

World's largest waterfall, between Argentina and Brazil

Sentinel-2 MSI acquired on 23 September 2016
Sentinel-1 CSAR IW acquired on 12 September 2016

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Sentinel-1 CSAR IW acquired on 06 April 2018
Sentinel-2 MSI acquired on 20 April 2020

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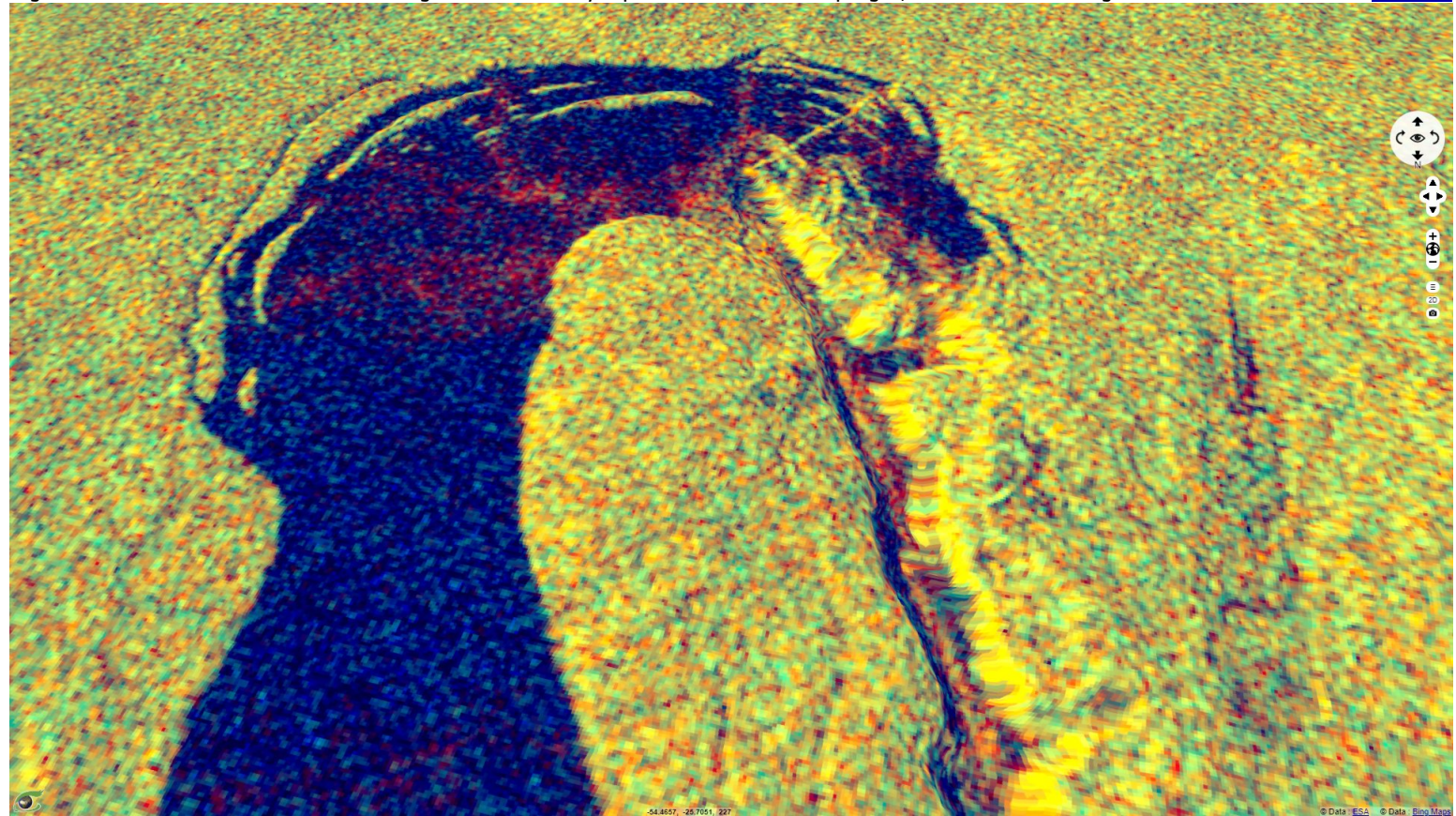
Fig. 1 - S2 (06.04.2018) - Iguazú falls are currently the largest waterfall in the World.

[3D View](#)



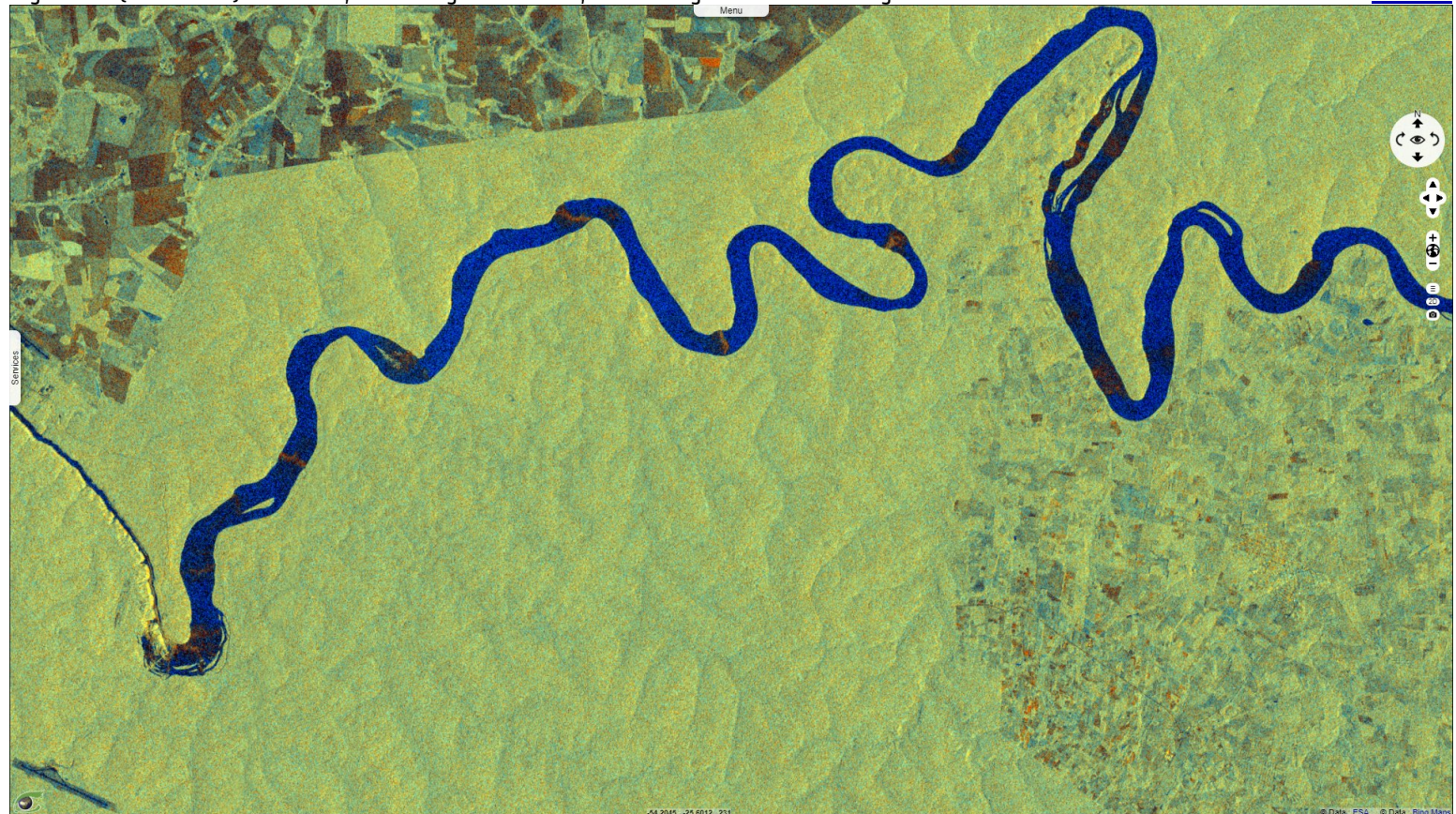
Source: [M & G Therin Weise](#):

Fig. 2 - S1 (12.09.2016) - It forms an elongated J covered by a permanent mist. At top-right, a succession of bridges leads to a belvedere. [3D View](#)



Iguazú Falls are formed by 275 waterfalls, the highest being 82m, that forms a front of 3 kilometres. The mean flow rate of the waterfall is 1756 m³/s, almost two-thirds of the flow rate of the Rhine at its mouth. Inside the "J", the Devil's Throat canyon is 80–90 m wide and 70–80 m deep. On the right bank is the Brazilian territory, which is home to more than 95% of the Iguazu River basin but has just over 20% of the jumps of these falls, and the left side jumps are Argentine, which makes up almost 80% of the falls.

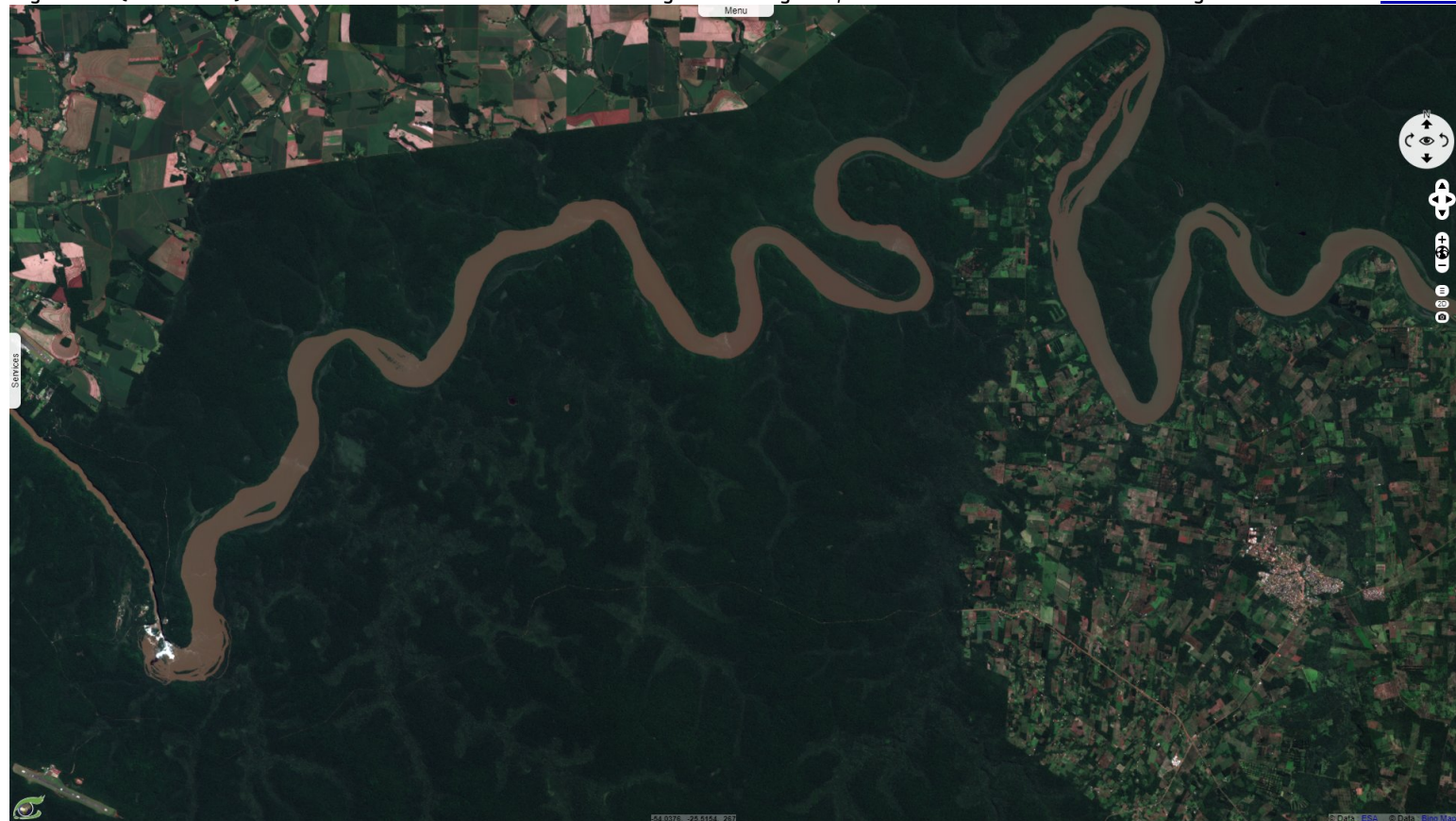
Fig. 3 - S1 (19.09.2016) - At south, on the Argentinian side, the river Iguazú borders the Iguazú National Park. [3D View](#)



On the Argentinian side, the Iguazú National Park is a UNESCO World Heritage since 1984. Its sheet [indicates](#): "Located in Misiones Province in the Northeastern tip of Argentina and bordering the Brazilian state of Parana to the north, Iguazú National Park, jointly with its sister park Iguacu in Brazil, is among the world's visually and acoustically most stunning natural sites for its massive waterfalls. It was inscribed on the World Heritage List in 1984. Across a width of almost three kilometres the Iguazú or Iguacu River, drops vertically some 80 meters in a series of cataracts."

Fig. 4 - S2 (06.04.2018) - Several smaller cataracts are located along the river Iguazú, visible both in visible and radar images.

[3D View](#)



"The river, aptly named after the indigenous term for "great water" forms a large bend in the shape of a horseshoe in the heart of the two parks and constitutes the international border between Argentina and Brazil before it flows into the mighty Parana River less than 25 kilometres downriver from the park. Large clouds of spray permanently soak the many river islands and the surrounding riverine forests, creating an extremely humid micro-climate favouring lush and dense sub-tropical vegetation harbouring a diverse fauna."

Fig. 5 - S2 (29.04.2018) - At north on the Brazilian side, Iguazu National Park also borders the river.

[2D View](#)



"In addition to its striking natural beauty and the magnificent liaison between land and water Iguazu National Park and the neighbouring property constitute a significant remnant of the Atlantic Forest, one of the most threatened global conservation priorities. This forest biome historically covering large parts of the Brazilian coast and extending into Northern Argentina and Uruguay, as well as Eastern Paraguay, is known for its extreme habitat and species diversity, as well as its high degree of endemism."

Fig. 6 - S2 (23.09.2016) - At north, the shadow of the plateau highlights the Devil's Throat canyon.

[3D View](#)



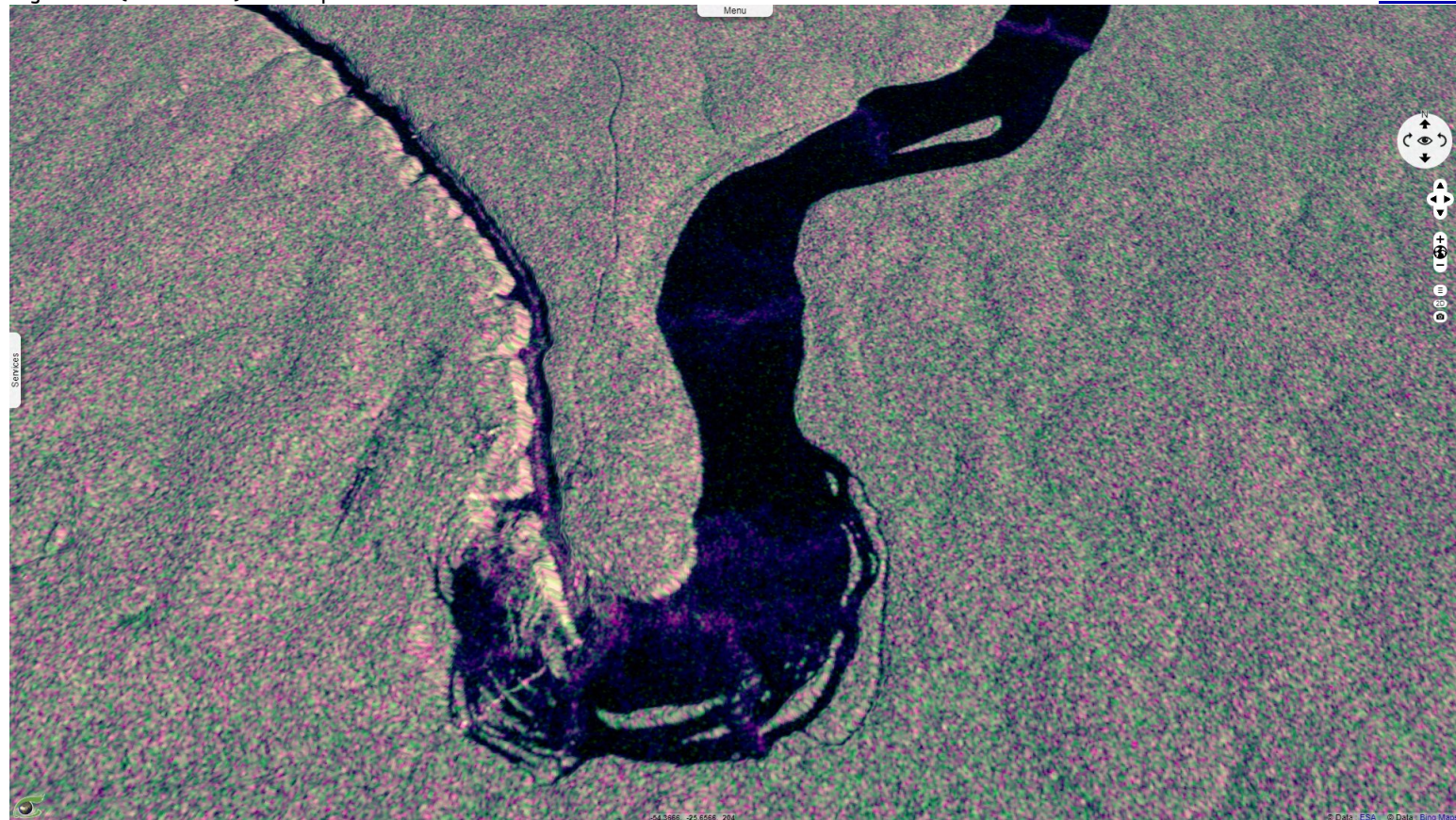
"Jointly with contiguous Iguazu National Park in Brazil, which was inscribed on the World Heritage List in 1986, it constitutes contiguous major remnants of the interior Atlantic Forest, once a much larger forest area, along the junction of the Iguazu and Paraná rivers where Paraguay, Argentina, and Brazil converge."



Source: Ko Hon Chiu Vincent, [left](#) [right](#).

Fig. 7 - S1 (24.09.2018) - An airport and several hotels lie next to the waterfall.

[3D View](#)



"Today, the parks are mostly surrounded by a landscape that has been strongly altered due to heavy logging, both historically and into the present, the intensification and expansion of both industrial and small-scale agriculture, plantation forestry for pulp and paper and rural settlements. Jointly, the two sister parks total around 240,000 hectares with this property's contribution being c. 67,000 hectares."

Fig. 8 - S2 (20.04.2020) - The water colour of the river evolves between brownish, greenish and blackish.

[3D View](#)



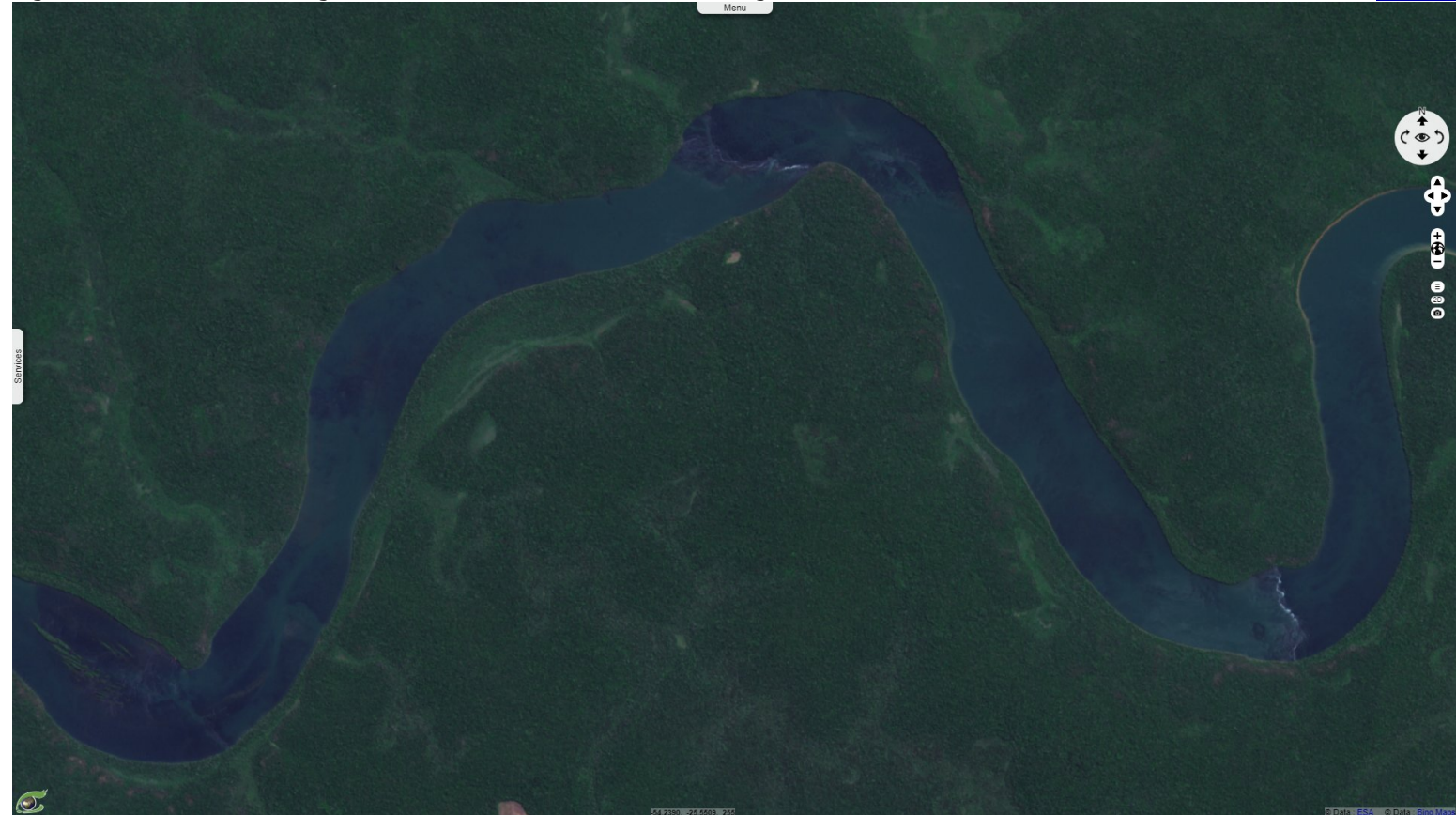
"Around 2000 plant species, including some 80 tree species have been suggested to occur in the property along with around 400 bird species, Both Parks also comprise semi-deciduous subtropical rainforests with a high degree of diversity and endemism, harboring Around 2000 plant species, including some 80 tree species have been suggested to occur in the property along with around 400 bird species, harpy eagle, the toucan, the broad-snouted caiman, tegu lizards, coral snake, land and water turtles, giant anteater, tapir, capybara, howler monkey, ocelot, puma, crab-eating fox and the jaguar. Next to the waterfalls along the river and on the islands a highly specialized ecosystem full of life has evolved in response to the extreme conditions of the tumbling water and soaking humidity."



Source: Ko Hon Chiu Vincent, [left](#) [right](#).

Fig. 9 - S2 (28.09.2019) - The Iguazú shows a darker blue colour on this image.

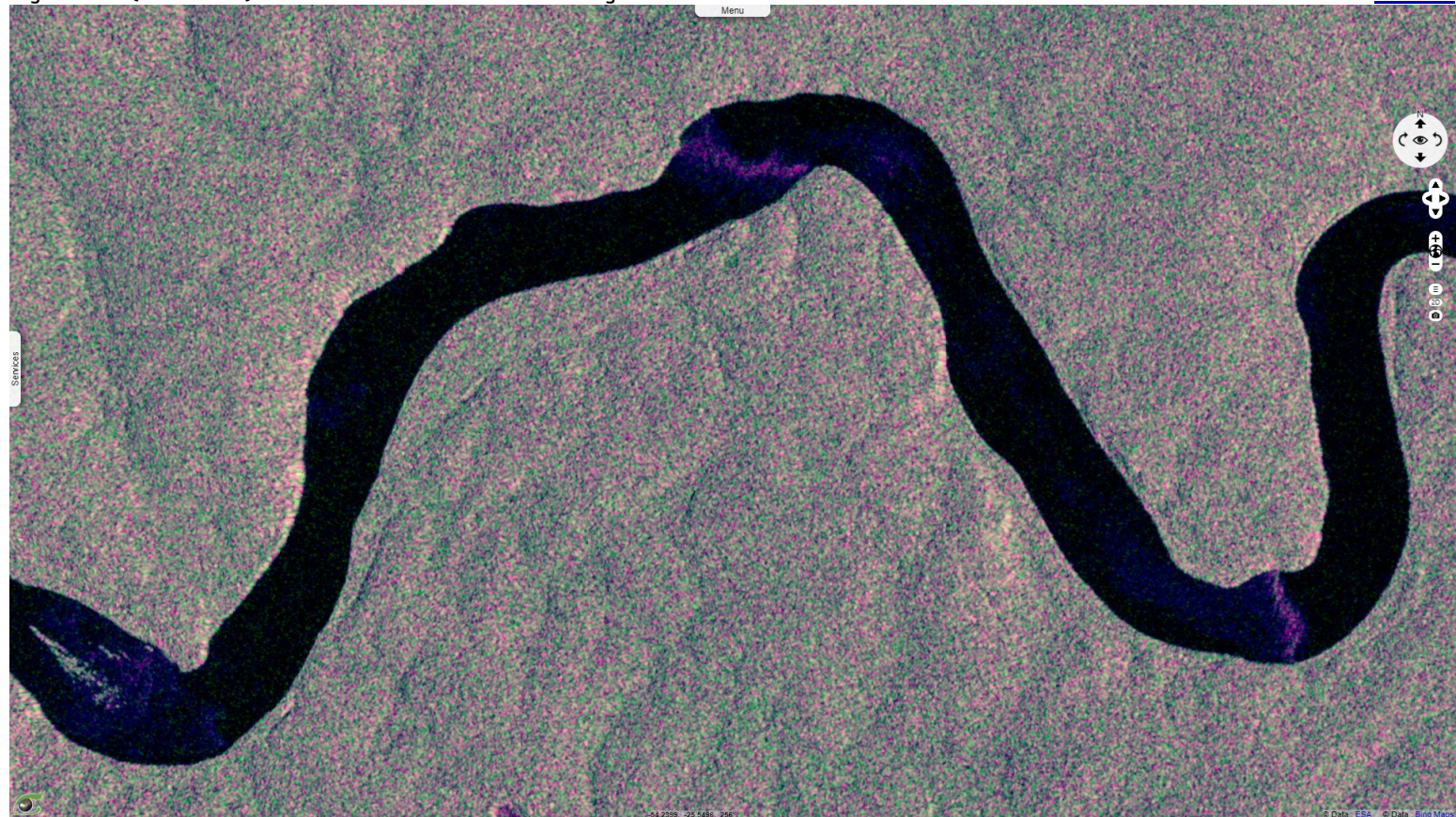
[3D View](#)



The World Heritage sheet dedicated to the Iguazú National Park, on the Brazilian side, [adds](#): "*The landscape is the result of volcanic processes dating back 500 million years, which forged its stunning geomorphological features. The Park's main attraction – and a major destination for international and domestic tourism – is the impressive waterfalls system of the Iguazú (or Iguazú) river, renowned for its visual and acoustic beauty, which spans nearly three kilometers with vertical drops of up to 80 meters.*"

Fig. 10 - S1 (29.04.2018) - The rocks and increased water roughness are visible on these smaller cataracts.

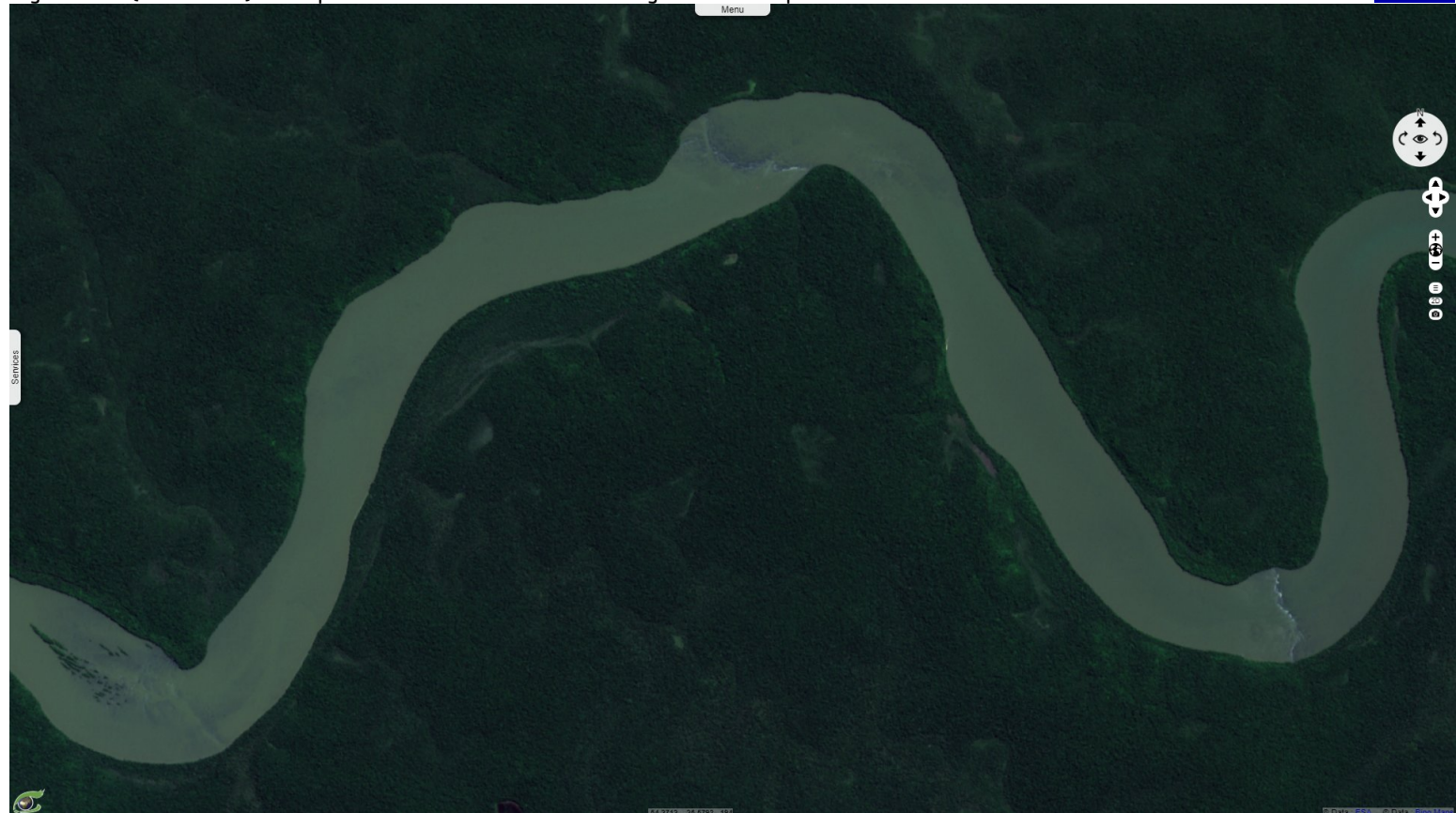
[3D View](#)



"Water levels are artificially regulated by power plants upriver, causing scenic and ecological impacts. The water levels are monitored in order to mitigate and prevent impacts. Tourism management is a key task in the property minimizing the direct and indirect impacts of heavy visitation and maximizing the opportunities in terms of awareness-raising for nature conservation and conservation financing."

Fig. 11 - S2 (11.04.2019) - The pristine forest on both sides belongs to national parks.

[3D View](#)



"Both parks share long-term conservation strategies and greatly benefit from joint collaboration and close cooperation. Future management may have to develop longer-term scenarios and to strike a balance between conservation and other land and resource use so as to maintain or restore the connectivity of the landscape."

Fig. 12 - S2 (20.04.2020) - Just further upstream, cropland has reached the river banks.

[3D View](#)



Fig. 13 - S1 (29.04.2018) - Its sinuous path shows a slower course, possibly due to a local flatter topography of the basalt plateau.

[3D View](#)

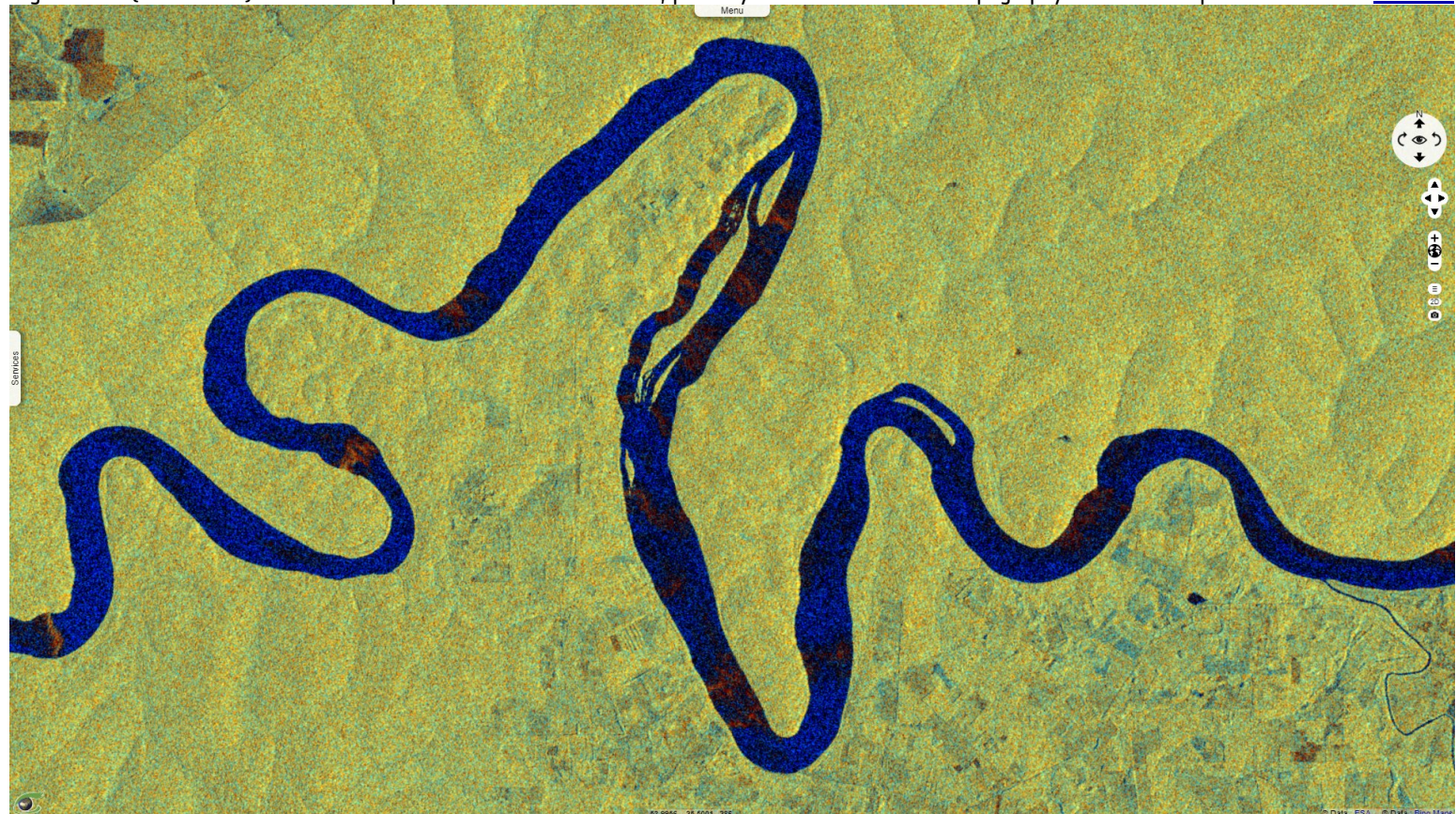
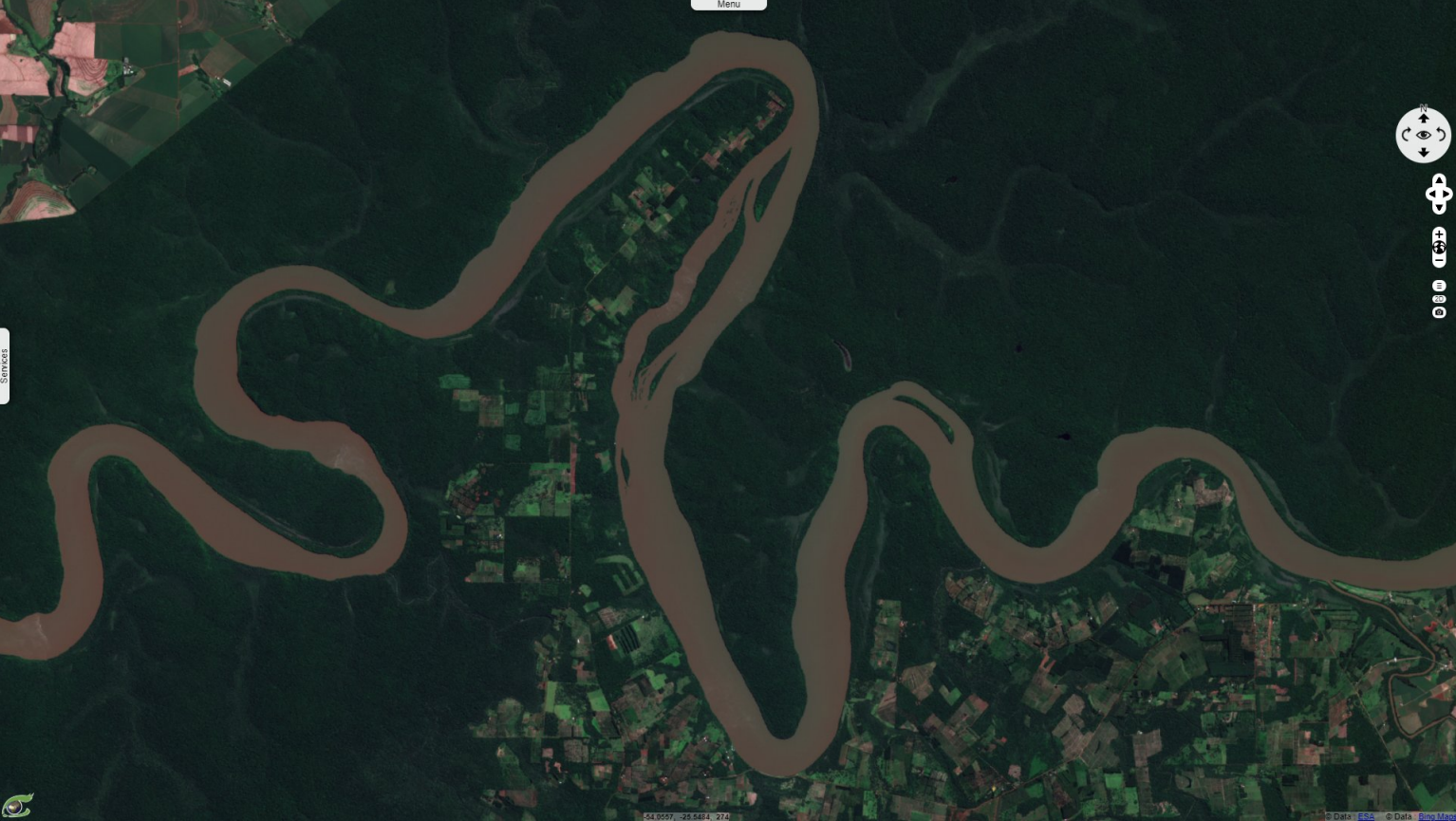


Fig. 14 - S2 (06.04.2018) - Fewer cataracts are visible along this longer section. [3D View](#)



*The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union.
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