

SARGASSUM

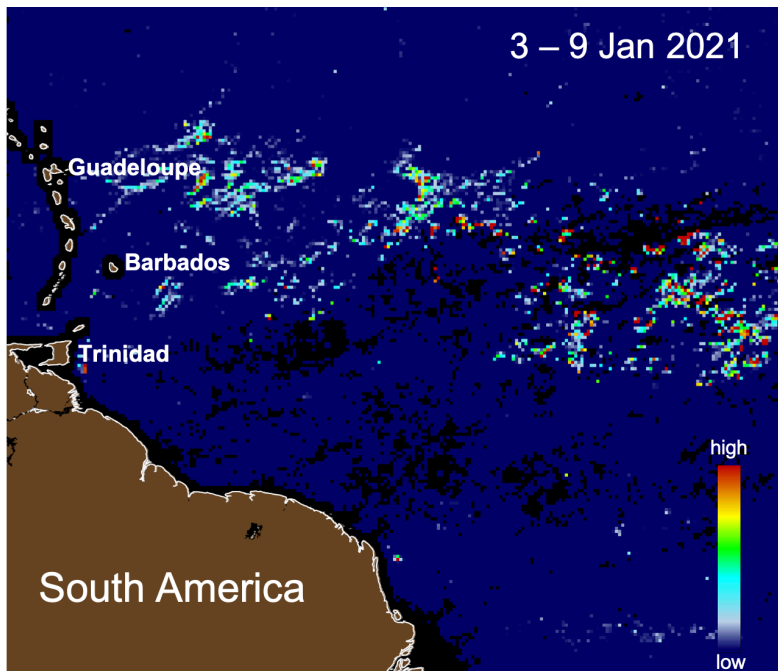
SUB-REGIONAL OUTLOOK BULLETIN



JAN 2021 | VOL I | ISSUE 8

Supported by:
Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety
based on a decision of the German Bundestag

KFW

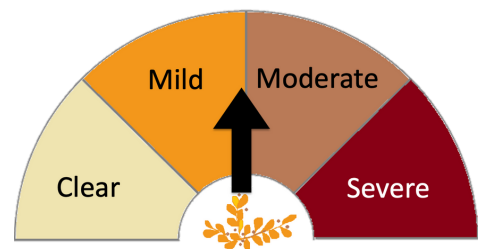


Sargassum image sourced from Optical Oceanography Laboratory USF.
[Click on picture above to access the source image.](https://optics.marine.usf.edu/projects/saws.html)

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 (JAN - APRIL 2021)

- The Eastern Caribbean islands saw mild sargassum influxes at the end of 2020. [\(Click here to view photos\)](#)
- The level of sargassum arriving now has increased slightly.
- There is 150% more sargassum visible out in the Atlantic than this time last year. However, this is still below 2018 levels, the worst year to date.



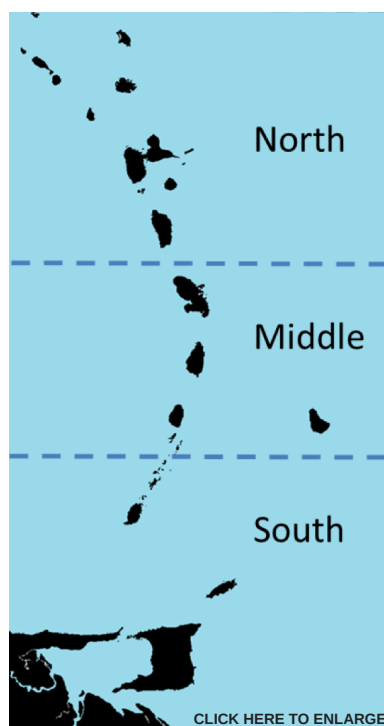
Sargassum abundance intensity level
(based on image 3 - 9 Jan 2021)

CURRENT OUTLOOK (JANUARY-APRIL 2021)

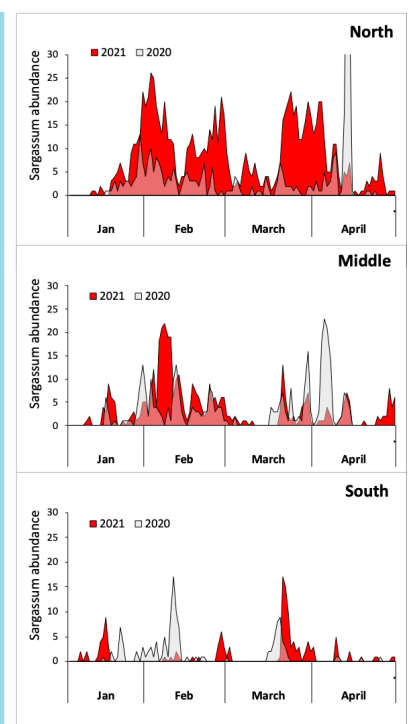
NOTE: New satellite imagery indicates much higher levels of sargassum than was predicted by the previous forecast.

The islands of the Eastern Caribbean can expect moderate to severe sargassum influxes over the next 3+ months (red), especially so for the northern islands, compared with the same period in 2020 (grey).

- Northern islands are set to receive moderate to severe influxes over the next 3 months with some reprieve in early March.
- Middle islands will experience moderate influxes from the end of January through early March with periodic influxes thereafter.
- In contrast, southern islands are expected to remain largely clear with a spike in late March.



[CLICK HERE TO ENLARGE](#)



IMPLICATIONS FOR THE TOURISM SECTOR

- Stakeholders in the tourism industry can expect more-or-less continuous mild to moderate sargassum influxes over the next few months in the middle and southern islands, with an ease at the beginning of April. Islands in the northern part of the island chain will be hard hit in the first 3 months.
- Clean up operations will likely put an extra strain on resources adding to the current COVID-19 challenges.

IMPLICATIONS FOR THE FISHERIES SECTOR

- The traditional pelagic fishing season got off to an unexpected slow start given the absence of sargassum. There were moderate landings of flyingfish and dolphinfish, with some juveniles being caught.
- Consumers can expect an increase in the availability of almaco jacks (amberfish) in the coming months given the current sargassum forecast.
- Fishers should remain vigilant at sea, particularly in the north-east where they are likely to encounter large sargassum mats.
- Fisherfolk will likely need to keep clearing their windward landing sites through much of the first quarter of 2021

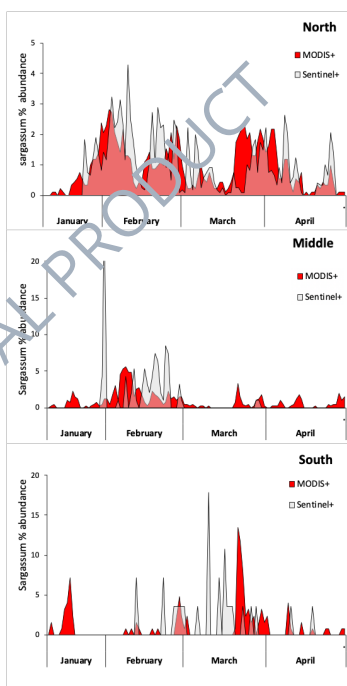
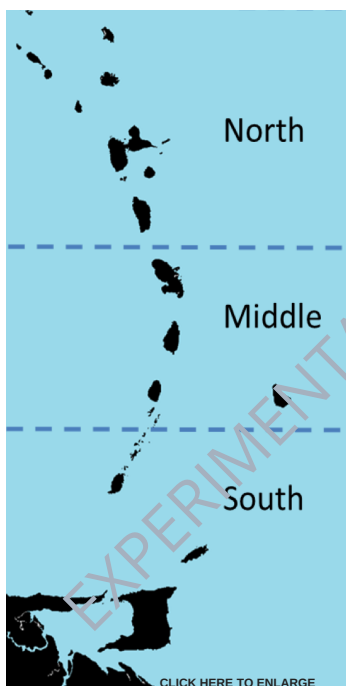
EXPERIMENTAL PREDICTION PRODUCT

The prediction graph below illustrates a comparison of 3+ month forecasts using a **relative index of sargassum** from processed satellite images by SaWS (USF/MODIS+) and SAMtool (CLS/Sentinel+). Close overlap of the two lines on any one graph indicates that the predictions are similar between the two datasets.

The forecast is remarkably similar for the northern islands.

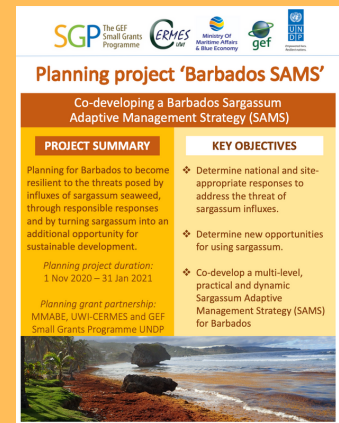
The prediction for the middle islands shows some difference with only Sentinel+ predicting a spike at the end of January.

The outlook for the southern islands differs quite a bit with Sentinel+ showing an earlier arrival of sargassum each month.



USEFUL RESOURCES

Click on the images and titles for more information



BGI-SAMS Project Announcement



Sargassum Watch (NOAA) Data collecting tools
(English and Spanish)
21 - 22 January 2021 | Online

Upcoming Webinar: Sargassum Watch (NOAA) Data Collecting tools

LATEST PUBLICATIONS

Click on the titles below to access articles

Pelagic Sargassum Prediction and Marine Connectivity in the Tropical Atlantic (Johnson et al. 2020)

A NEMO-based model of Sargassum distribution in the Tropical Atlantic (Jouanno et al. 2020)

Sargassum distribution model based on the NEMO ocean modelling platform (Jouanno and Benshila 2020)

In situ observations and modelling revealed environmental factors favouring occurrence of *Vibrio* in microbiome of the pelagic sargassum responsible for strandings (Michotey et al. 2020)

Massive influx of pelagic Sargassum spp. on the coasts of the Mexican Caribbean 2014–2020: challenges and opportunities (Chávez et al. 2020)

**SUBSCRIBE TO SARGNET
LISTSERV (CLICK HERE)**