Sentinel Vision
SED-469
17 June 2019

2D Layerstack

Anak Krakatau metamorphosis during its 2018 eruption

Sentinel-2 MSI L1C acquired on **16 November 2018** at 03:00:01 UTC
Sentinel-1 CSAR IW acquired on **22 December 2018** at 22:33:45 UTC
...
Sentinel-1 CSAR IW acquired on **08 January 2019** at 22:41:39 UTC
Sentinel-2 MSI L2A acquired on **02 February 2019** at 03:09:39 UTC

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Keyword(s): Geohazard, island, archipelago, coastal, natural disaster, volcano, earthquake, Indonesia, Pacific Ring of Fire

Fig. 1 - S2 (16.11.2018) - 12,11,2 colour composite - Anak Krakatau appeared in 1927, after the Krakatau volcano collapsed in 1883. 2D view

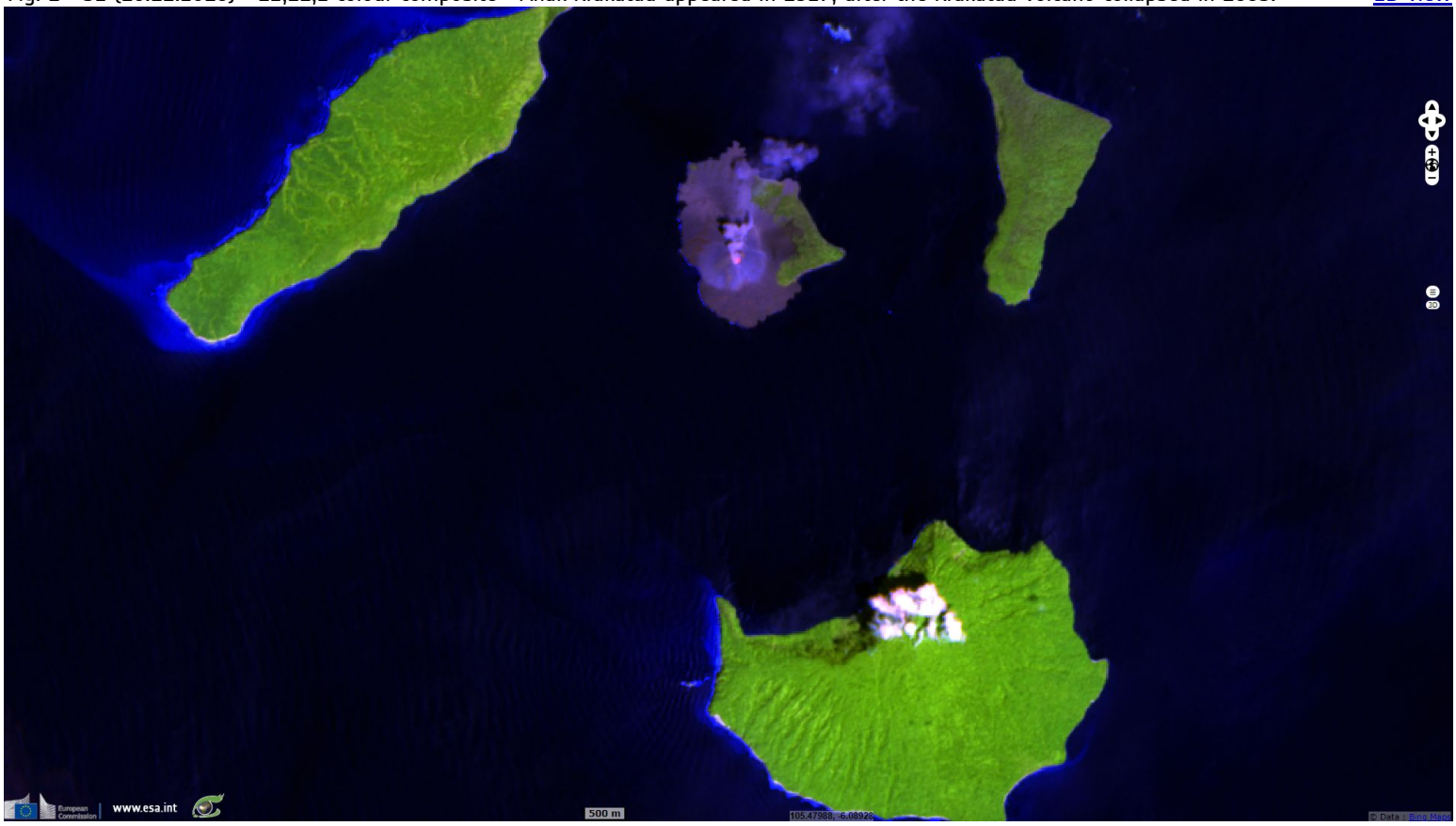


Fig. 2 - S1 (22.12.2018) - vv,vh,vv colour composite - Anak Krakatau had erupted +40 times since it emerged, it was active since June 2018. 2D view

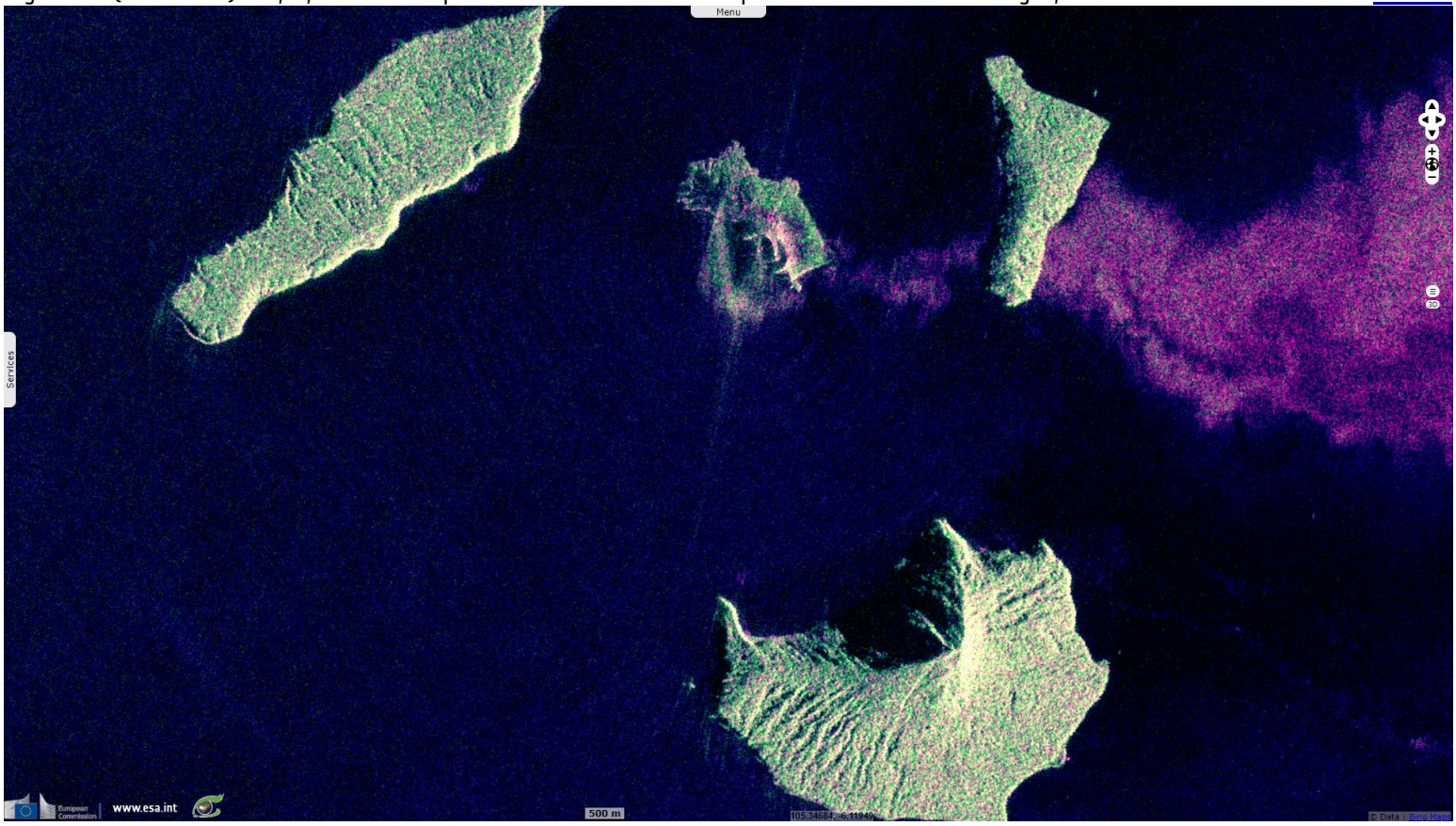


Fig. 3 - S1 (28.12.2018) - vv,vh,vv colour composite - Its activity caused a submarine collapse and a tsunami on 22.12.2018. 2D view

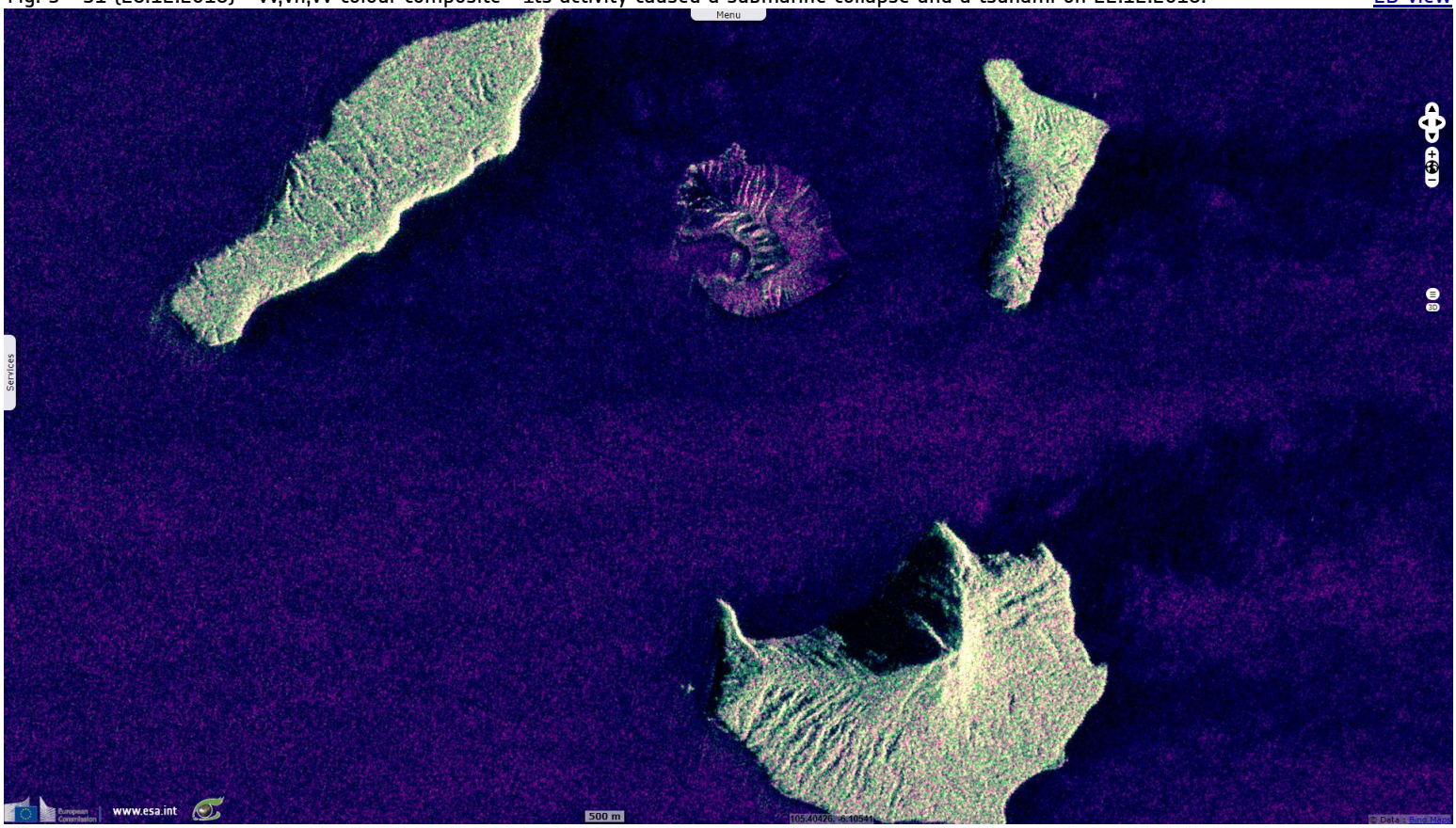
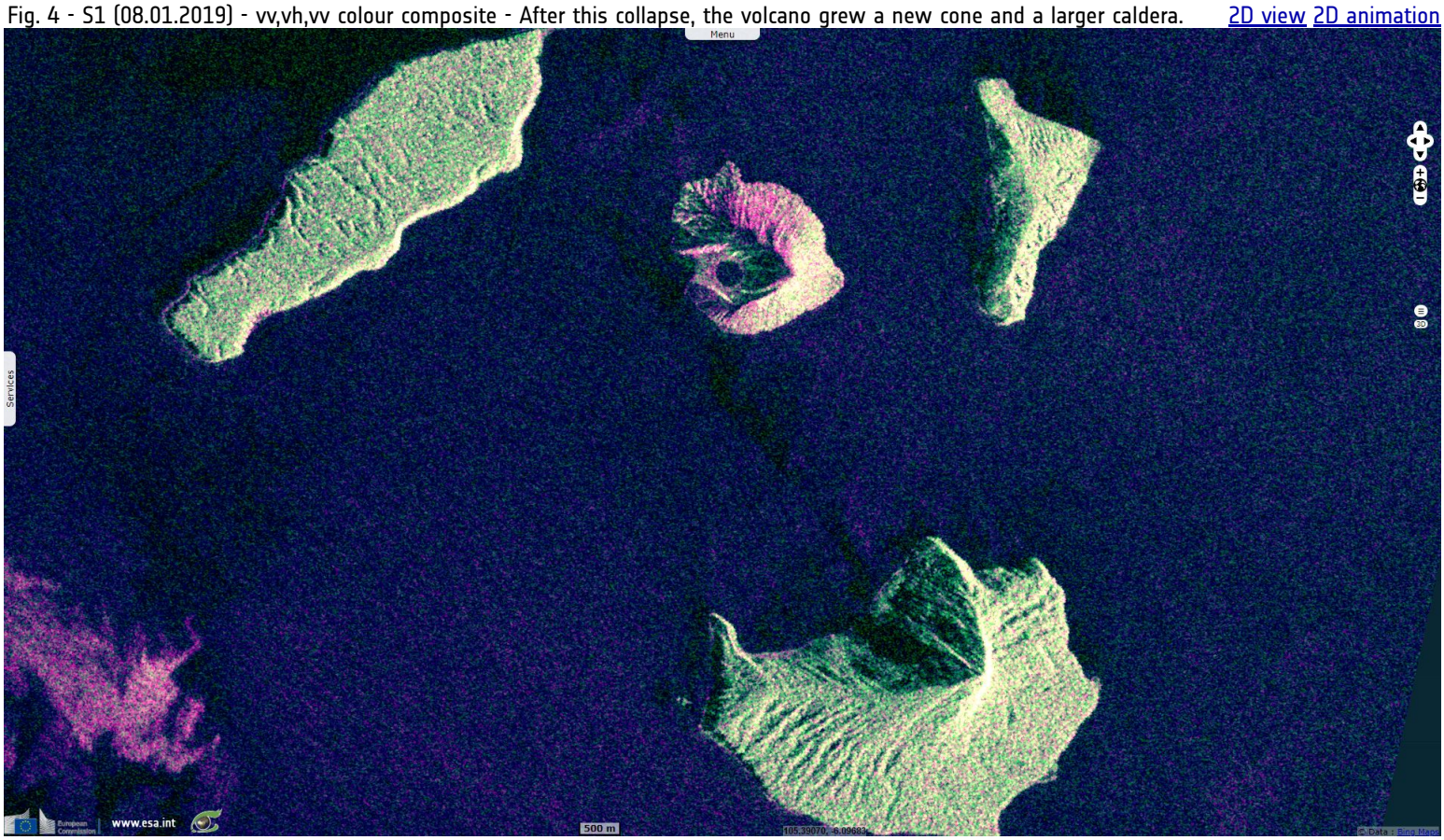


Fig. 4 - S1 (08.01.2019) - vv,vh,vv colour composite - After this collapse, the volcano grew a new cone and a larger caldera. 2D view 2D animation



The shape of the island changed slightly since February, the circular caldera enlarged and became less regular. The lake still contains large amounts of unconsolidated sediments, giving it earthy hues after rainfalls. The western gap between the caldera and the sea also widened slightly.

Fig. 5 - S2 (02.02.2019) - 4,3,2 natural colour - The lack of vegetation on the emerged volcano makes it vulnerable to erosion. 2D view

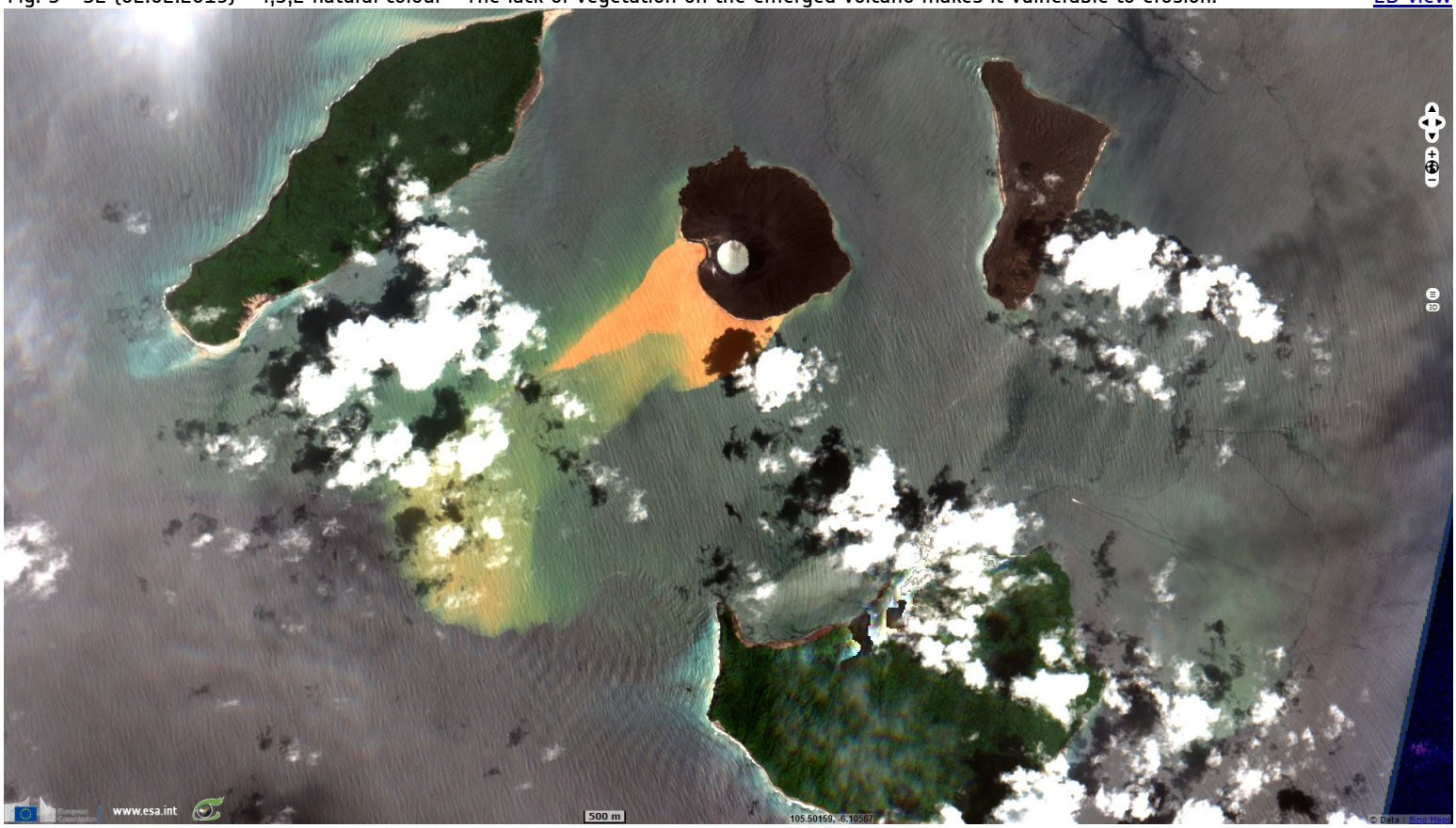
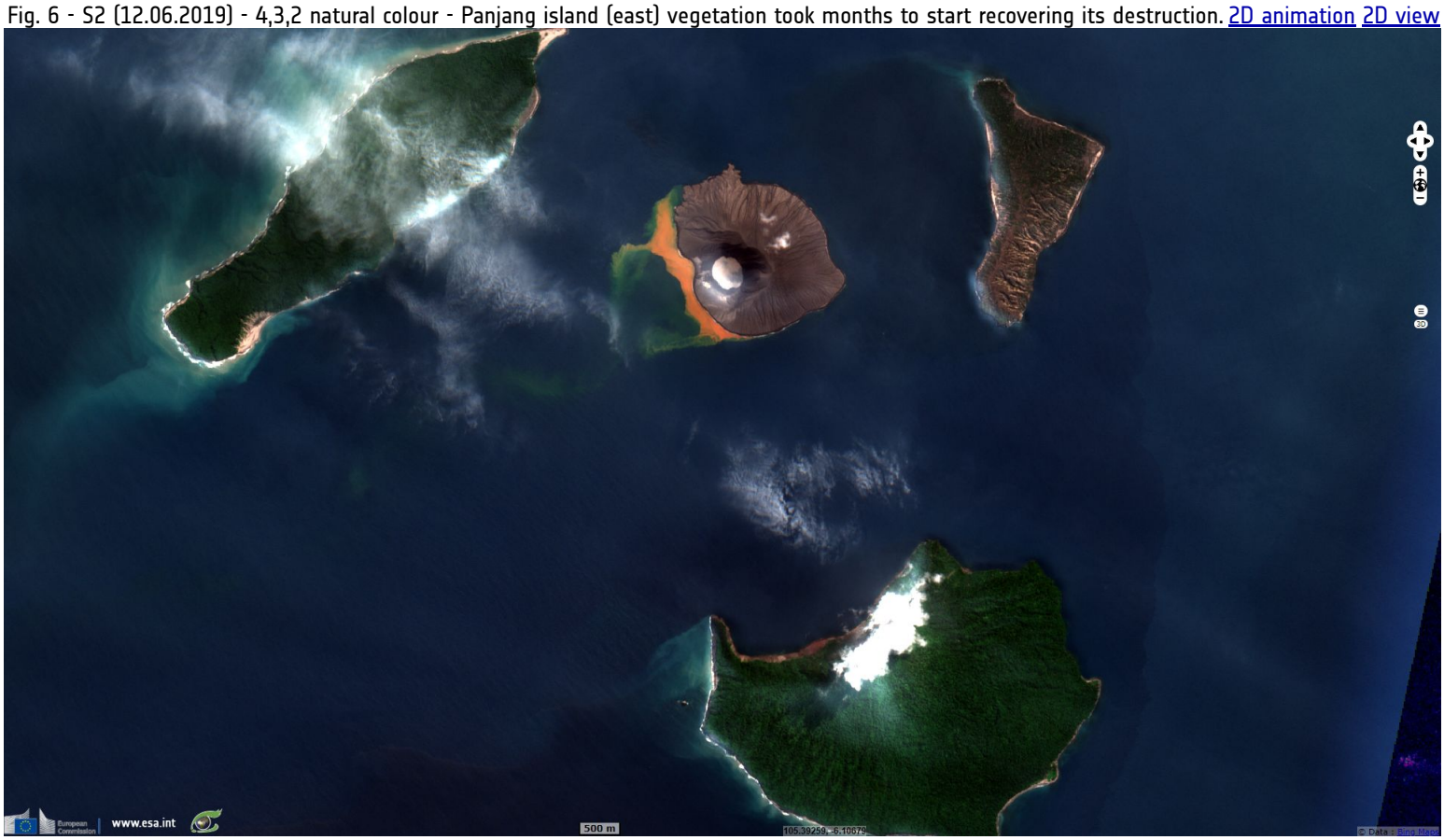


Fig. 6 - S2 (12.06.2019) - 4,3,2 natural colour - Panjang island (east) vegetation took months to start recovering its destruction. 2D animation 2D view



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