



# SARGASSO SEAWEED IN SIGHT

**Local stakeholders, citizens and tourists missing white sandy beaches can now consult the evolution of these seaweed mats in the Caribbean online.**

Sargasso mats have serious impacts on tourism, fishing and the health of citizens. The coastal regions deeply affected by mass strandings have seen the annual cost of cleaning beaches soar. The restoration of the beaches in the Caribbean has been estimated at an incredible 120 million dollars per year! Fishermen immobilized at the quay are becoming increasingly frequent, their propellers getting entangled in these algae infesting the fishing ports. Citizen health is also threatened. The decomposing Sargasso seaweed fumes release gases that are sources of intoxication.

We are currently in the middle of the stranding season. CLS's Earth observation and space oceanography experts have placed the affected areas under high-level satellite surveillance. Thanks to the development of an operational capacity to detect and forecast Sargasso drift, CLS provides strategic information to local stakeholders from space: maps of the presence of algae and drift forecasting based on the use of optical and radar satellite sensors.

This monitoring, at an altitude of several hundred kilometers, can cover the overall state of Sargasso mats throughout the Caribbean, the Gulf of Mexico and the African coast.

Local stakeholders, citizens and tourists in need of a destination found in postcards can now consult the evolution of these banks online. This reliable satellite solution was developed with the support of the European Space Agency and chosen by Météo-France in 2019 on behalf of the French government, whose confidence in this solution was renewed this year.





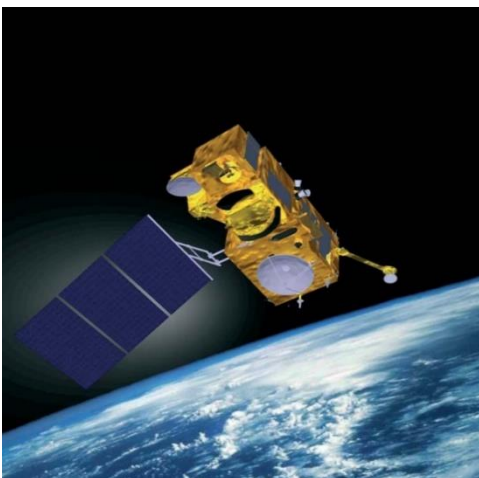
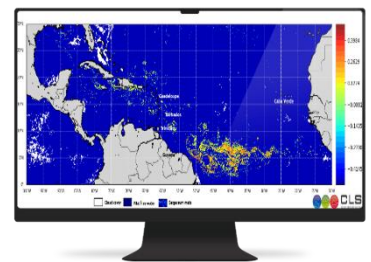
## 2021 season: a resurgence of Sargassum mats

The borders are slowly opening after being closed due to the pandemic. Travelers are already imagining turquoise waters and white beaches. That's why CLS is now providing weekly updates on the sargassum situation throughout the Atlantic region. Anyone can access this information:

- Local governments looking to stay alert and mitigate impacts to their economies and citizens
- Tourism stakeholders who seek to reassure their customers
- And the customers themselves who would like to choose their destination according to these new criteria.

CLS's sargassum detection and monitoring tool, SAMTool, is a scalable solution available through a secure web portal, with no local software installation needed. The first screenshot represents the weekly detections made available, the second screenshot in the middle represents the daily Sargassum detections. The last screen shows the yellow, black and red dots representing the probable drift positions of the Sargassum rafts, with forecasts valid up to five days.

For more than 5 years now, CLS has been working on the development of an operational solution to help solve the problem caused by massive Sargassum strandings. As an expert in space-based solutions, the company has devised a solution based on optical and radar satellite sensors that can detect Sargassum, day or night and regardless of cloud cover.



As an expert in spatial oceanography, the company has also developed a drift model that can now be used to predict future strandings. Faced with an increasing number of strandings, CLS has been able to test its solution on numerous cases and thus perfect its predictions. CLS provides an operational service supported by analysts, based on a unique combination of Earth observation satellite data from 6 optical instruments and 2 synthetic aperture radar (SAR) instruments.

# Press Contacts:

## CLS

Amélie PROUST ALBRAND

[aproust@groupcls.com](mailto:aproust@groupcls.com)

+33 (0) 6 62 80 45 92

[www.cls.fr](http://www.cls.fr)

## CLS

Anna SALSAC-JIMENEZ

[asalsacjimenez@groupcls.com](mailto:asalsacjimenez@groupcls.com)

+33 (0) 6 70 01 67 55

[www.cls.fr](http://www.cls.fr)

## About CLS

CLS is a global company and pioneer provider of monitoring and surveillance solutions for the Earth, created in 1986. We are subsidiary of the French Space Agency (CNES)<sup>1</sup> and CNP<sup>2</sup>, an investment firm.

Our mission is to create innovative space-based solutions to understand and protect our planet and to manage its resources sustainably.

CLS employs 800 people at our headquarters in Toulouse (France) and in 29 other sites around the world. The company works in five strategic markets:

- sustainable fisheries management,
- environmental monitoring,
- maritime surveillance,
- fleet management,
- and energy & mining.

CLS processes data from 100,000 transponders per month (such as drifting buoys, animal tags, VMS transponders, & LRIT tracking) and observes the oceans and inland waters (more than 20 instruments onboard satellites daily deliver information to CLS on the world's seas and oceans). In addition, we monitor land and sea activities by satellite (nearly 10,000 radar images and several hundred drone flights are processed each year). The CLS Group had revenue of nearly 138,4 million Euros in 2020.

Committed to a sustainable planet, the company works every day for the Earth, from Space.

[www.cls.fr](http://www.cls.fr)

### <sup>1</sup>CNES

CNES (Centre National d'Études Spatiales) is the public establishment responsible for proposing French space policy to the government and implementing it within Europe. It designs and places satellites in orbit and invents the space systems of tomorrow; it promotes the emergence of new services, useful in everyday life. CNES, created in 1961, is the originator of major space projects, launchers and satellites, and is the natural partner for industry to push innovation. CNES has nearly 2,500 employees, men and women who are passionate about space, which opens up infinite fields of application and innovation, and who work in five areas: Ariane, science, observation, telecommunications and defense. CNES is a major player in technological innovation, economic development and industrial policy in France. It also forges scientific partnerships and is involved in numerous international cooperative ventures. France, represented by CNES, is the main contributor to the European Space Agency (ESA).

[www.cnes.fr](http://www.cnes.fr)

### <sup>2</sup>CNP

Founded by Mr. Albert Frère and owned by members of his family, CNP is one of the two pillars of the Frère Group. With a stable and supportive family shareholder base, CNP focuses on long-term value creation through active involvement with the management teams of the companies in which it is the majority or leading shareholder. Through its two pillars, CNP and GBL, the Frère Group manages net asset value of around €5.5 billion, deployed through a diversified portfolio of global companies that are leaders in their sectors of activity.

[www.cnp.be](http://www.cnp.be)

