

Heavy rainfall over south-east France & north Italy

Sentinel-3 SLSTR RBT acquired on 02 October 2021 from 20:01:52 to 22:41:27 UTC

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Sentinel-1 CSAR IW acquired on 03 October 2021 from 17:30:58 to 17:31:23 UTC

Sentinel-3 SLSTR RBT acquired on 04 October 2021 from 09:15:35 to 20:53:29 UTC

Sentinel-2 MSI acquired on 06 October 2021 at 10:29:21 UTC

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[2D Layerstack](#)

Fig. 1 - S3 SLSTR (04.10.2021) - A large depression moved over western Europe.

[3D animation](#) [3D view](#)

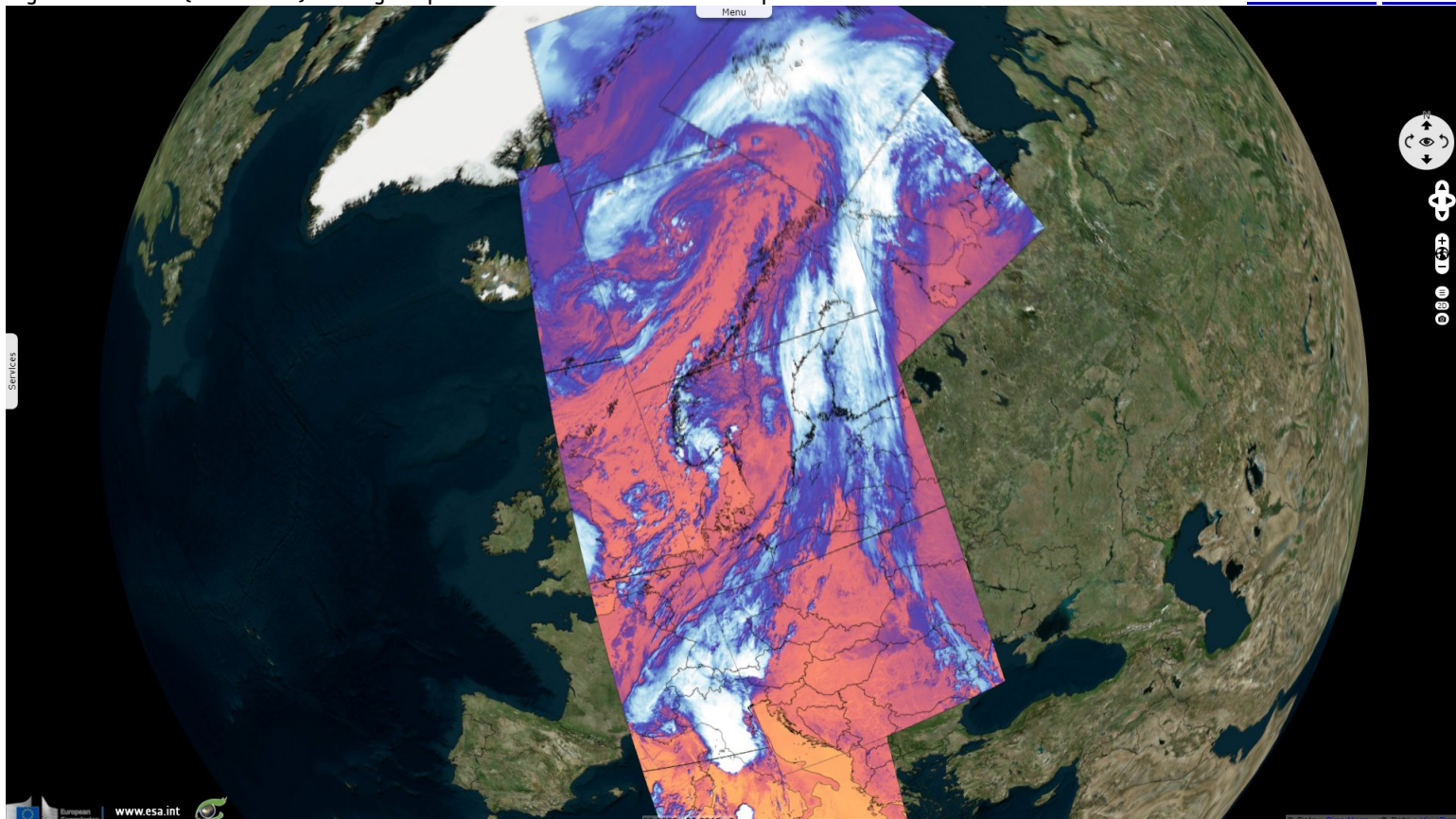


Fig. 2 - S3 SLSTR (04.10.2021) - In particular, it caused heavy rainfalls over south-east of France and northern Italy.

[3D view](#)

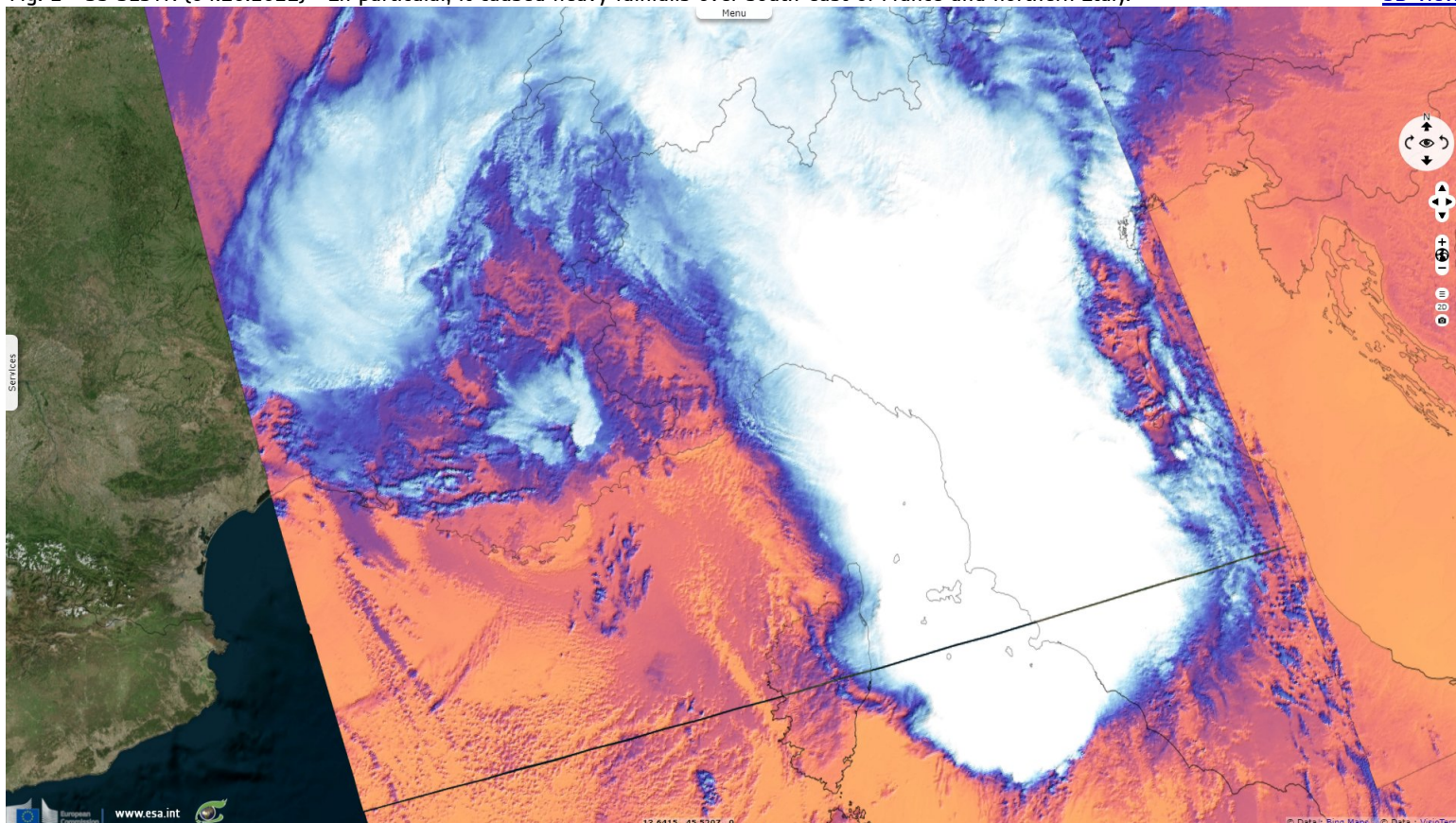
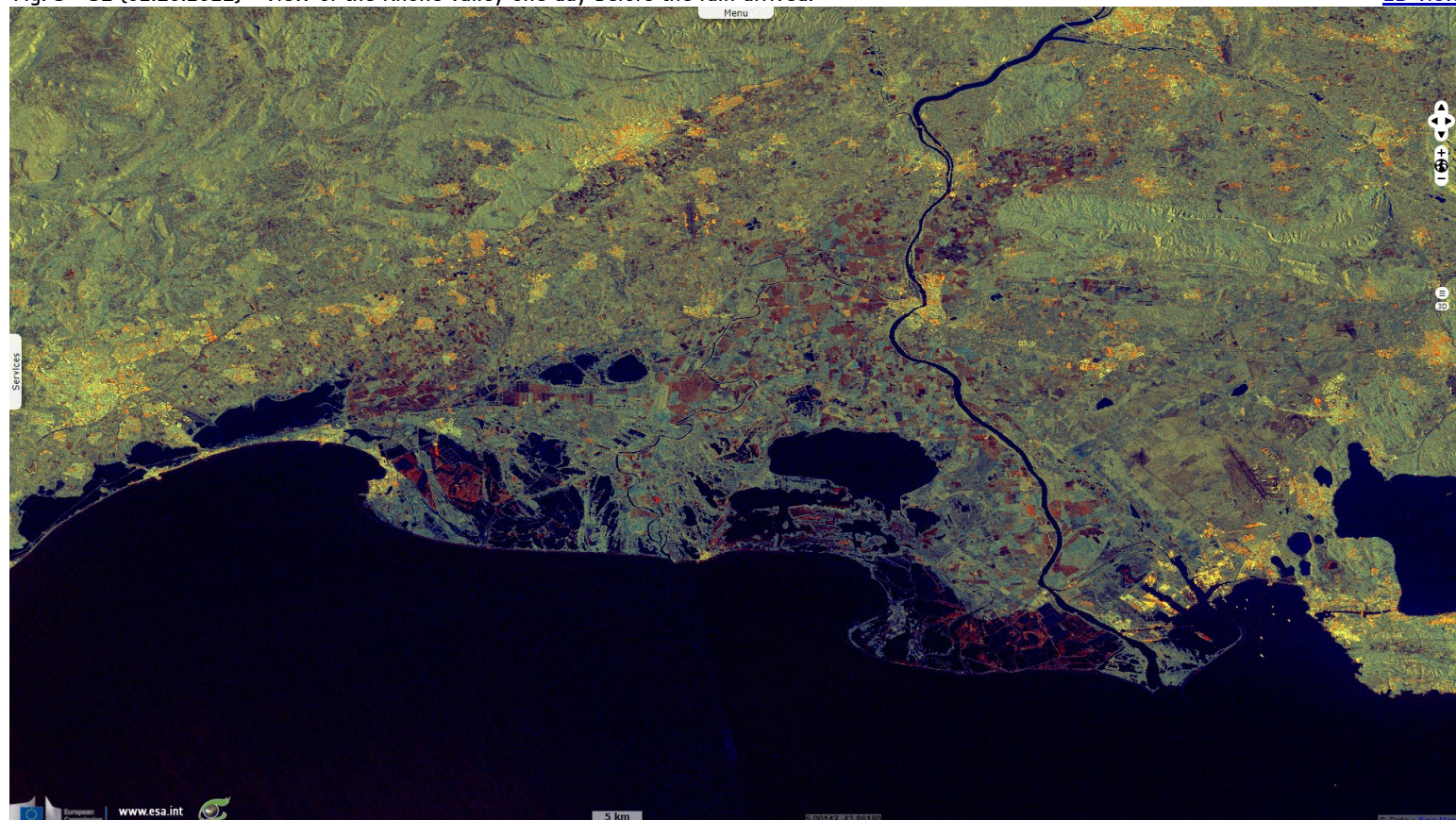


Fig. 3 - S1 (02.10.2021) - View of the Rhone valley one day before the rain arrived.

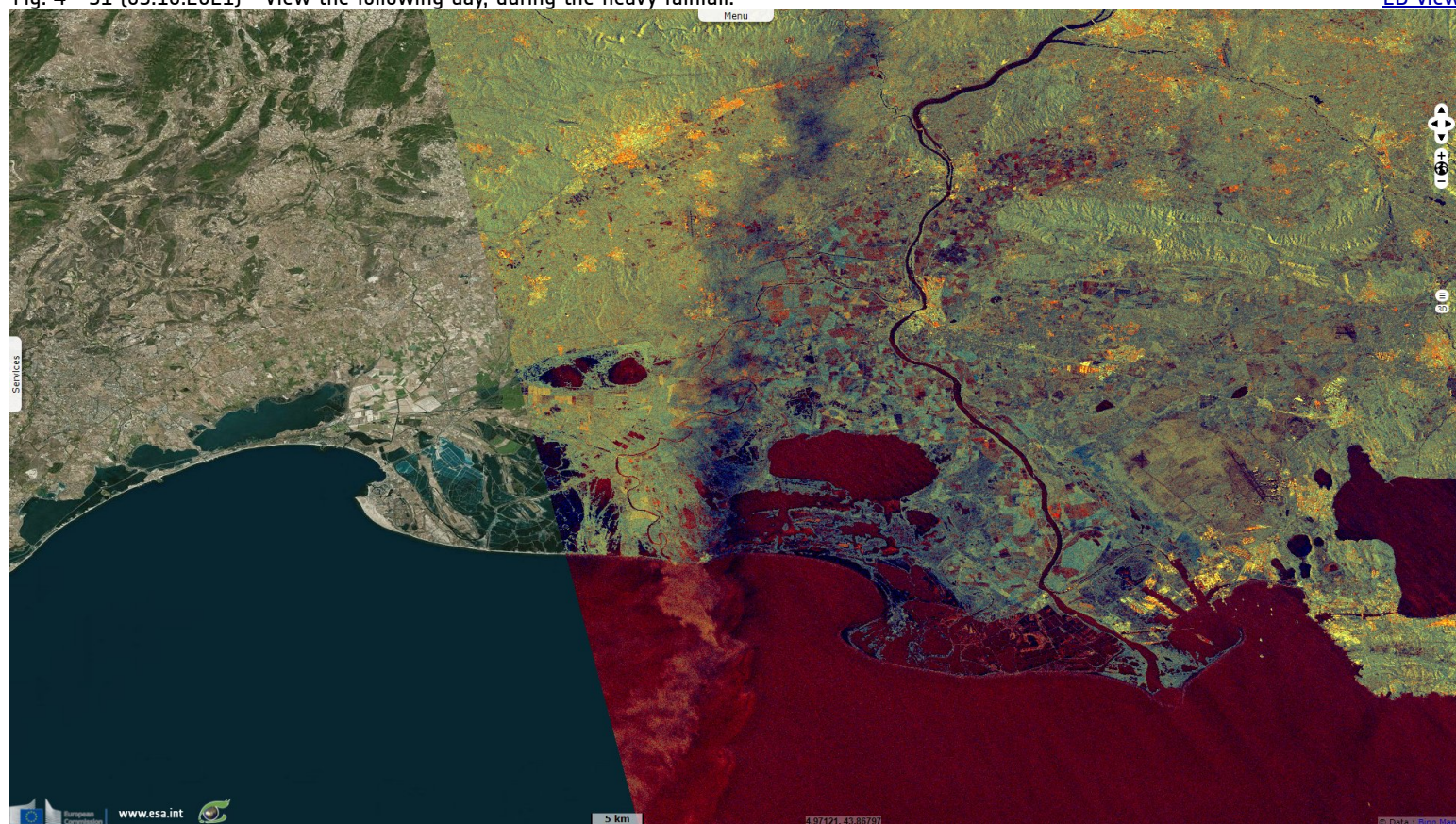
[2D view](#)



In south-east of France, up to 180 mm fell on Marseille, 250 mm in the Var department (where power outage affected 23 000 homes), in Cevennes mountains and 365 mm in Lozere department. It is in the Rhone Valley that satellite images best showed the phenomenon.

Fig. 4 - S1 (03.10.2021) - View the following day, during the heavy rainfall.

[2D view](#)



Floodlist reported staggering amounts of rain fell in northern Italy on 04 October 2021, causing floods and landslides in Liguria and Piedmont Regions. Liguria's environment agency reported a record 181 mm of rainfall in just 1 hour and over 900 mm in 24 hours.

Fig. 5 - S2 (06.10.2021) - View of the increased alluvial charge in the Rhone delta after the rainfall.

[2D view](#)

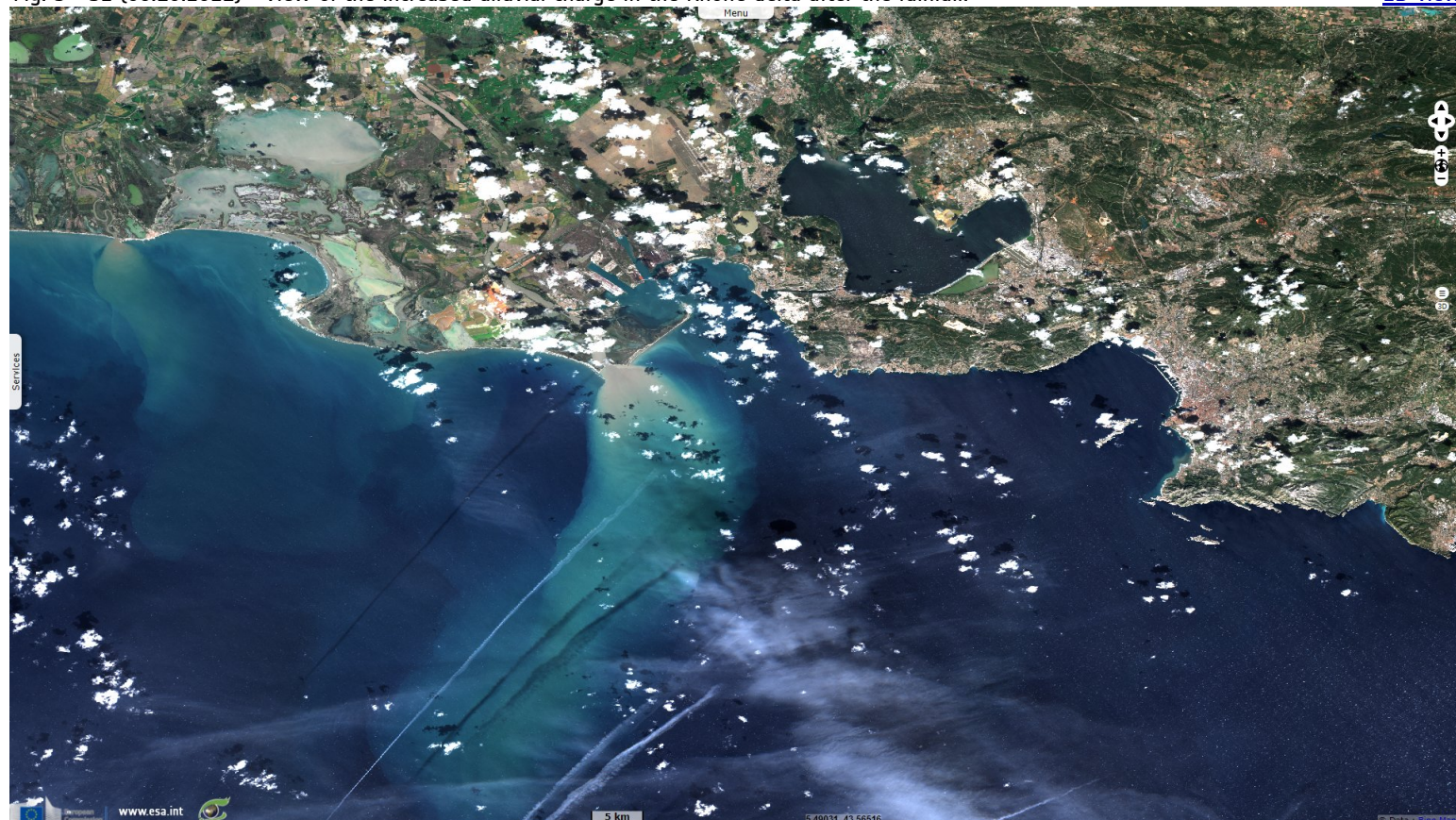
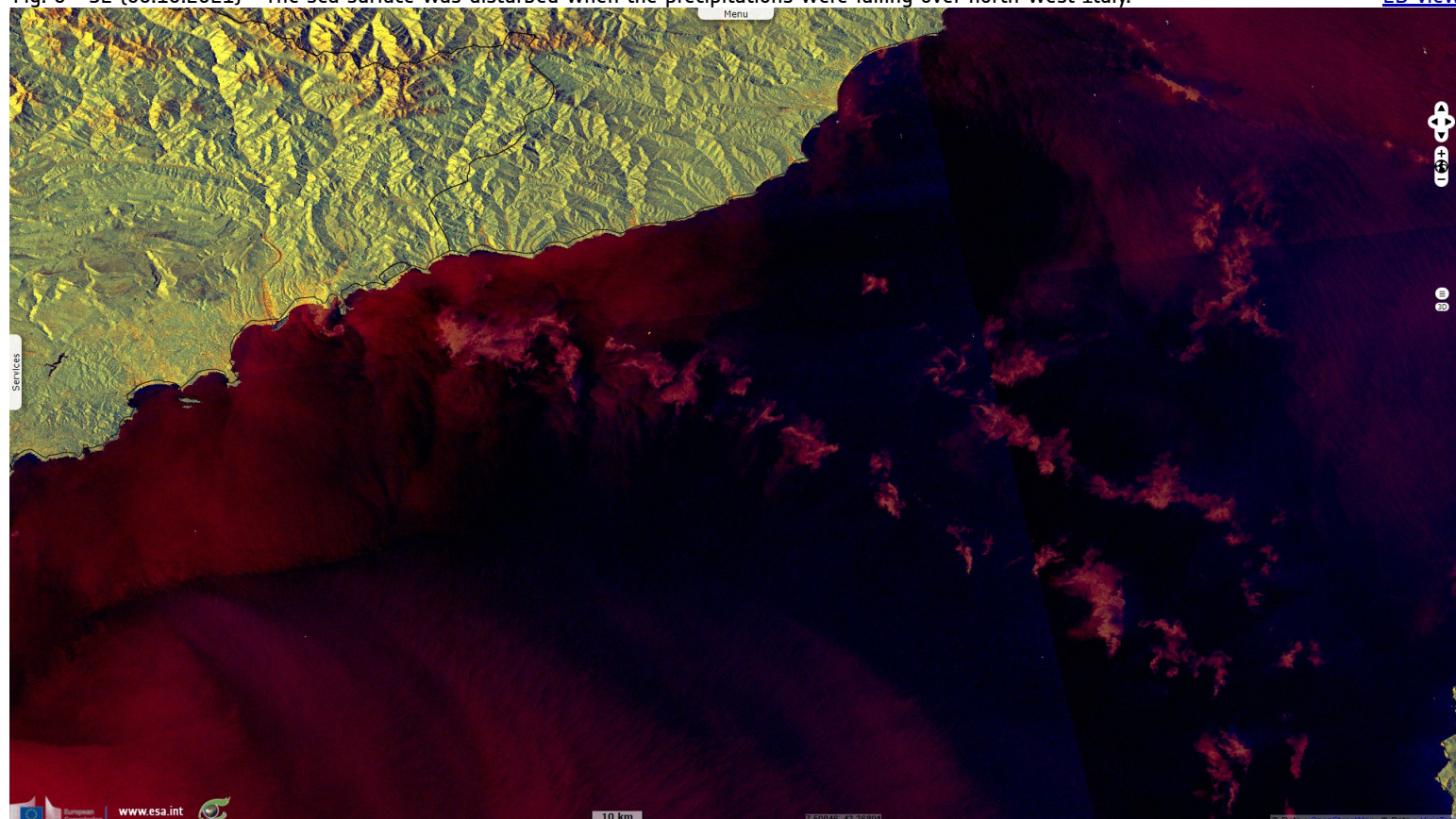


Fig. 6 - S2 (06.10.2021) - The sea surface was disturbed when the precipitations were falling over north-west Italy.

[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.
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