

South America steps forward to protect wetlands

Sentinel-1 CSAR EW acquired on 16 June 2015 at 22:38:23 UTC

Sentinel-2 MSI acquired on 16 October 2016 at 15:26:32 UTC

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Sentinel-3 SLSTR RBT acquired on 19 May 2017 from 13:54:19 to 13:57:19 UTC

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[2D Layerstack](#)

Fig. 1 - S3 SLSTR (19.05.2017) - S6,S5,S2 colour composite - Rio Negro conservation area (green), World's largest Ramsar Site. [2D view](#)

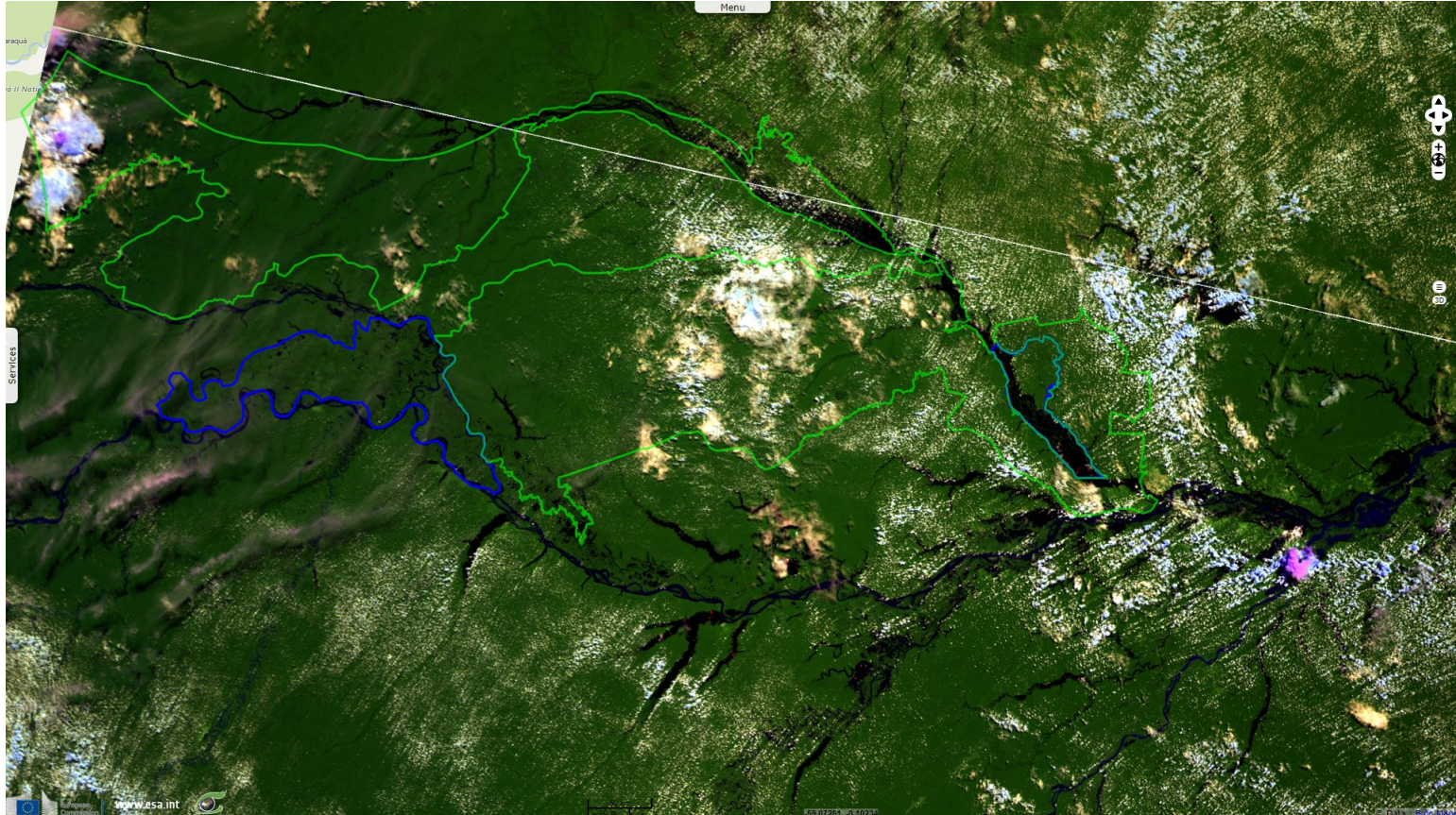
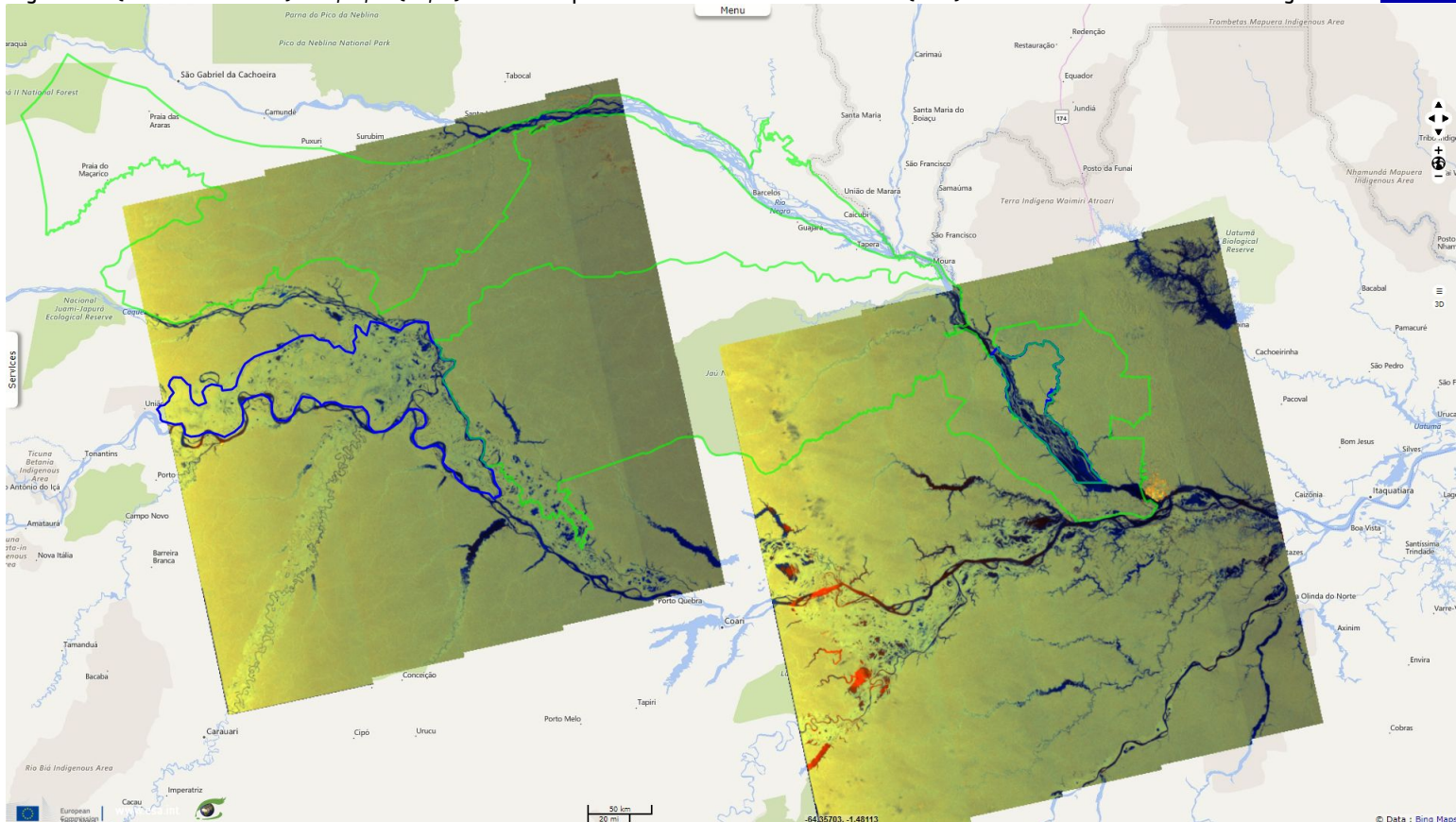


Fig. 2 - S1 (16 & 18.06.2015) - vv,vh,ndi(vh,vv) colour composite - 2 connected Ramsar sites (blue) will also benefit from new designation. [2D view](#)

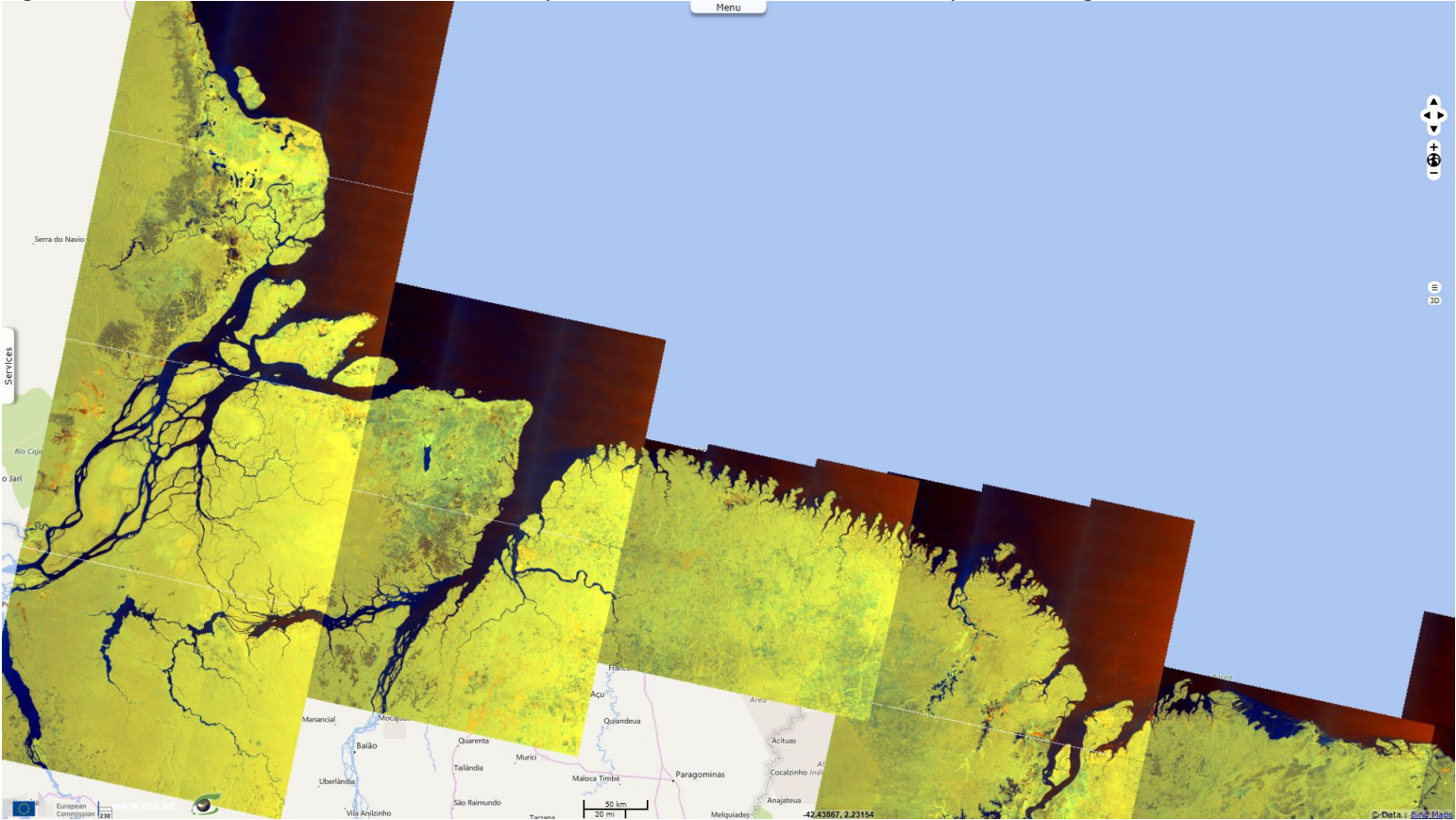


The 14.06.2018, Brazil designated several wetlands to be protected under the Ramsar convention. Rio Negro Ramsar site is one of these, it is the world's largest Ramsar Site, covering over 12 million ha. Its sheet [describes](#) it as follows: "*The Rio Negro is the biggest tributary river on the north side of the Amazon basin. At over 1,500 kilometres long, it is the longest blackwater river in the world, and it supports one of the largest preserved tropical rainforests. The Ramsar Site covers over 12 million hectares; it includes a variety of wetlands that are particular to the region, such as Igapó (blackwater-flooded) forests, edaphic savannas and fluvial archipelagos, and comprises more than 20 conservation units. The designation of the Site greatly increases the connectivity of Brazil's protected areas. Its rich biodiversity includes globally-threatened bird species; 3 endangered mammals are present: the giant river otter, the Brazilian bare-faced tamarin and the white-bellied spider monkey. The Site also contributes to the Amazon rainforest's climate regulation on which the stability of the planet depends. The local communities are enormously ethnically and culturally diverse; the protected areas included in the Site aim to support their low-impact sustainable forms of resource utilization and agriculture.*"

Fig. 3 - S3 OLCI (12.07.2018) - 7,6,4 colour composite - Its strong sediment load color the waters of the Amazon estuary. [2D view](#)



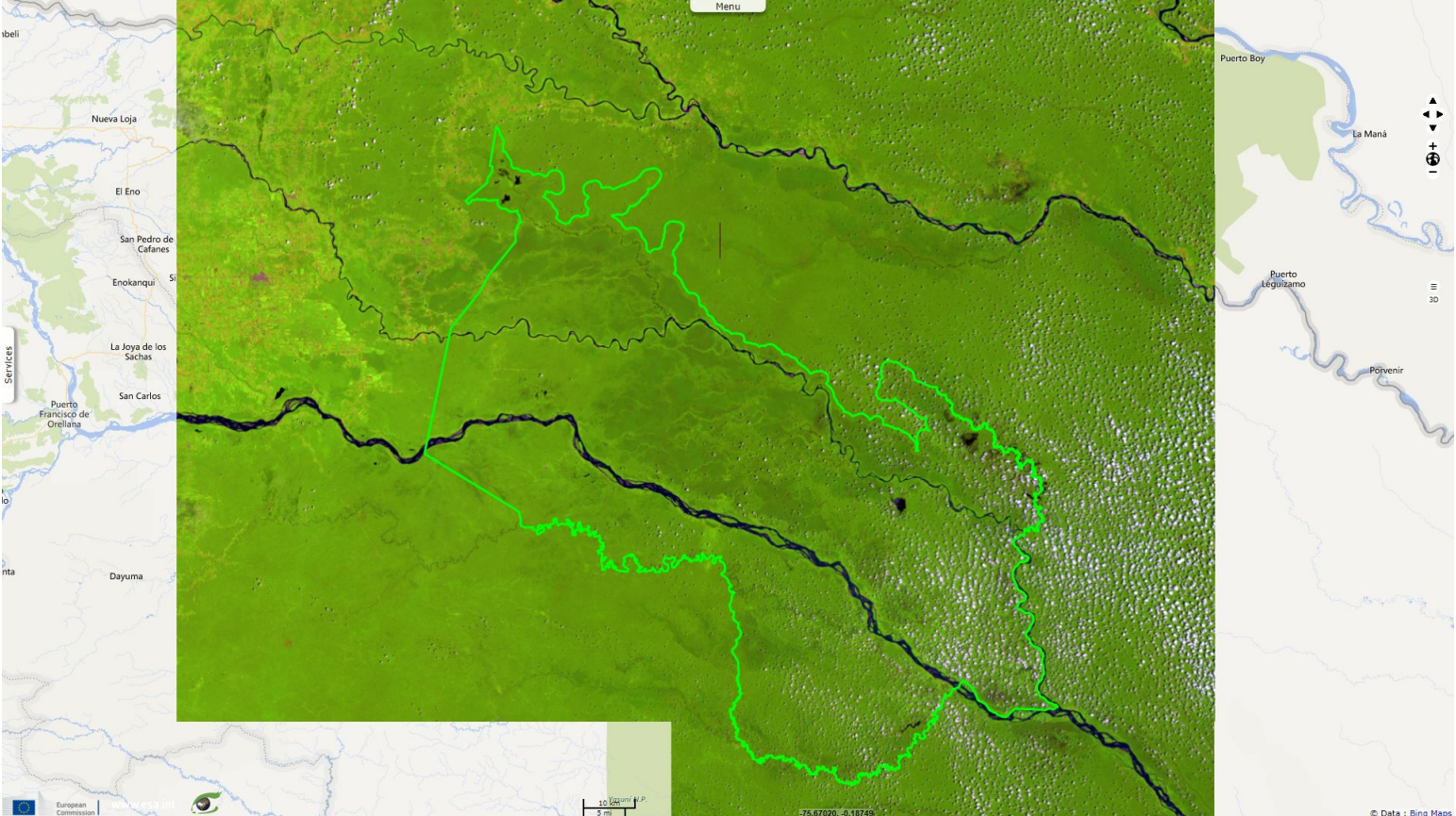
Fig. 4 - S1 (18-28.07.2018) - vv,vh,ndi(vh,vv) colour composite - Radar view of the Amazon estuary and its mangroves. [2D view](#)



Another site of prime importance added mid-June is Amazon Estuary and its Mangroves, one of the biggest continuous mangrove formations in the world. Its description [details](#): "*The Site is located on the Marajó archipelago, the world's largest fluvial-maritime archipelago, at the mouth of the*

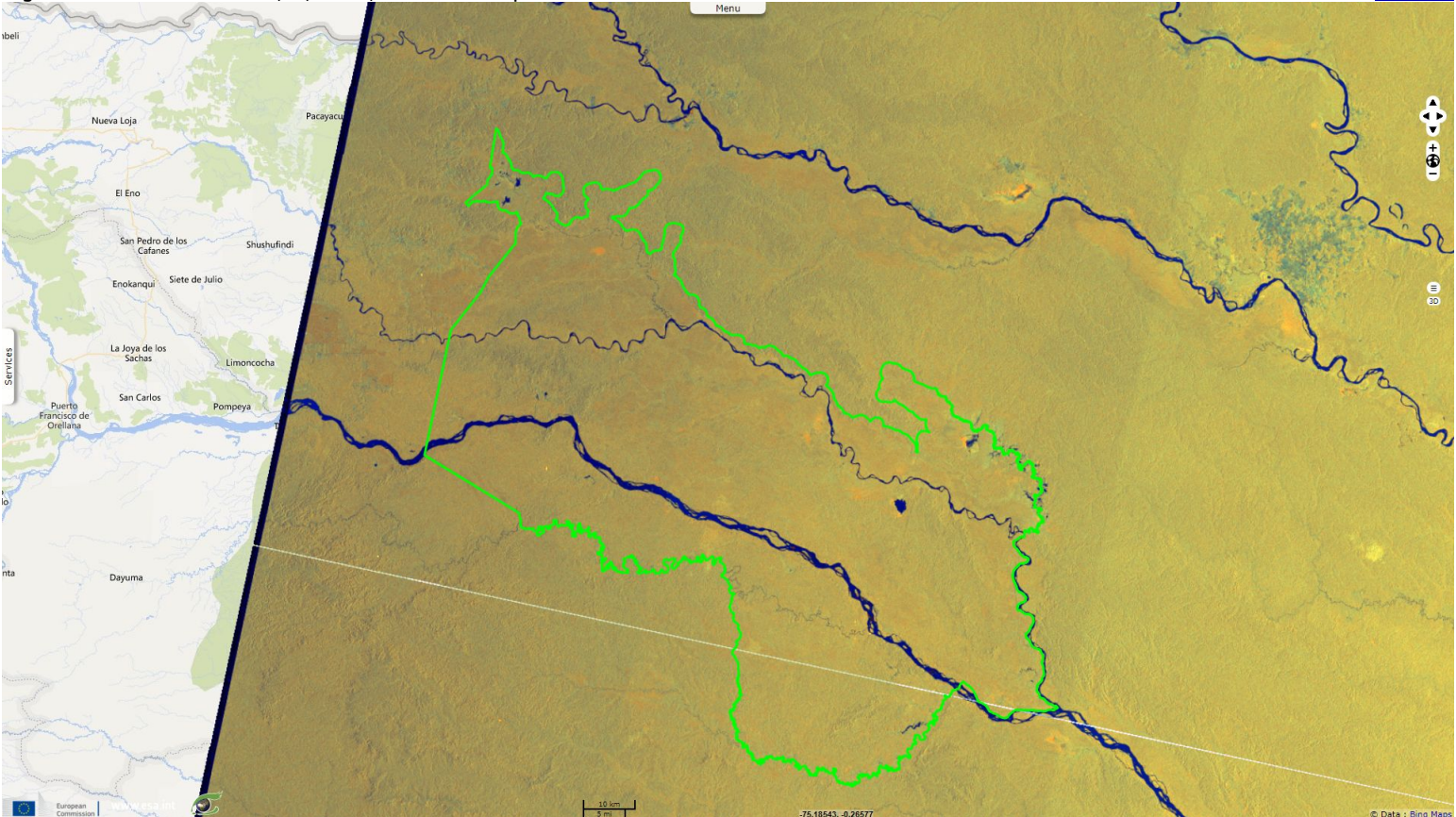
Amazon River. It consists of a corridor of 23 conservation units with a combined area of over 3.8 million hectares. On this stretch of coast lies one of the biggest continuous mangrove formations in the world; with over 8,900 square kilometres stretching over 700 km, it holds 70% of the mangroves of Brazil. The Site is adjacent to other Ramsar Sites: Cabo Orange, Baixada Maranhense, Reentrancias Maranhenses and Parcel Manuel Luiz. The Site and the wider Amazon estuary and coastal basins ecoregion are extremely biodiverse and of great international importance. Around 40 species found in the Site are both nationally and globally threatened, and 21 more listed as threatened on Brazil's Red List."

Fig. 5 - S2 (16.10.2016) - 11,8,2 colour composite - Complejo de Humedales Cuyabeno Lagartococha Yasuní, largest Ramsar site in Ecuador. [2D view](#)



The stakes of the conservation of Yasuni National Park had been raised in a previous story released in [July 2017](#). Named a Ramsar Site the 13.06.2018, it became the largest in Ecuador and is [depicted](#) as follows: "The Site is located in the Amazon biogeographic region, and provides a corridor connecting the Cuyabeno Wildlife Reserve with the Yasuní National Park, one of the most important biodiversity hotspots in the world. This important complex contains several types of wetlands, including the Cuyabeno flooding forests, permanent rivers, lakes and pools."

Fig. 6 - S1 (20.07.2017) - vv,vh,ndi(vh,vv) colour composite - Radar view of the wetland. [2D view](#)

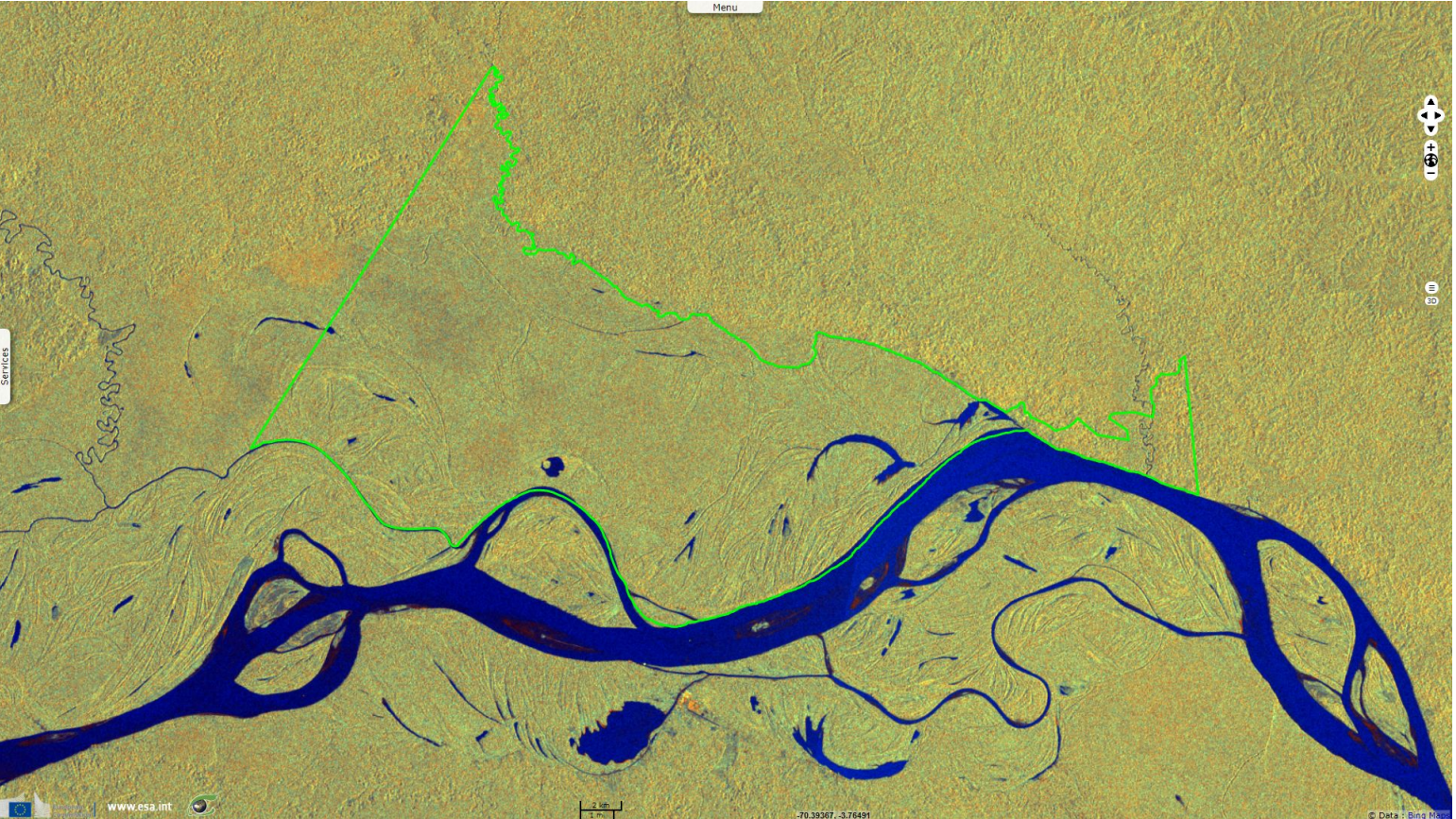


"At over 770,000 hectares, it is the largest Ramsar Site in Ecuador. Around 1,500 species of plants, 600 species of birds and 167 species of mammals are found in the Site. Particularly noteworthy is the presence of threatened aquatic mammals such as the Amazonian manatee, giant

otters and river dolphins. Communities belonging to six of Ecuador's indigenous nations depend directly on the natural resources of the Site."

Fig. 7 - S1 (18.07.2018) - vv,vh,ndi(vh,vv) colour composite - View of the lakes, islands, loops and oxbows of Lake Tarapoto wetland.

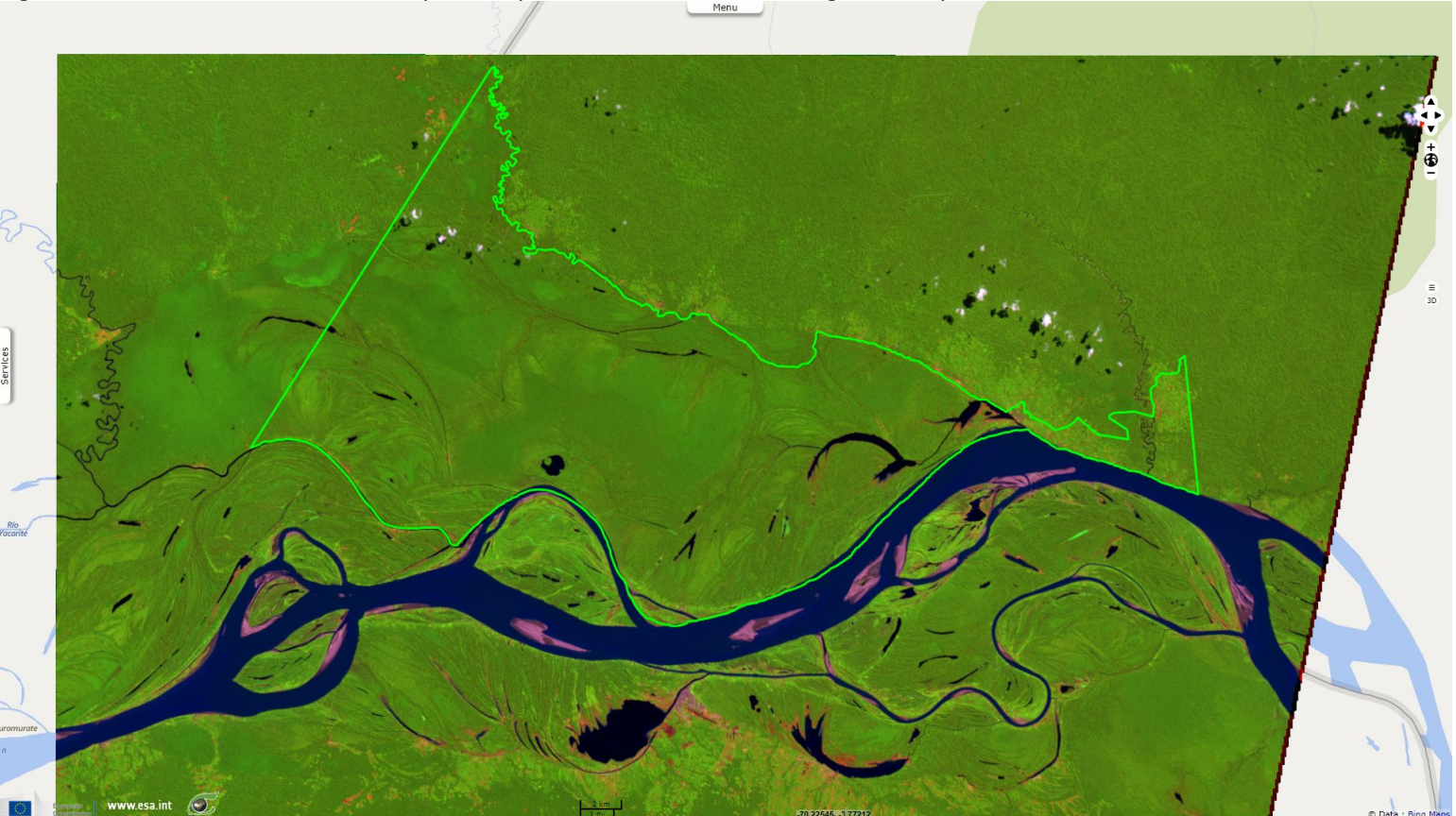
[2D view](#)



Colombia named its first Wetland of International Importance in Amazonia by selecting Lake Tarapoto the 14.06.2018. Ramsar [describes](#) it as follows: "The Site, located on the River Amazon in the far south of the country, consists of several lakes interconnected by rivers and creeks. The Lakes of Tarapoto sustain plant and animal species including the ceiba tree, black caiman, 136 species of fish including the largest known freshwater fish, the pirarucu, and more than 153 bird species."

Fig. 8 - S2 (01.08.2017) - 11,8,2 colour composite - Optical view of the wetland during a clear day.

[2D view](#)



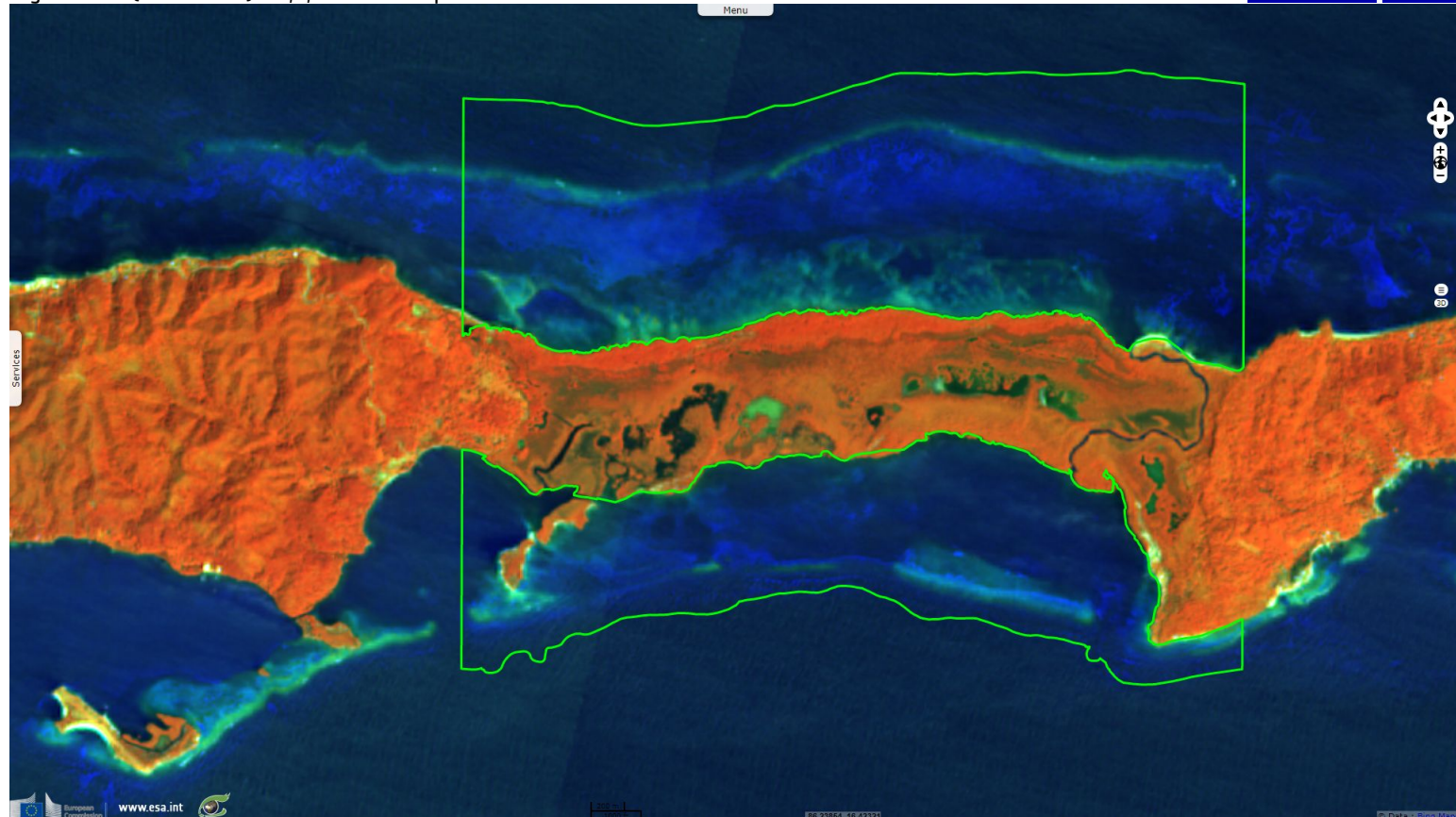
"Grey and pink dolphins use the Site as a habitat to teach their calves to fish. It also hosts threatened mammals such as the tapir, the giant armadillo, the Amazonian manatee, the giant otter and the anteater. This great biodiversity, and in particular the fish resources, supports the 22 indigenous communities of the TICOPA (Ticuna, Cocama and Yagua) indigenous reservation."

Fig. 9 - S2 (21.02.2017) - 4,3,2 natural colour - Sistema de Humedales de Santa Elena lies on Roatán island, 65km off the coast of Honduras. [2D view](#)



Nominated by Honduras the 05.06.2018, Sistema de Humedales de Santa Elena is [characterised](#) by its sheet as including "a good example of a wooded wetland composed mainly of mangroves, and a marine wetland composed of seagrass beds and reef lagoons that are part of the Mesoamerican Reef System, the second longest barrier reef in the world."

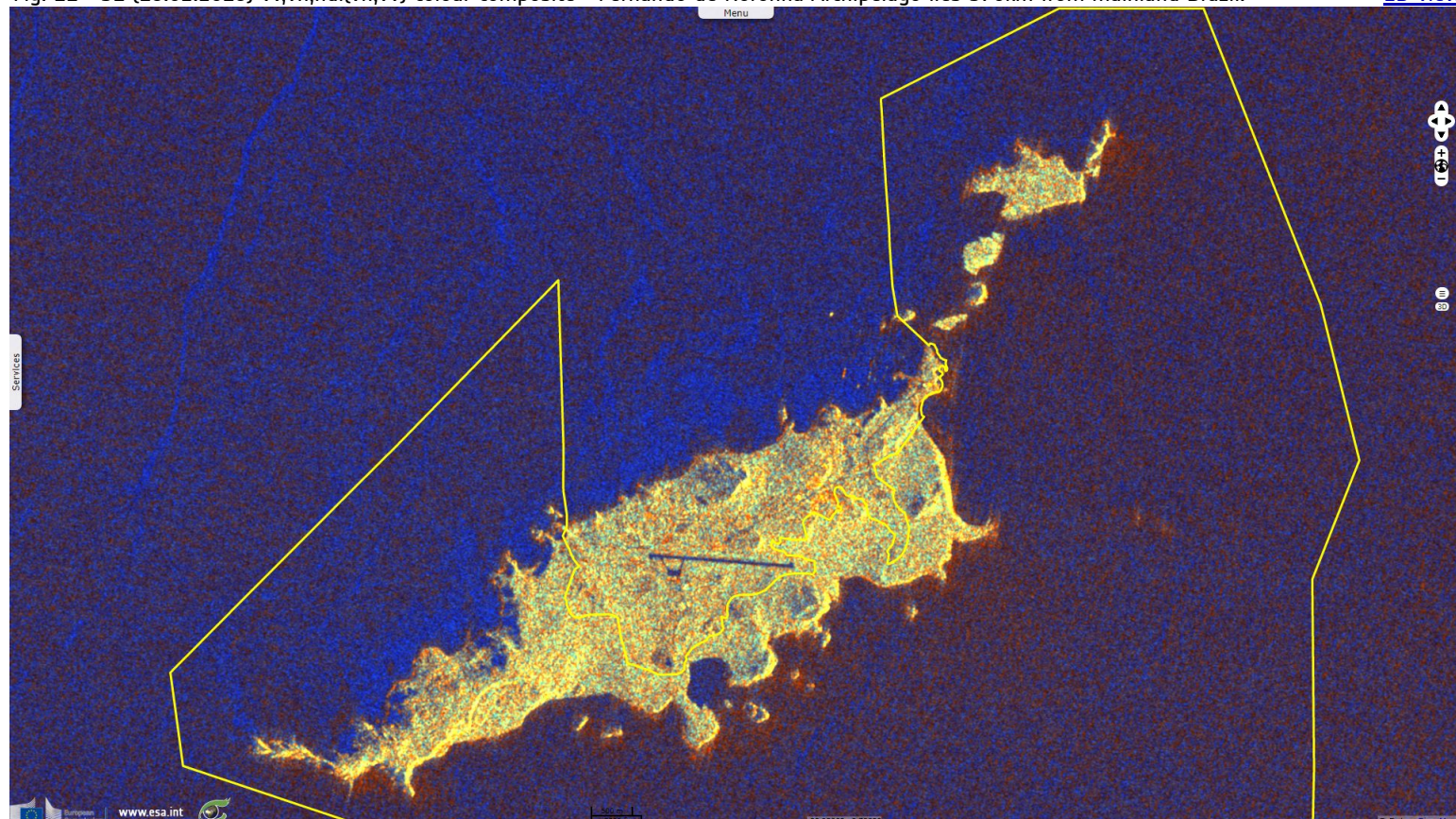
Fig. 10 - S2 (21.02.2017) - 8,5,2 colour composite - The wetland is located east of the island. [2D animation](#) [2D view](#)



"The Site is an important resting, feeding and nesting area for several species of resident and migratory birds. The reef area and the seagrass also act as a nursery and feeding area for marine species such as sea turtles, dolphins and sharks that are frequently found here."













Fig. 11 - S1 (18.02.2018) vv,vh,ndi(vh,vv) colour composite - Fernando de Noronha Archipelago lies 370km from mainland Brazil.

[2D view](#)



Third and smallest of the three Ramsar sites selected by Brazil the 05.06.2018, it is also a UNESCO World Heritage site. UNESCO [wrote](#) about it: "Peaks of the Southern Atlantic submarine ridge form the Fernando de Noronha Archipelago and Rocas Atoll off the coast of Brazil. Their rich waters are extremely important for the breeding and feeding of tuna, shark, turtle and marine mammals. The islands are home to the largest concentration of tropical seabirds in the Western Atlantic. Baia de Golfinhos has an exceptional population of resident dolphin and at low tide the Rocas Atoll provides a spectacular seascape of lagoons and tidal pools teeming with fish." The Ramsar sheet [completes](#): it "has been for millennia a refuge for many endemic species because of its isolated location. Of the 28 coral species occurring in Brazil, ten are found in all phases of their lives here. There are also great concentrations of spinner dolphins and pantropical spotted dolphins, and an area where humpback whales reproduce and rear their calves."

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