

Mudflows in Zimbabwe Eastern Highlands

Sentinel-2 MSI acquired on 23 February 2019 at 07:39:19 UTC

Sentinel-2 MSI acquired on 22 March 2019 at 07:26:19 UTC

Sentinel-2 MSI acquired on 25 March 2019 at 07:36:09 UTC

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[2D Layerstack](#)

Fig. 1 - S2 [22 & 25.03.2019] - 4,3,2 natural colour - Caused by Cyclone Idai, large sediment plumes discharge into the Canal of Mozambique [3D view](#)

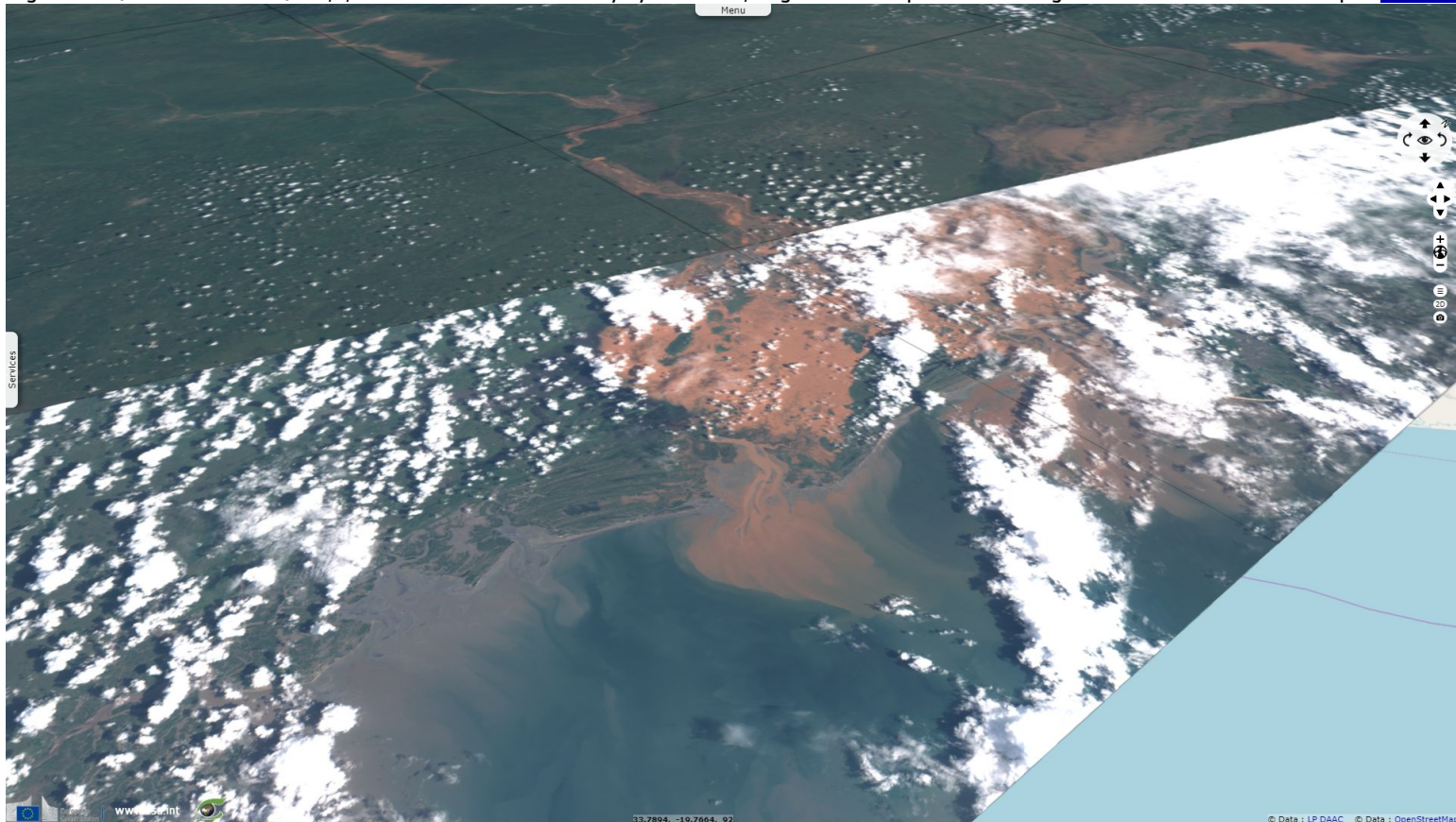
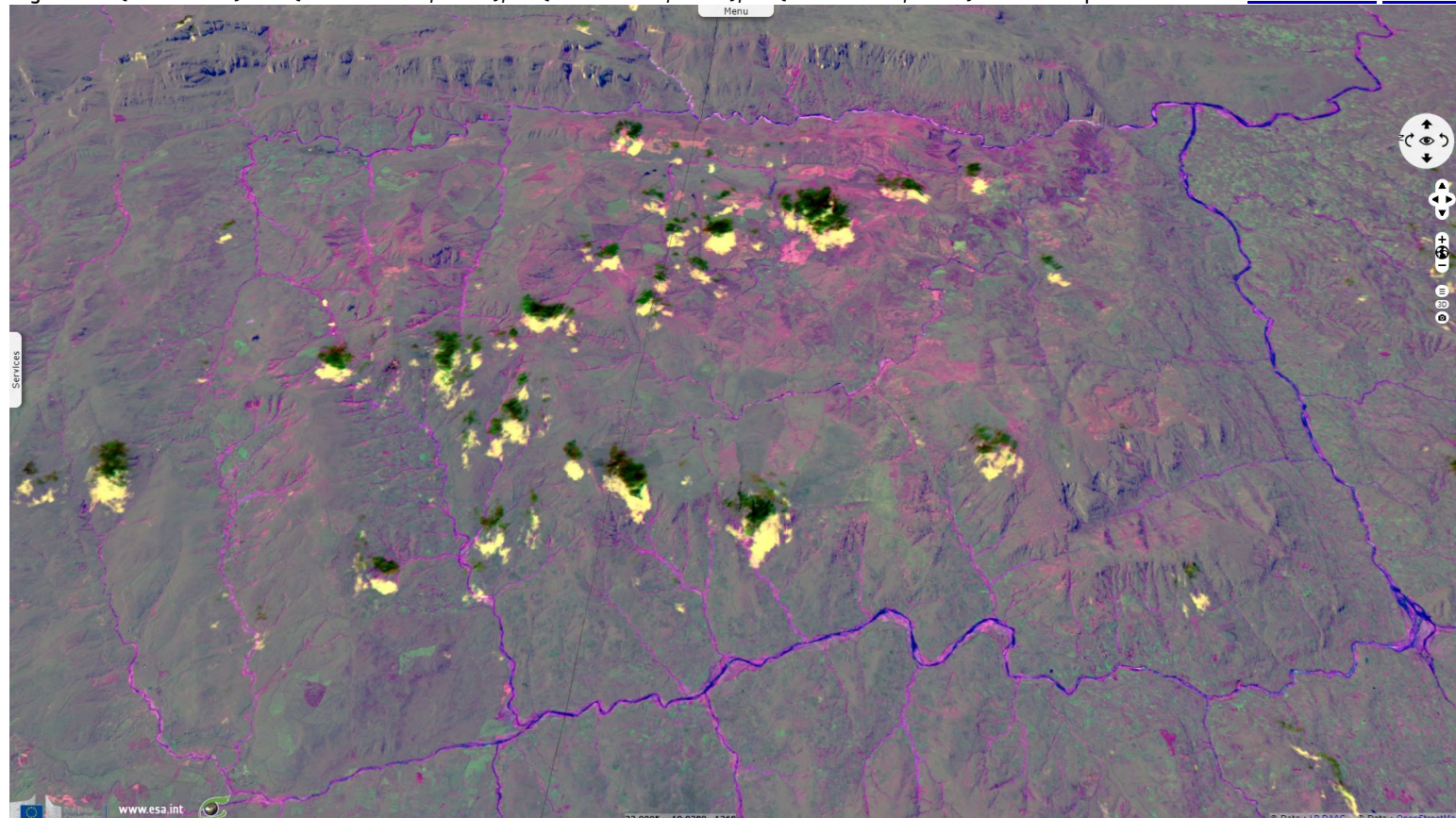


Fig. 2 - S2 [25.03.2019] - 4,3,2 colour composite - Upstream, sediments brought by mudflows remained after the flood. [3D animation](#) [3D view](#)



Fig. 3 - S2 (25.03.2019) - ndi(band 11 after,before), ndi(band 8 after,before), ndi(band 2 after,before) colour composite.

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



The 11,8,2 colour composite highlights the bare soil, vegetation and water cover. By computing the Normalised Difference Index of these 3 bands before and after Cyclone Idai, the change become more apparent: rivers grew and bare soil replaced vegetation due to erosion and mud deposits. In particular, landslides happened in numerous gullies, showing in pink and purple.

Fig. 4 - S2 (25.03.2019) - View of Chimanimani section of Zimbabwe Eastern Highlands across the frontier with Mozambique.

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

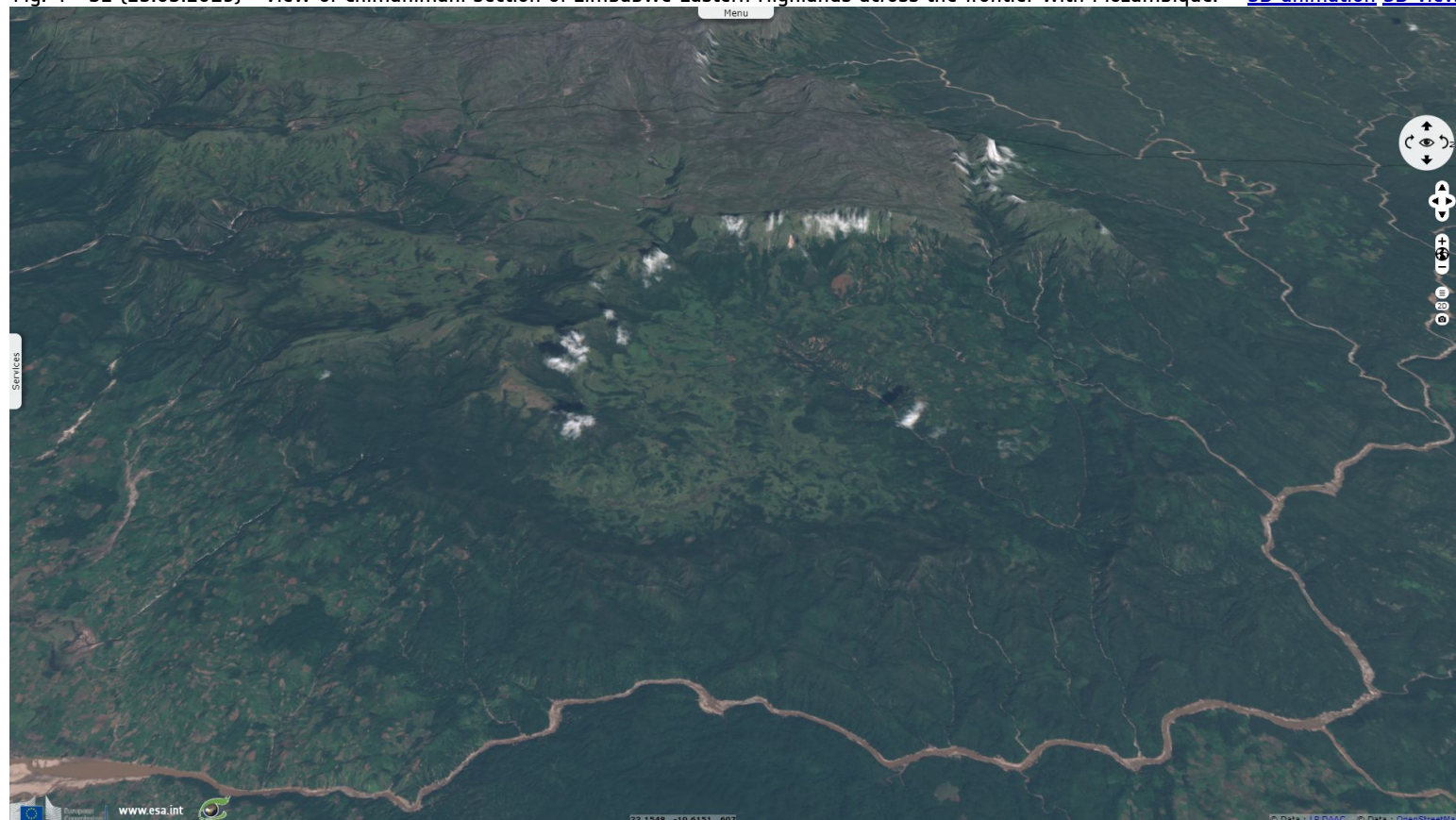
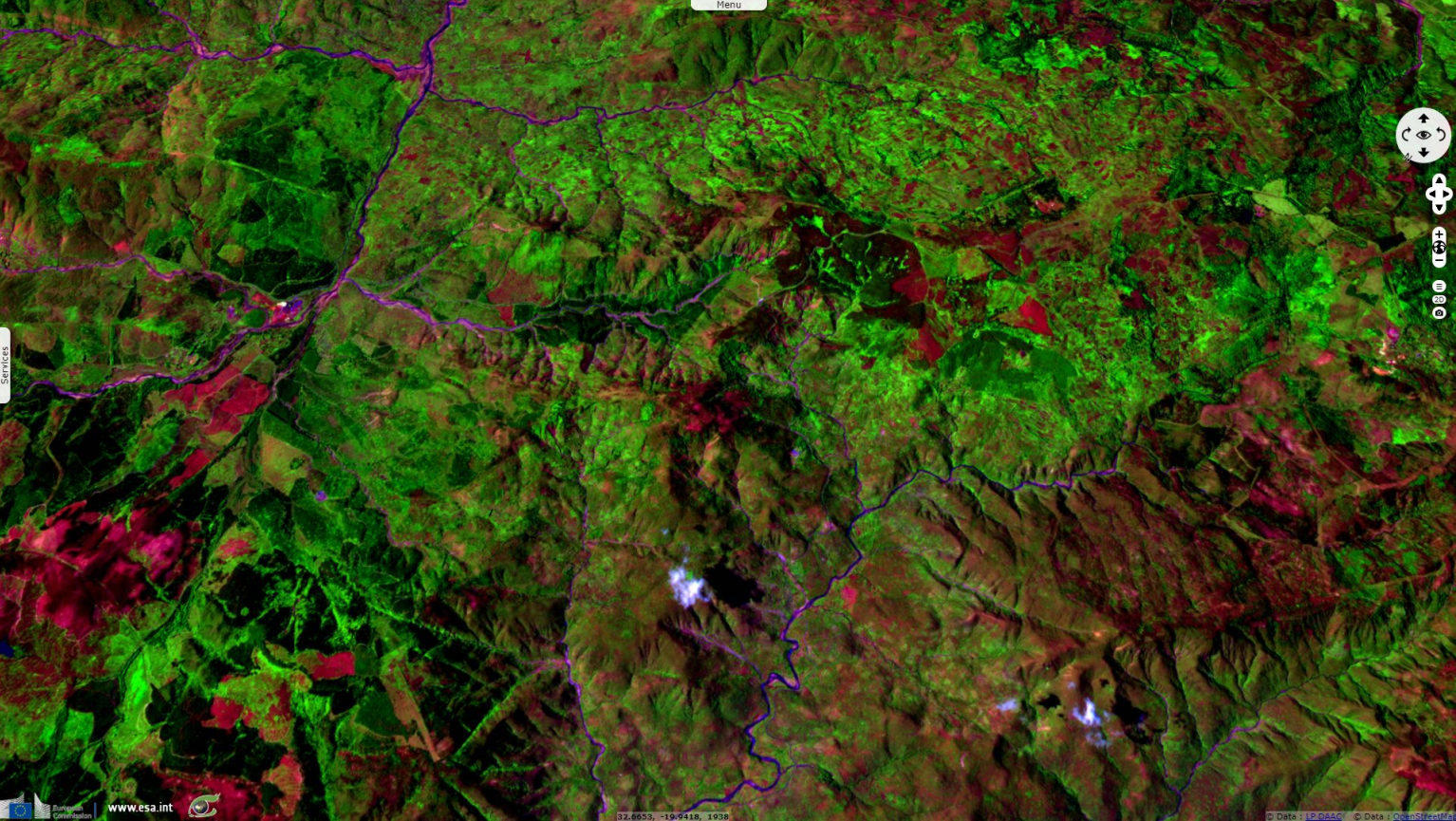














Fig. 5 - S2 (25.03.2019) - 11,8,2 colour composite - Zoom in on eroded areas north of Monte Binga. [3D animation](#) [3D view](#)



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