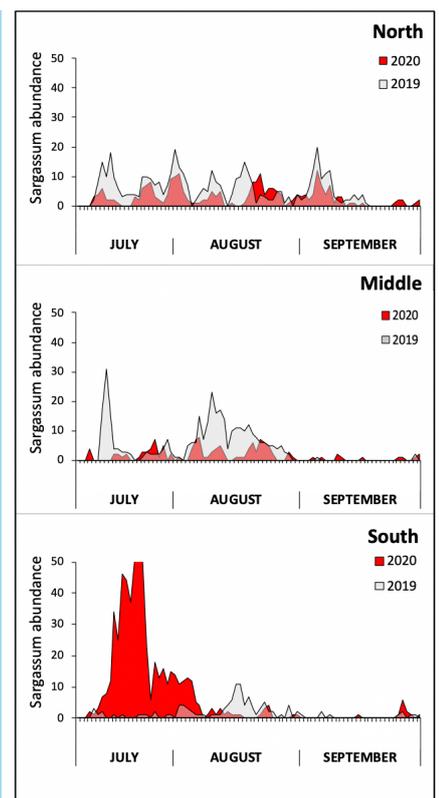
CURRENT OUTLOOK (JULY-SEPTEMBER 2020)

There is a big difference among the islands in the amount of sargassum expected to arrive over the next 3 months.

- Northern islands are set to receive moderate influxes of sargassum until mid-September when it will clear, unless anomalous winds push the sargassum more westwards which could affect Anguilla to the Dominican Republic.
- Middle islands are likely to continue experiencing moderate levels through July and August, and should be mild or clear by September.
- Southern islands are facing severe sargassum influxes through July and early August as ocean currents concentrate the seaweed and push it into the Caribbean Sea through the south end of the island chain.
- This influx is in prime position for influx to the Netherland Antilles in about a month and along the Mayan coast in 2-3 months.



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IMPLICATIONS FOR THE TOURISM SECTOR

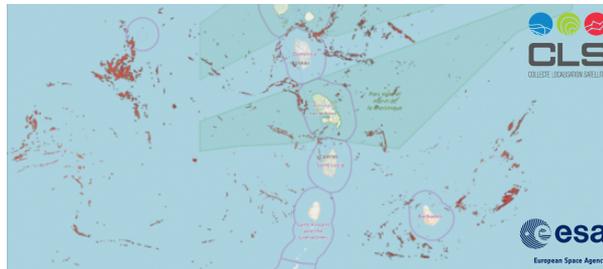
- Stakeholders in the tourism industry can expect more-or-less continuous mild to moderate sargassum influxes over the next three months in the northern and middle islands, although this should decrease at the end of September. Islands in the southern part of the island chain will be hard hit in July and August, but pretty well clear by September.
- In light of the COVID-19 pandemic, many hotels and other tourism businesses may remain closed, but maintenance crews will likely be needed to help clear mass influxes to prevent long-term damage

IMPLICATIONS FOR THE FISHERIES SECTOR

- The traditional pelagic fishing season has already ended, but large floating sargassum mats will likely maintain catches of almaco jacks (amberfish) over the summer and could bring in young dolphinfish which should be left to mature.
- Fishers should remain vigilant at sea, particularly in the south where they are likely to encounter large sargassum mats.
- Fisherfolk will likely need to keep clearing their landing sites through much of the summer.

SPOTLIGHT ON SARGASSUM INNOVATION

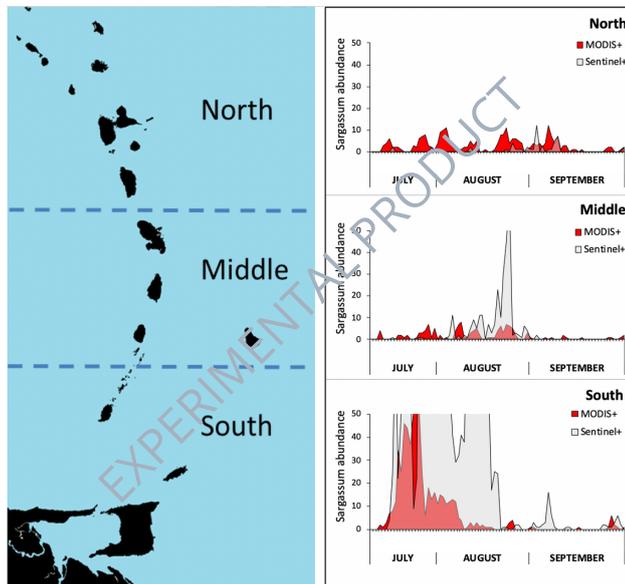
Sargassum
Detection and
Monitoring with
SAMtool.
[Click here for
more info.](#)



The prediction graph below illustrates a comparison of three-month forecasts (JAS 2020) using processed satellite images from SaWS (USF) and SAMtool (CLS). CLS images are derived from higher resolution Sentinel-3 satellites.

The forecast is quite similar for the northern islands. However, a high peak is expected in late August for the middle islands.

In the southern islands, a large peak extending into August with a very high peak in mid August is observed. This latter peak is from the equatorial region that is not visible in the MODIS+ satellite images.



Acknowledgement: The development of this information product has benefited from the generous support of the Food and Agriculture (FAO) / Global Environment Fund (GEF) project 'Climate Change Adaption in the Eastern Caribbean Fisheries Sector' (CC4FISH), and the Caribbean Biodiversity Fund (CBF) project 'Adapting to a new reality: managing responses to influxes of sargassum seaweed in the Eastern Caribbean (SargAdapt)', co-financed by the International Climate Initiative (IKI) of the German Federal Ministry for Environment, Nature Conservation, and Nuclear Safety through KfW. **Disclaimer:** The information bulletin is meant to provide a general outlook of current sargassum abundance and the likelihood of future sargassum influx events for the Eastern Caribbean. By no means should it be used for commercial purpose, or for predicting the arrival of an influx event for a specific location or beach. We make no warranties, either expressed or implied, concerning the accuracy, completeness, reliability or suitability of said information. The bulletin may be freely used and distributed by the public with appropriate acknowledgement of its source but shall not be modified in content and then presented as original material. We take no responsibility for improper use or interpretation of the bulletin.

USEFUL RESOURCES

Click on the titles below to download resources

Project SargAdapt Webpage.

GCFI Sargassum Influx Response Poster. A useful reminder at this time.

Monitoring and evaluation of Sargassum collection operations: Summary report
Best practices handbook for Caribbean fishers coping with sargassum
CERMES/GCFI/SPAW-RAC Sargassum Management Brief

LATEST PUBLICATIONS

Click on the titles below to access articles

Temporal changes in the composition and biomass of beached pelagic Sargassum species in the Mexican Caribbean. (García-Sánchez et al. 2020)

How do you deal with 9m tonnes of suffocating seaweed? (Guardian)

Biocatalytic characteristics of chitosan nanoparticle-immobilized alginate lyase extracted from a novel *Arthrobacter* species AD-10. (Mohapatra 2020)

Pelagic Sargassum spp. capture CO₂ and produce calcite. (Paraguay-Delgado et al. 2020)

Golden carbon of Sargassum forests revealed as an opportunity for climate change mitigation (Gouvêa et al. 2020)

Pelagic Sargassum for energy and fertiliser production in the Caribbean: A case study on Barbados. (Thompson et al. 2020)

Sargassum Inundations in Turks and Caicos: Methane Potential (Milledge et al. 2020)

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