

Baniyas thermal power plant causes a 1000 km² oil spill, Syria

Sentinel-1 CSAR IW acquired on **24 August 2021** at 03:43:17 UTC

Sentinel-3 OLCI FR acquired on **28 August 2021** at 08:07:07 UTC

Sentinel-2 MSI acquired on **28 August 2021** at 08:16:11 UTC

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Sentinel-1 CSAR IW acquired on **06 September 2021** at 03:34:29 UTC

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Keyword(s): Oil spill, pollution, marine environment, emergency, man-made disaster, infrastructure, oil and gas, Cyprus, Turkey, Mediterranean Sea

Fig. 1 - S2 (28.08.2021) - A large oil spill followed the Syrian coast toward north before drifting west toward Cyprus.

[3D view](#)

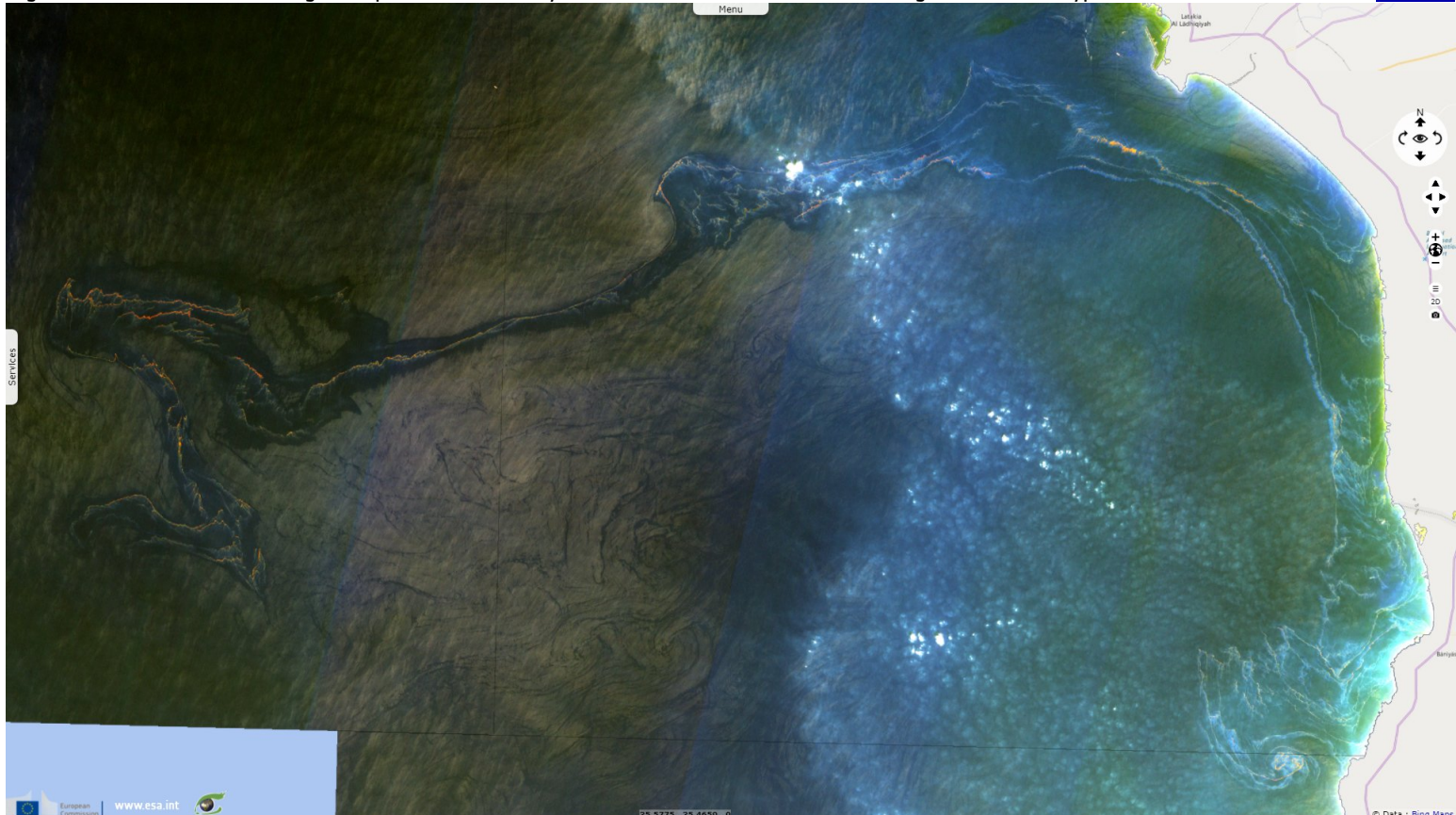


Fig. 2 - S3 OLCI (28.08.2021) - Contemporaneous acquisition by OLCI.

[3D view](#)

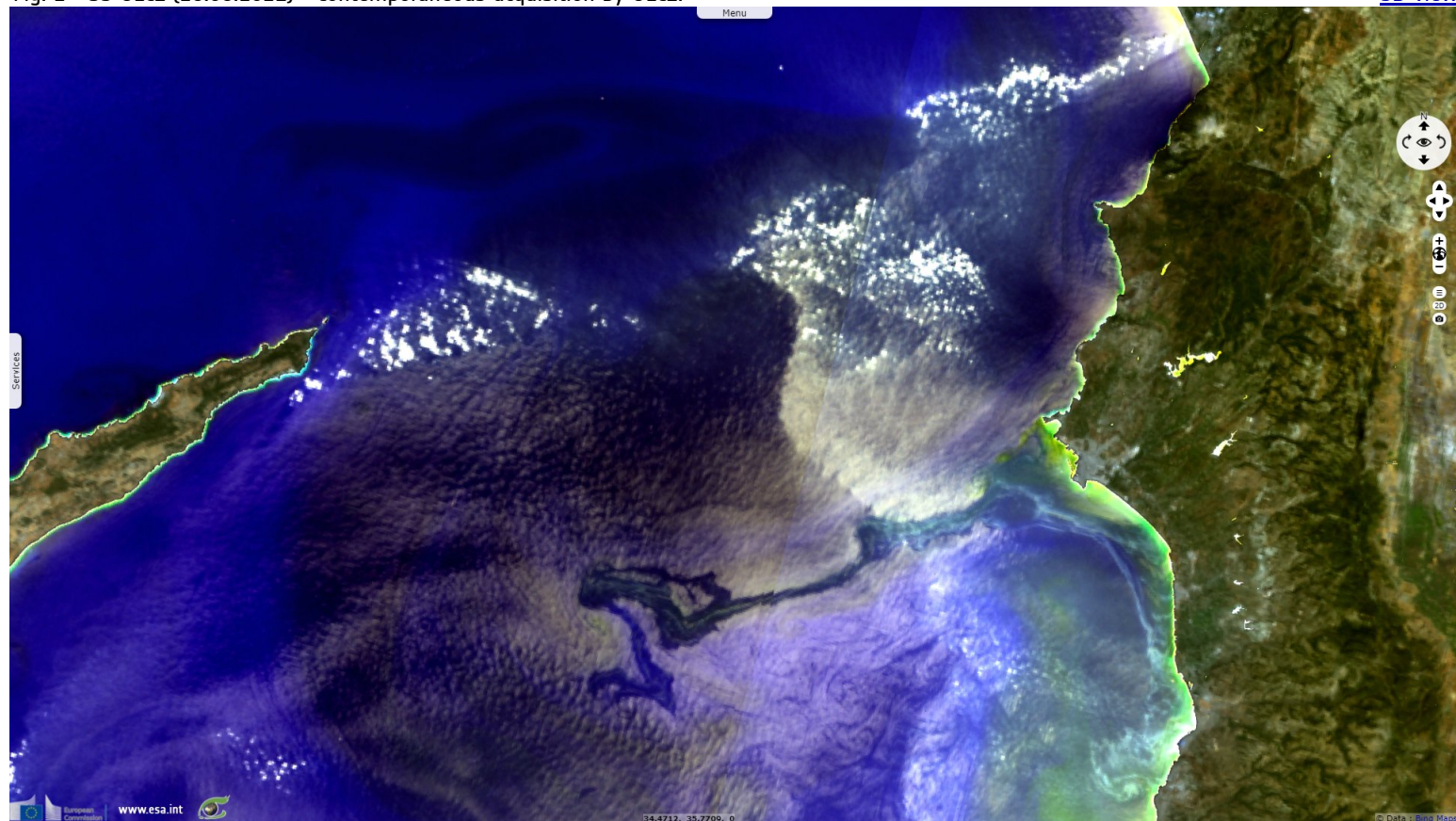


Fig. 3 - S2 (28.08.2021) - Focus on the western front of the oil spill.

[3D view](#)



Yesar Al-Malek [described](#) an important oil spill off the coast of Syria for Middle East Energy Services: "A 1000 km² oil slick has formed off the coast of Syria after a fuel tank at the 670 MW Baniyas power plant began leaking" though a crack in its walls "on 23 August. The plant is attached to the 140 000 b/d refinery that receives monthly Iranian crude supplies. Syrian authorities have given contradictory estimates of the leaked fuel volume. On 30 August, Mahmoud Ramadan, head of Syria's state power firm, said 15 900 tons of fuel had leaked, but other officials have given far lower figures."

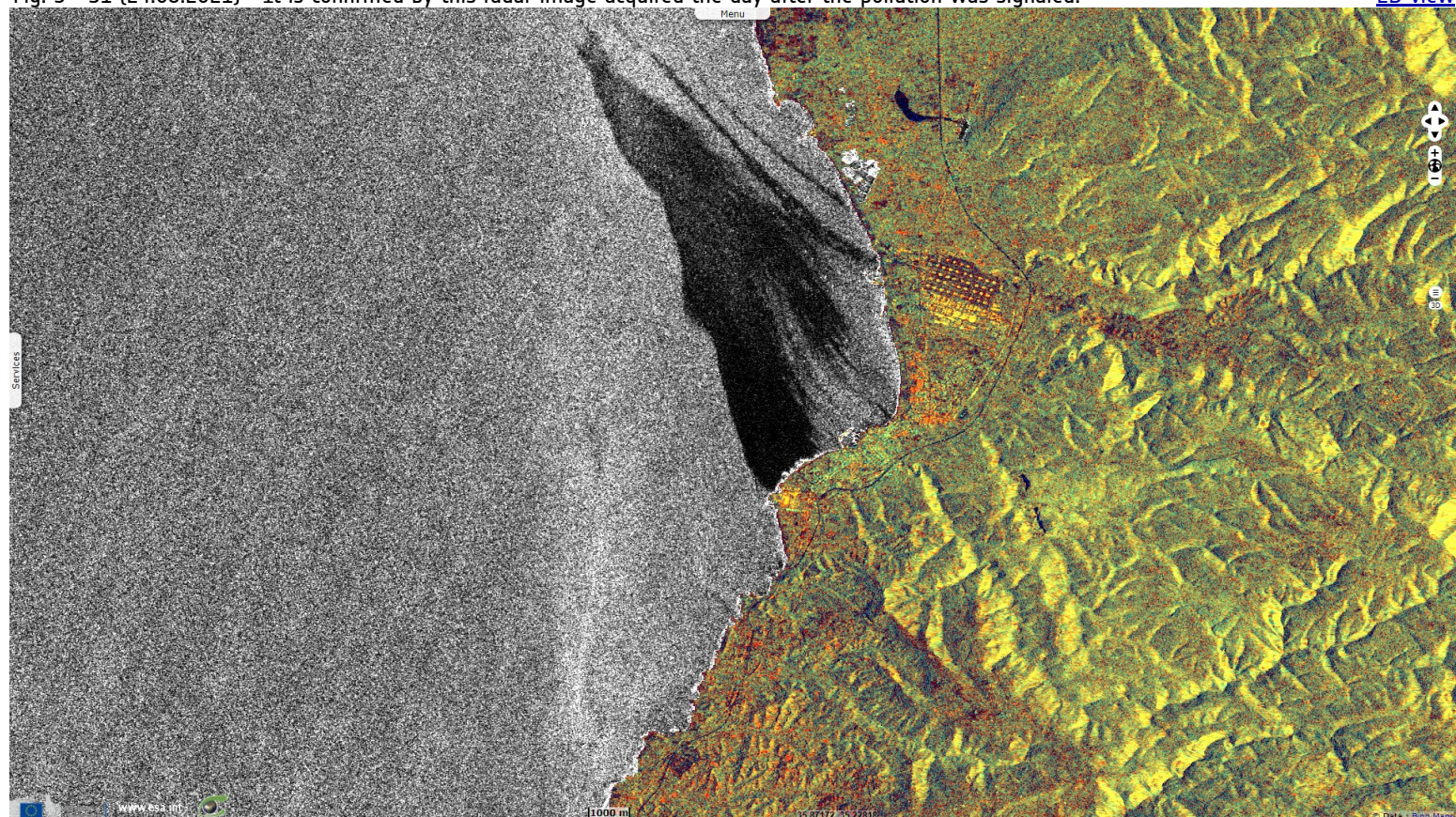
Fig. 4 - S2 (28.08.2021) - The site reported to be the source is the thermal power station next to Syria's largest refinery in Baniyas.

[2D view](#)



Fig. 5 - S1 (24.08.2021) - It is confirmed by this radar image acquired the day after the pollution was signaled.

[2D view](#)



Fact-checking website polygraph.info commented that "The Syrian government immediately downplayed the problem, claiming everything was under control and a clean-up nearly complete." CNN Journalists [added](#): "A resident in Baniyas said much of the coast had been polluted. 'The government only sent teams with sponges and water hoses; they do not have the capacity to deal with this.... you cannot clean the sea with sponges,'".

Fig. 6 - S1 (29.08.2021) - The pollution continued drifting closer to Cyprus shore.

[3D view](#)

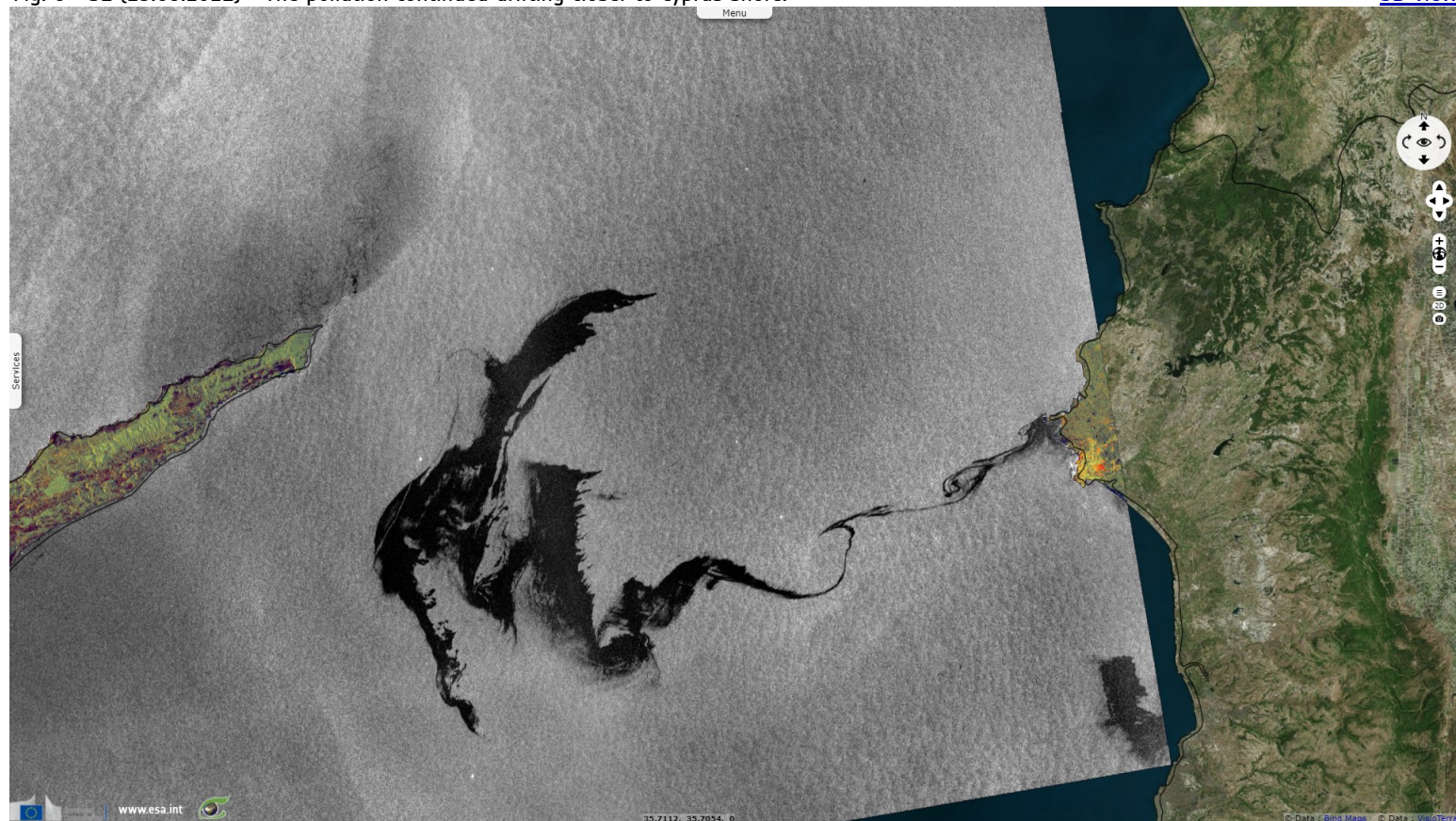
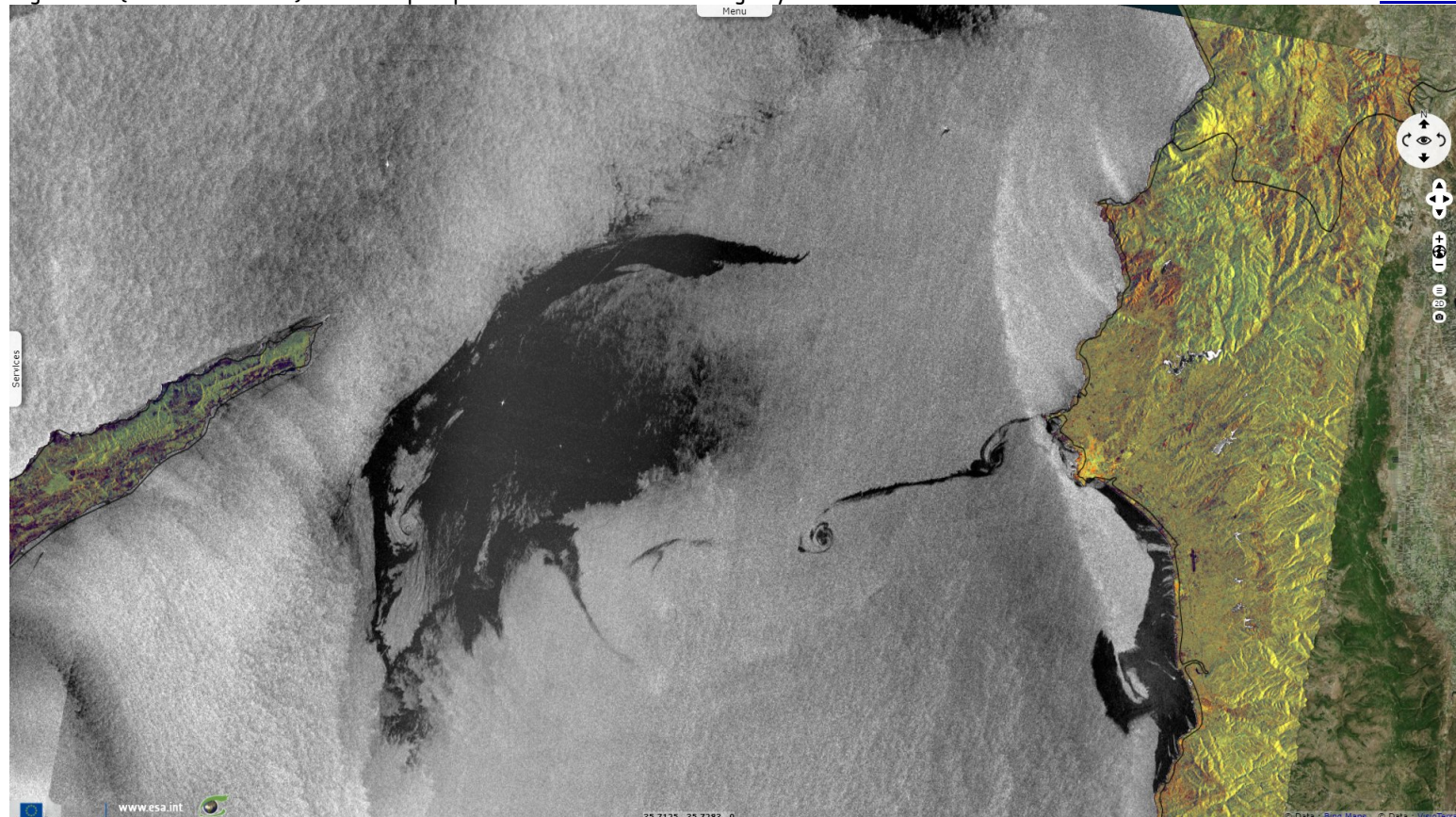


Fig. 7 - S1 (30.08.2021 03:42) - The oil spill spread even more the following day.

[3D view](#)



Further west, Elias Hazou of the Cyprus Mail [wrote](#) about the preparation of the Cypriot authorities: "The Fisheries Department is said to possess 'a significant stockpile of containment and recovery equipment including vessels, skimmers, boom and a vessel dispersant spraying capability.' The fisheries department also said steps have been taken to inform the north while the Republic of Cyprus is ready to respond and provide assistance in case it is requested. Cyprus has dealt with a number of spills in the past, but all minor."

Fig. 8 - S1 (30.08.2021 15:33) - Fresh oil was still emitted from Baniyas, spreading on the Syrian coast.

[3D view](#)

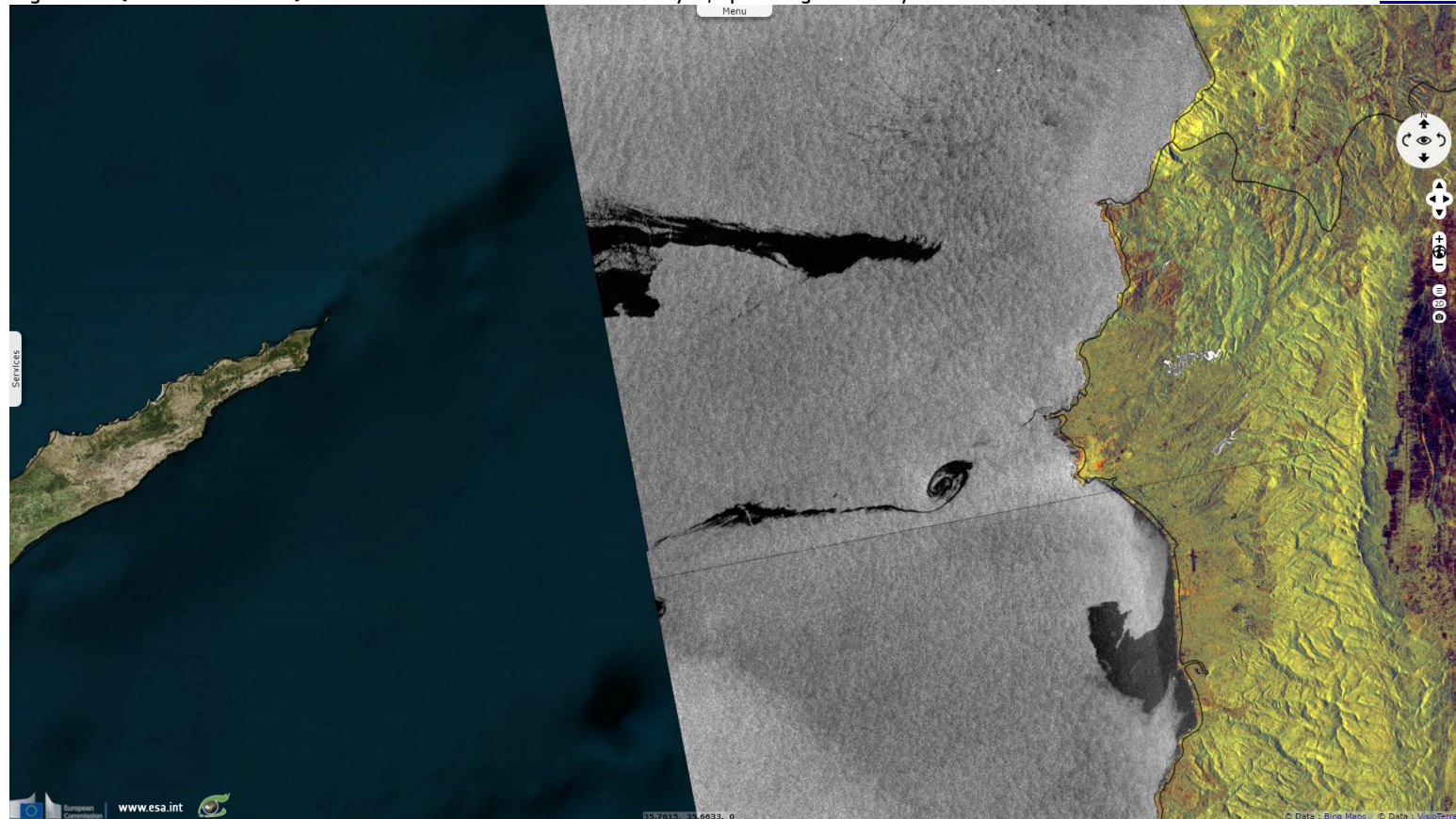
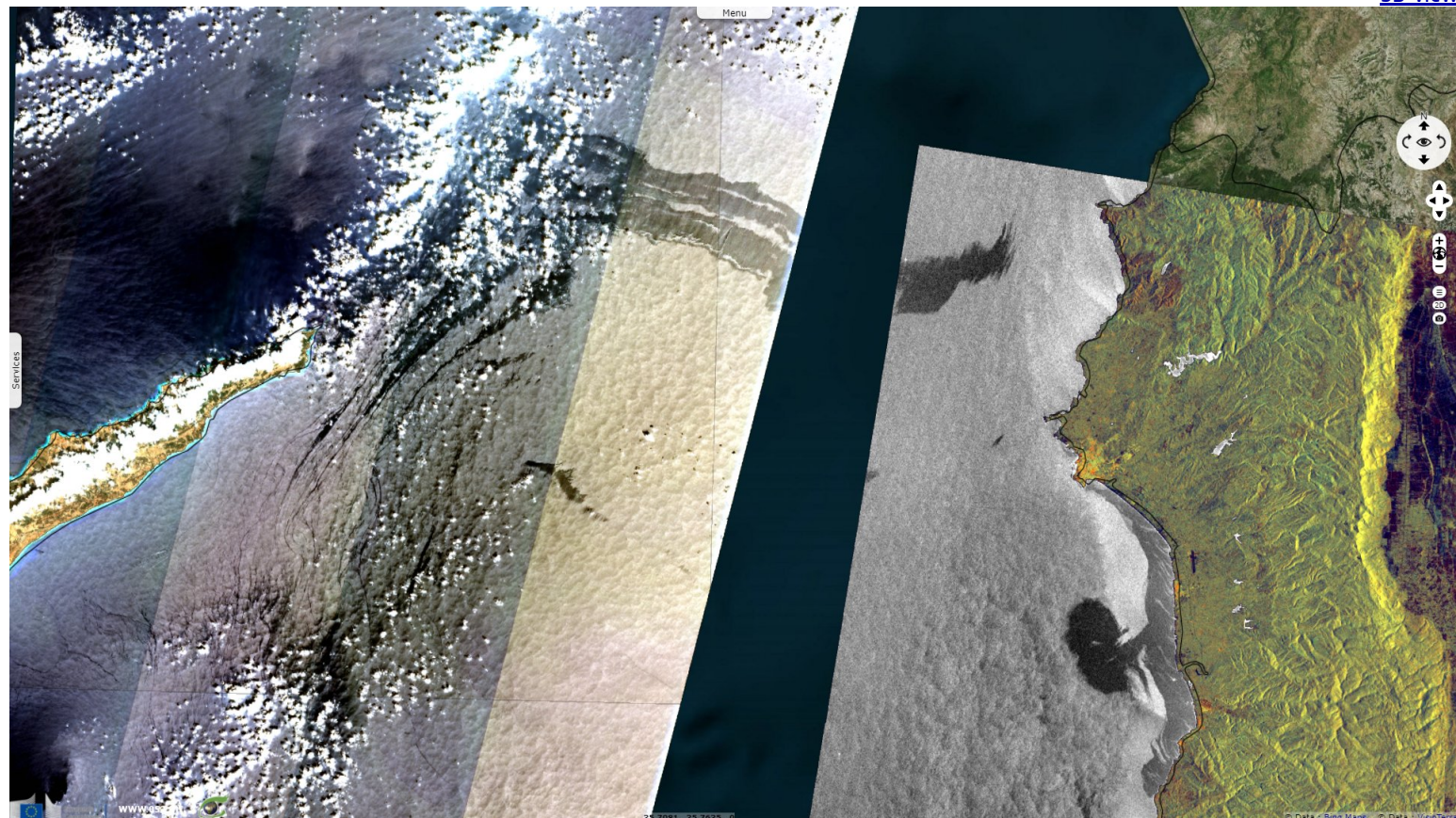


Fig. 9 - S1 (31.08.2021) & S2 (31.08.2021) - S1 image at east and near-contemporaneous S2 at west, the latter shows the slick reaching the Cypriot coast.

[3D view](#)



In the northern part of the island, Helena Smith [commented](#) in the Guardian "Crews were reportedly cleaning parts of the spill that had broken off, with the Turkish Cypriot infrastructure minister saying clumps of oil had become stuck to the seabed, which could be environmentally catastrophic." "In the island's south, the Greek Cypriot government requested an oil recovery vessel from the EMSA, which was also on standby. By Wednesday, Kadis, the Greek Cypriot agriculture minister, said the main oil slick was headed towards Turkey and Syria."

Fig. 10 - S3 OLCI (01.09.2021) - The main body of the slick then moved north-east toward Turkey

[3D view](#)

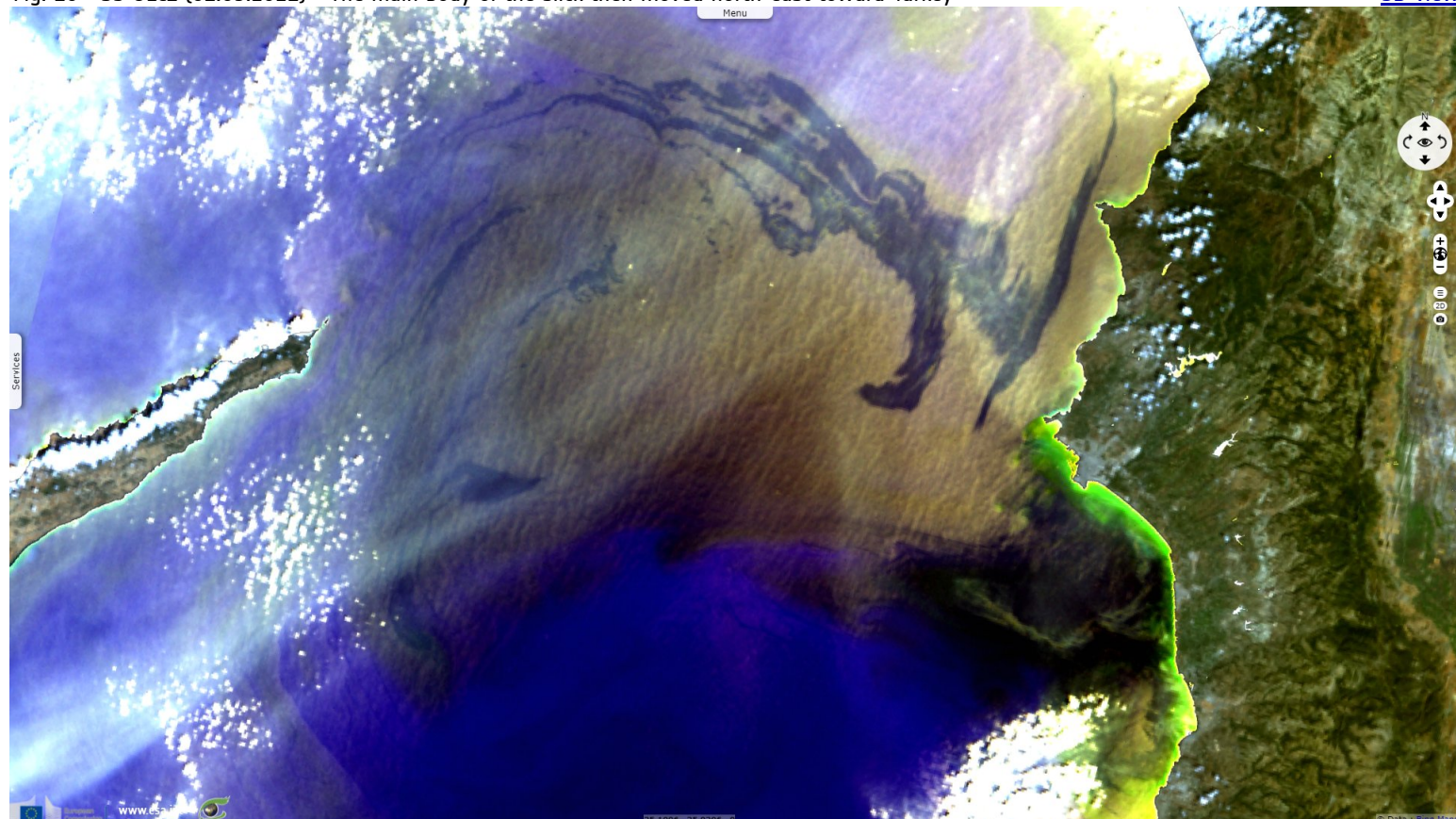


Fig. 11 - S2 (02.09.2021) - It reached Antakya on 2 September.

[3D view](#)



3D view

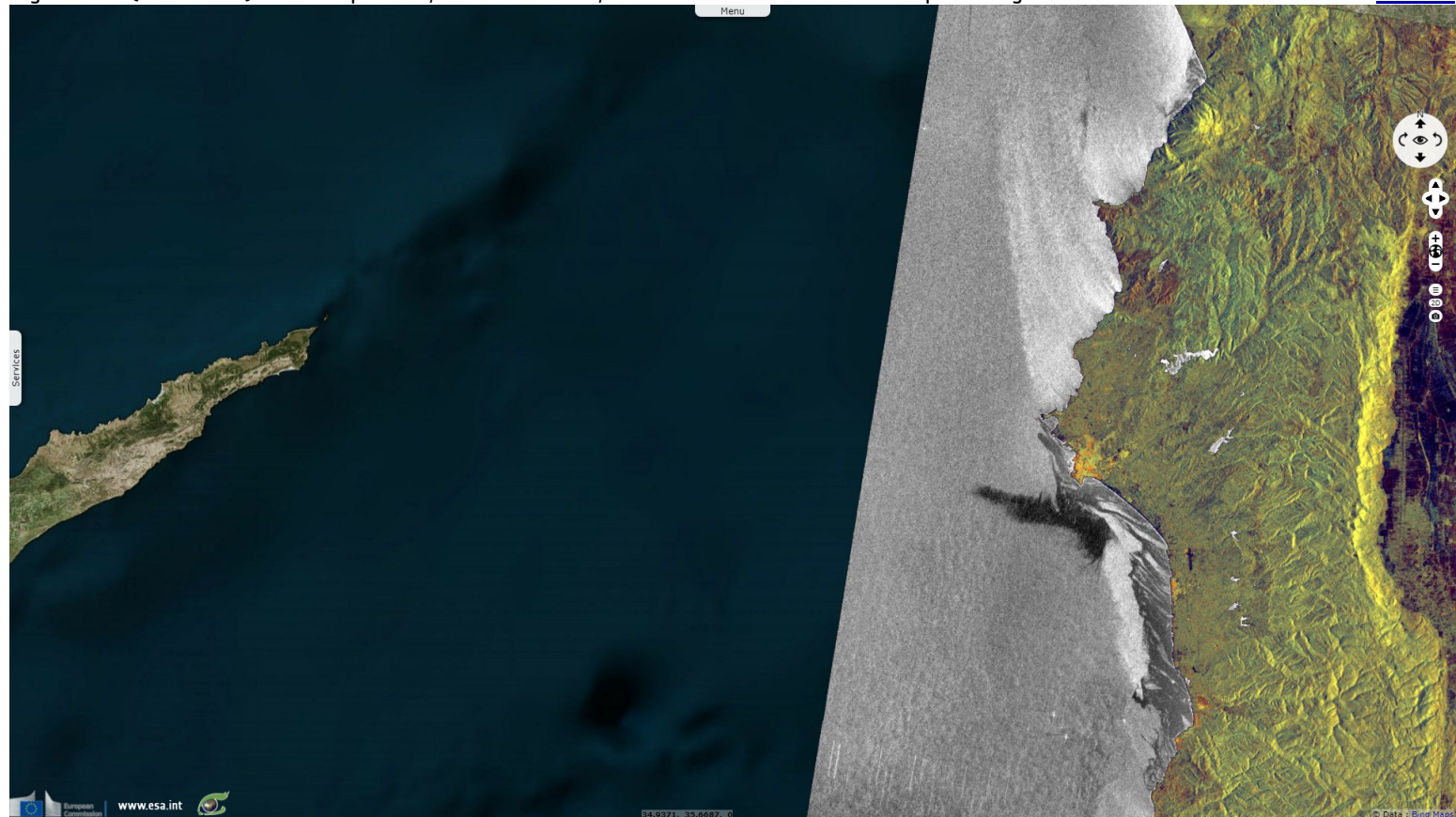


3D view



Fig. 14 - S1 (06.09.2021) - On 6 September, after two weeks, the source does not seem to keep emitting oil into the sea.

[3D view](#)



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