

"Commodo and Incommodo" investigation of a mining project, Ivory Coast

Sentinel-1 CSAR IW acquired on 30 September 2022 at 18:42:42 UTC

Sentinel-2 MSI acquired on 24 December 2017, 03 January 2020, 22 January 2022, 02 January 2023

Sentinel-3 SLSTR RBT acquired on 03 January 2020

Author(s): Sentinel Vision team, VisioTerra, France - svp@visioterra.fr

Keyword(s): Land, natural resources, Commodo Incommodo, Mangrove, Mine permit, Sassandra, Ramsar wetland, Ivory Coast

Fig. 1 - S3 SLSTR (03.01.2020) - 5,3,2 - Ivory Coast (left) and zoom on the Sassandra sub-prefecture and the mining permit area (right). [2D view](#) [2D view](#)

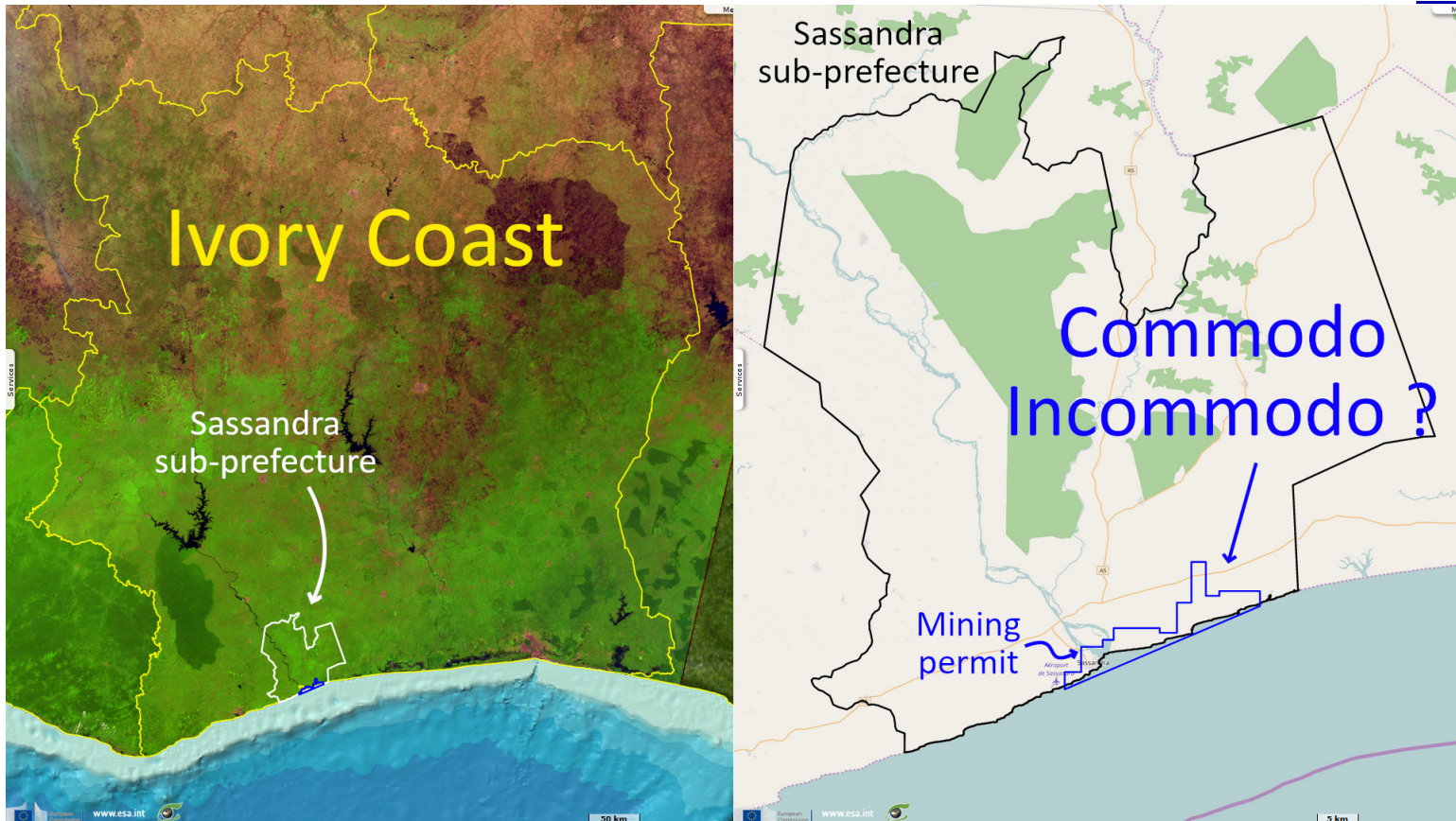


Fig. 2 - Digital Elevation Model (left) and land use land cover map (right).

[2D view](#) [2D view](#)

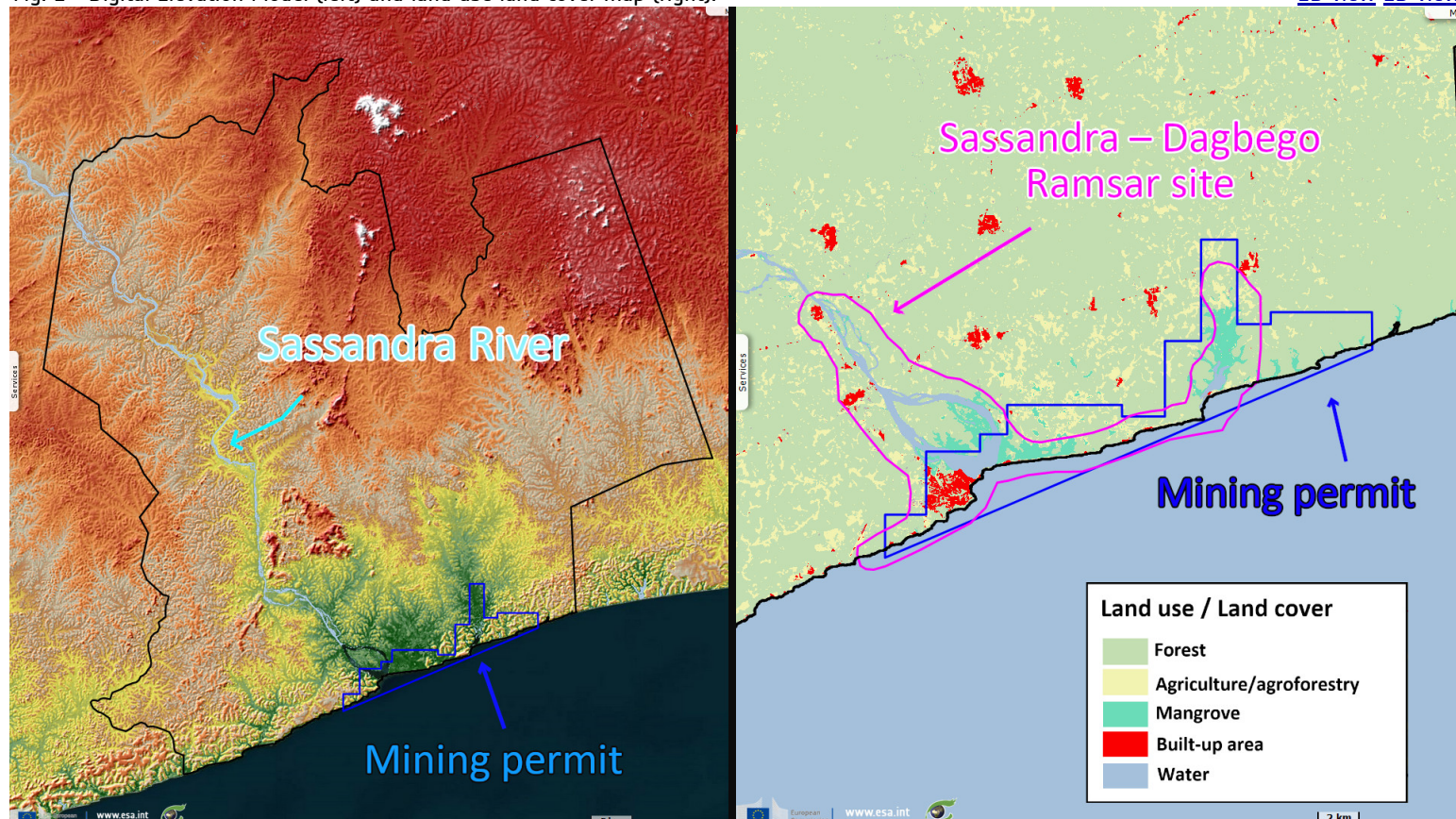
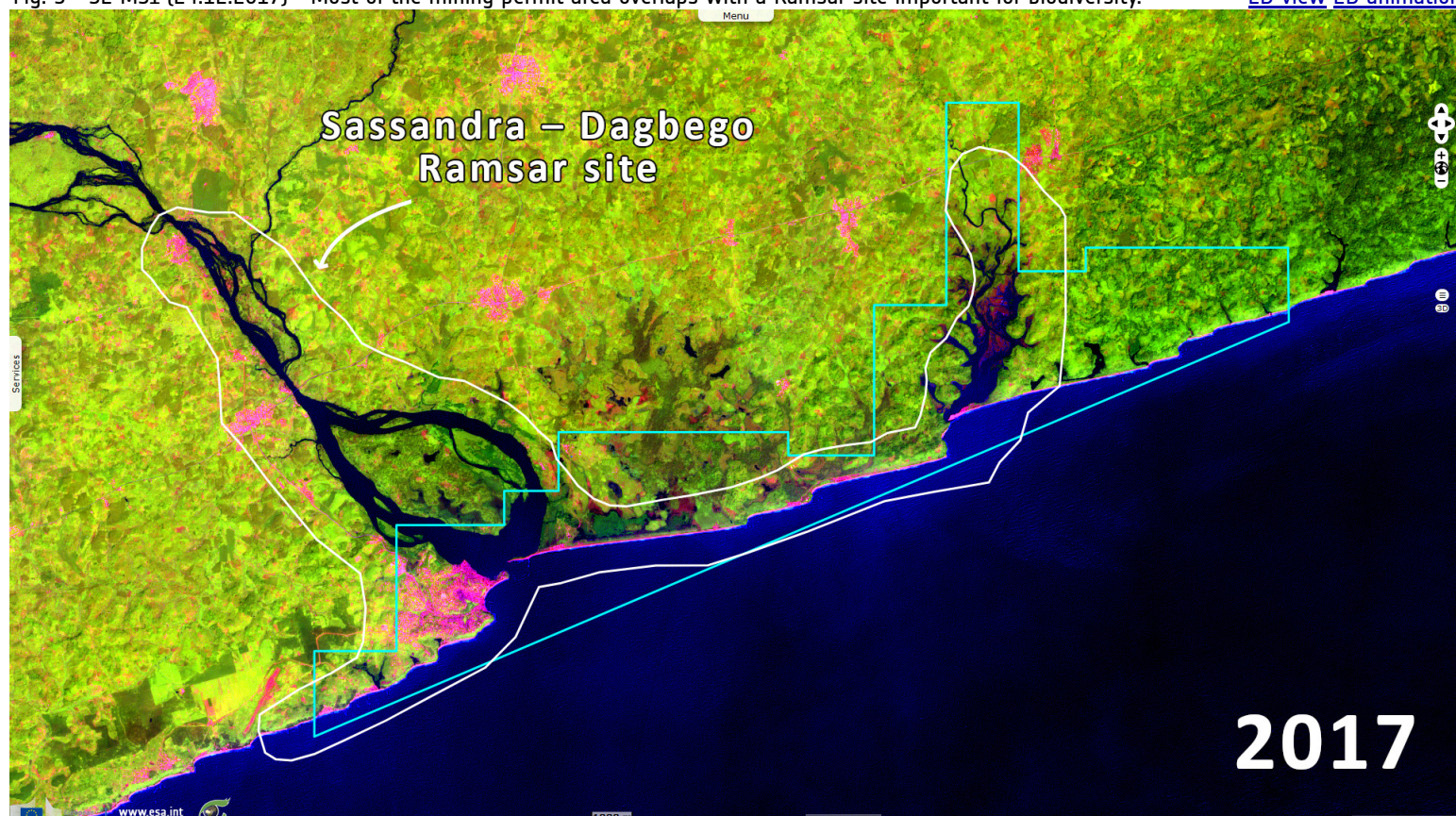


Fig. 3 - S2 MSI (24.12.2017) - Most of the mining permit area overlaps with a Ramsar site important for biodiversity.

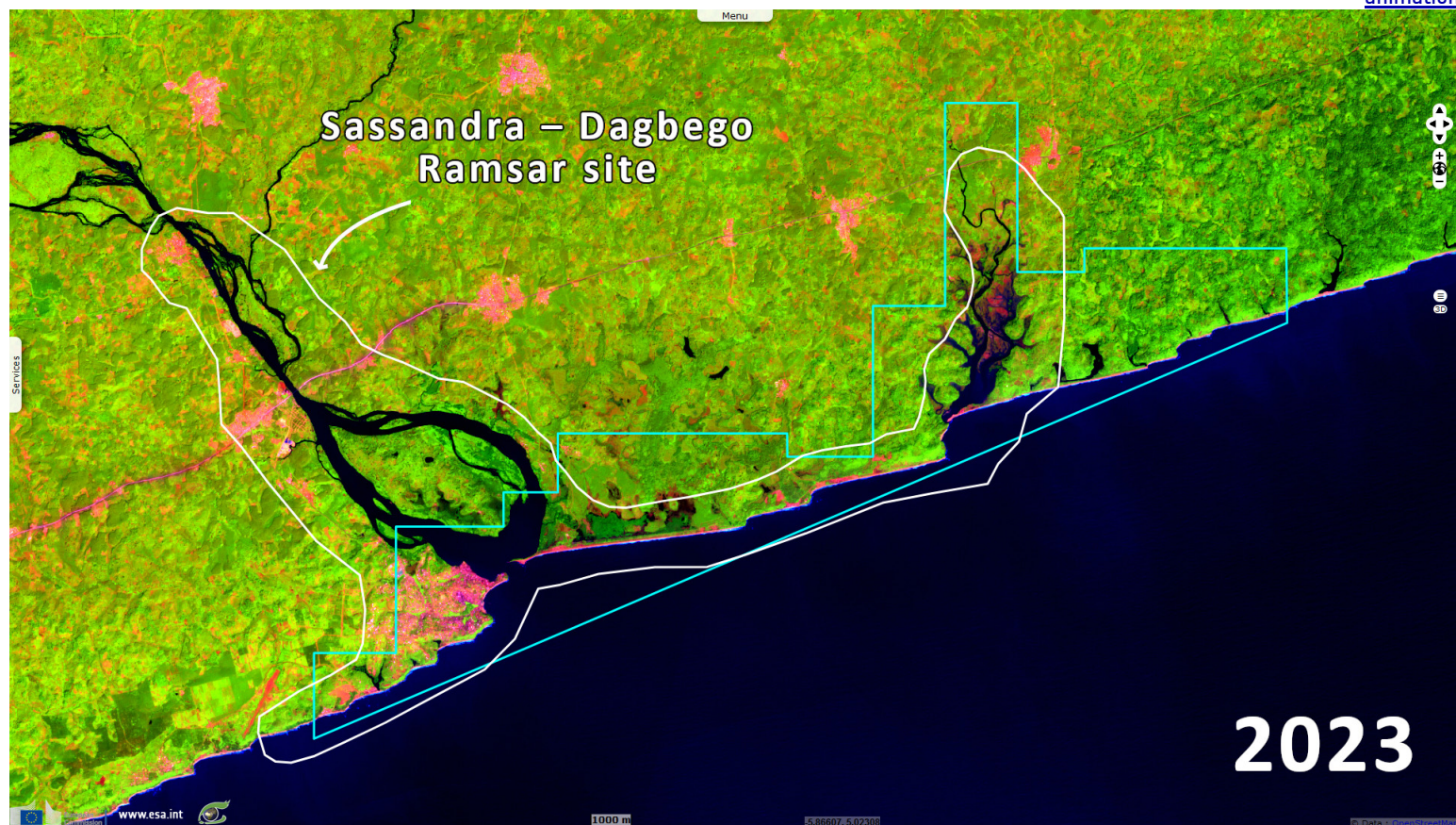
[2D view](#) [2D animation](#)



A request for investigation "Commodo and Incommodo" has been opened by the Sassandra sub-prefecture (Ivory Coast) regarding a request for the exploitation of heavy mineral concentrate such as ilmenite, magnetite, garnet, zircon, ilmenorutile, rutile and monazite. The exploitation would extend over an area of 83.14 km².

Fig. 4 - S2 MSI (02.01.2023) - 11,8,2 - The Sassandra–Dagbego Ramsar site is home to the best preserved mangroves in the country.

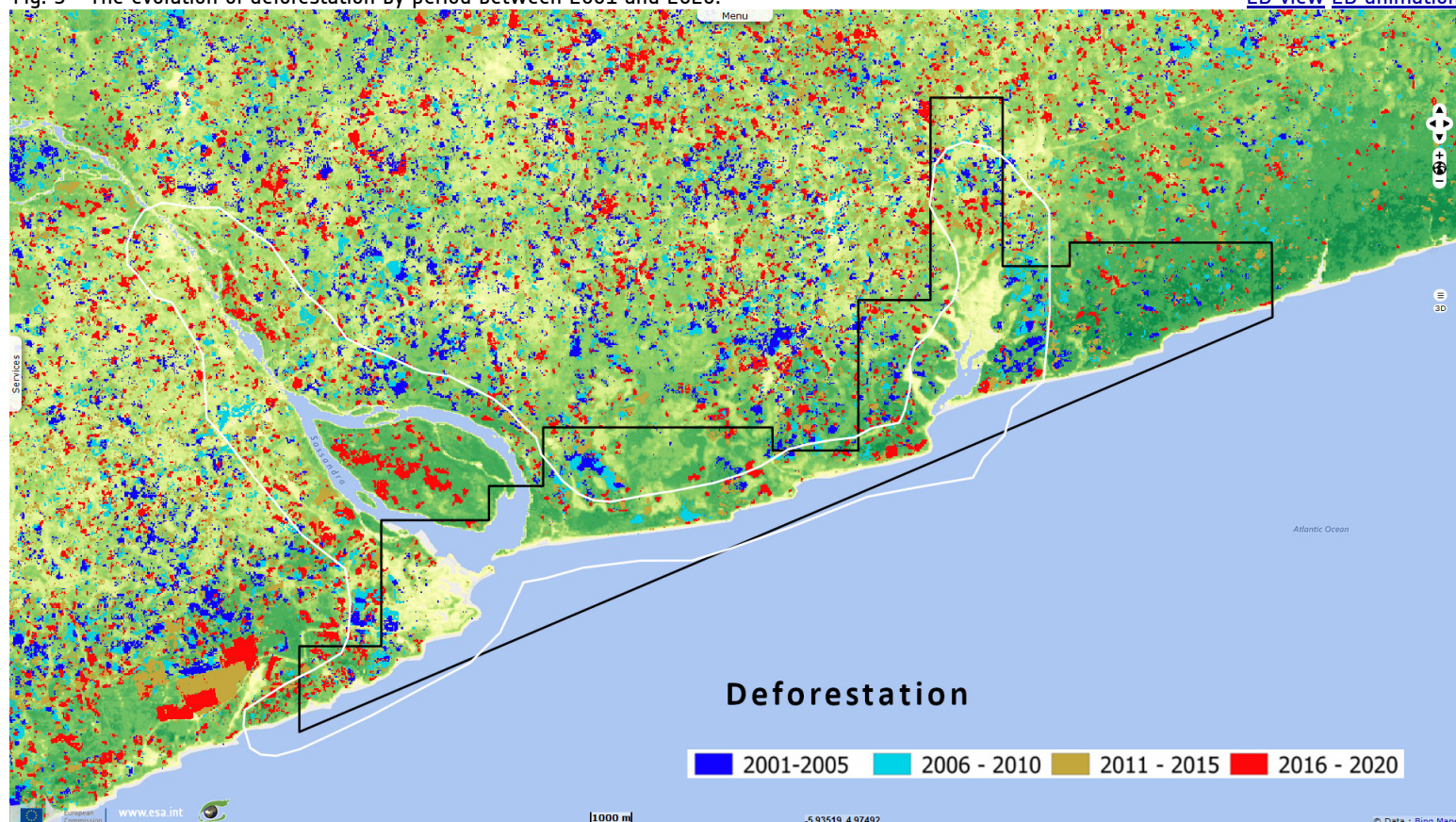
[2D view](#) [2D animation](#)



As shown in Fig.2 (right), the mining permit overlaps with the Sassandra-Dagbego Ramsar site. The Sassandra-Dagbego Ramsar site covers 10,551 ha and extends over 20 km east to the mouth of the Dagbégo lagoon, over 20 km north to the extension of the Sassandra river to Gaoulou, and over 10 km west to Grand Drévin). This is the area of affluence of primary (Sassandra) and secondary rivers, considered by Conservation International as a high priority area for the conservation of freshwater ecosystems, marine ecosystems and waterbirds. The Ivory Coast mangroves have only three species of mangroves: *Rhizophora racemosa* (Red Mangrove) and *Avicennia germinans* (White Mangrove) and *Conocarpus erectus* (Gray Mangrove). The Ramsar site is the only place where we are certain to find all three types of mangroves at the same time. The area is home to the best preserved mangroves in the country.

Fig. 5 - The evolution of deforestation by period between 2001 and 2020.

[2D view](#) [2D animation](#)















Among the many criteria that make this area a unique ecosystem, we mention the population of animal and plant species that maintain the biological diversity of the Ivorian coastal forest, including avian fauna and other species threatened with extinction [Source: [The Ramsar Sites Information Service](#)].

Fig. 6 - S1 IW (2015) - MV,MH,CV - The yellowish areas show the mangroves which do not vary during the year.

[2D view](#)



*The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union.
Contains modified Copernicus Sentinel data 2023, processed by VisioTerra.*

More on European Commission space:							
More on ESA:				S-1 website	S-2 website	S-3 website	
More on Copernicus program:				Scihub portal	Cophub portal	Inthub portal	Colhub portal
More on VisioTerra:				Sentinel Vision Portal	Envisat+ERS portal	Swarm+GOCE portal	CryoSat portal