

Torrential rain causes multiple dam failures in China

Sentinel-2 MSI acquired on 25 June 2021 at 02:45:49 UTC
Sentinel-1 CSAR IW acquired on 06 July 2021 at 21:53:17 UTC
Sentinel-1 CSAR IW acquired on 18 July 2021 at 21:53:18 UTC
Sentinel-2 MSI acquired on 20 July 2021 at 02:45:51 UTC

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[2D Layerstack](#)

Fig. 1 - S2 (2021.06.25) - View Yong'an Dam and Xinfa Dam, located in Morin Dawa Daur, Inner Mongolia, China

[2D view](#)

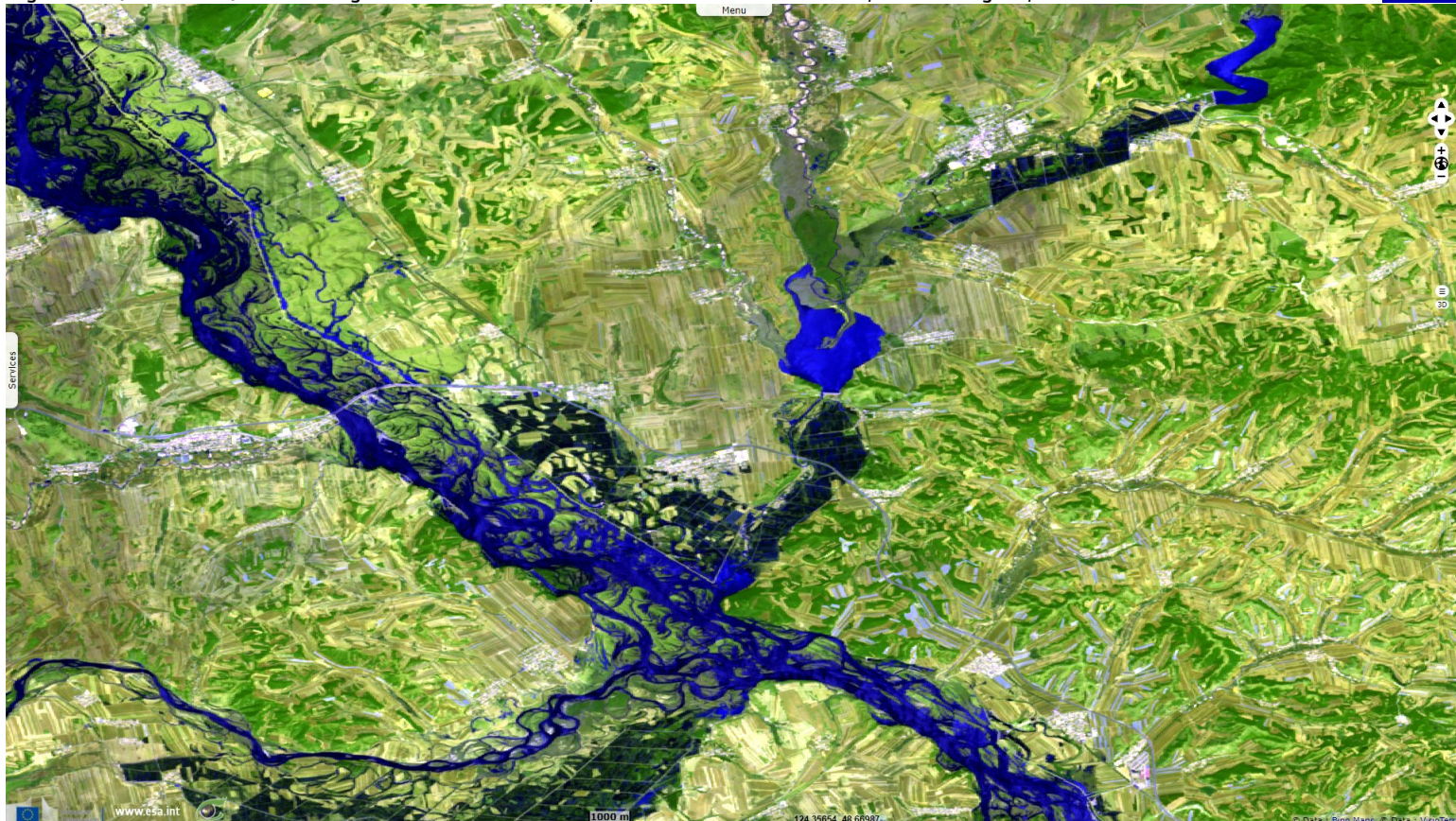


Fig. 2 - S2 (2021.07.20) - On Sunday 18 July 2021, the torrential rain of the summer flood season caused both dams to fail.

[2D view](#) [2D animation](#)

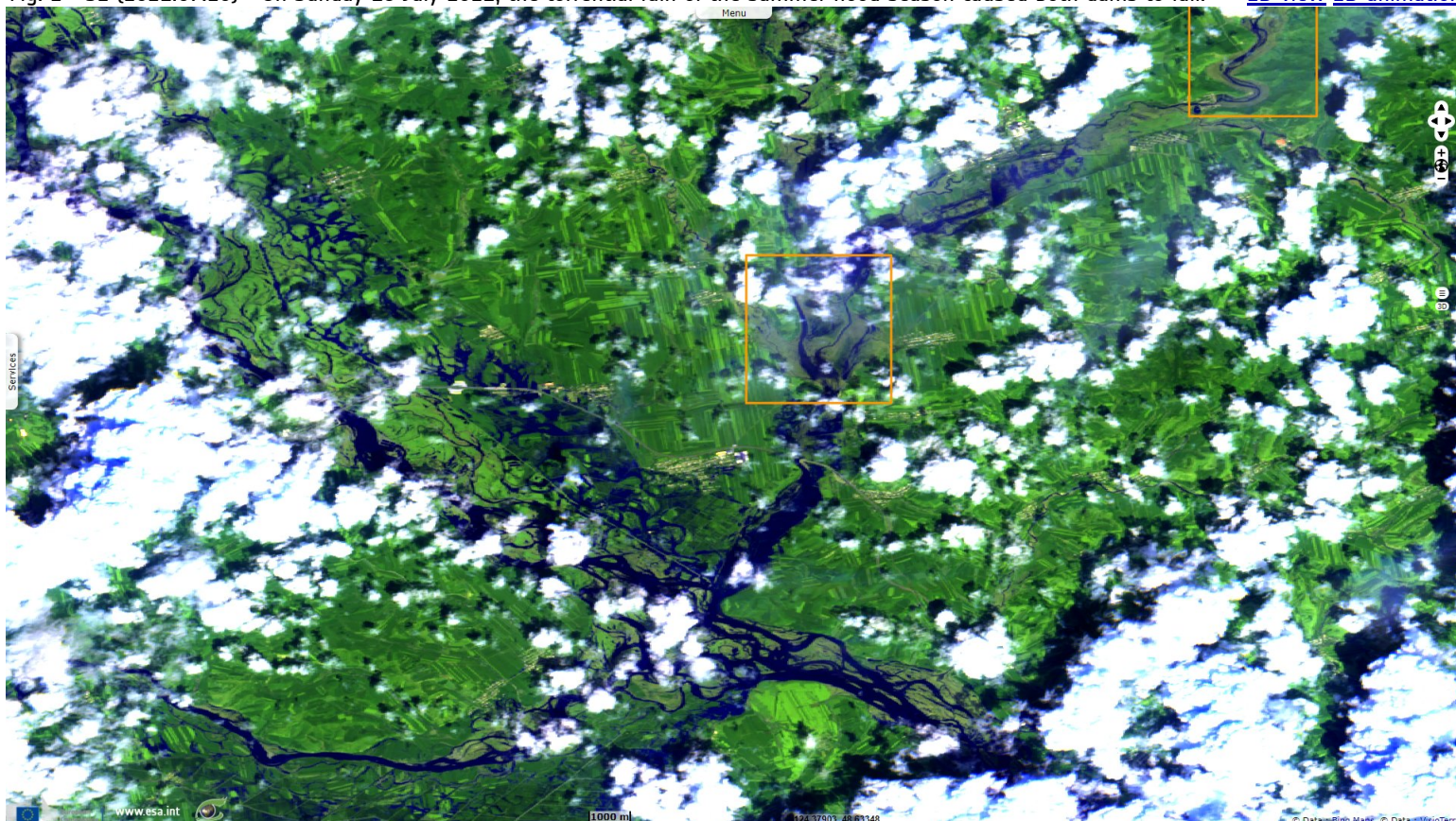


Fig. 3 - S1 (06.07.2021) - These dams had formed reservoirs with a combined water storage capacity of 46 million m3.

[2D view](#)

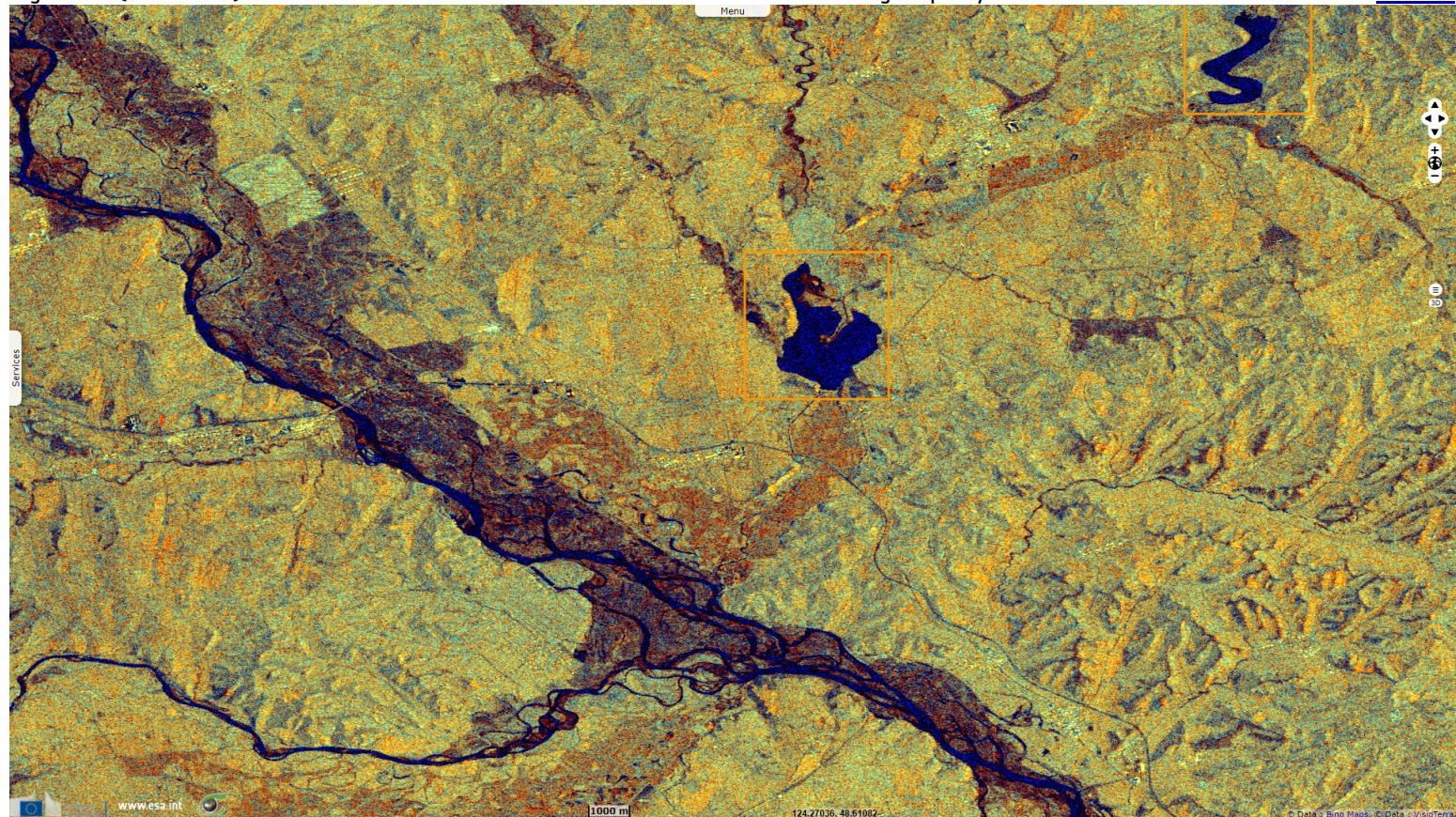


Fig. 4 - S1 (18.07.2021) - At centre, Xinfu dam (downstream) is not as empty as it is on the Sentinel-2 image acquired two days later.

[2D view](#) [2D animation](#)

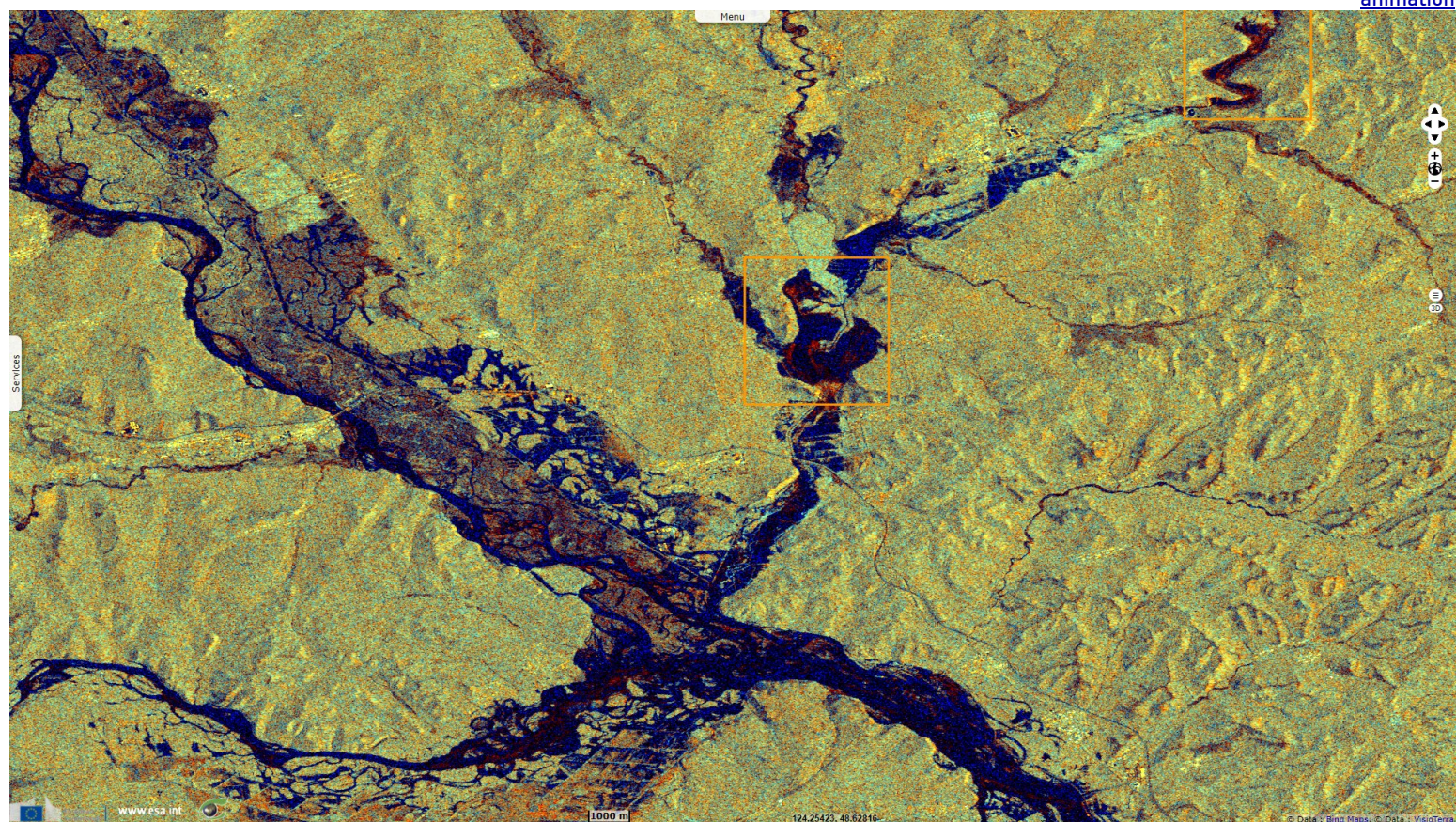
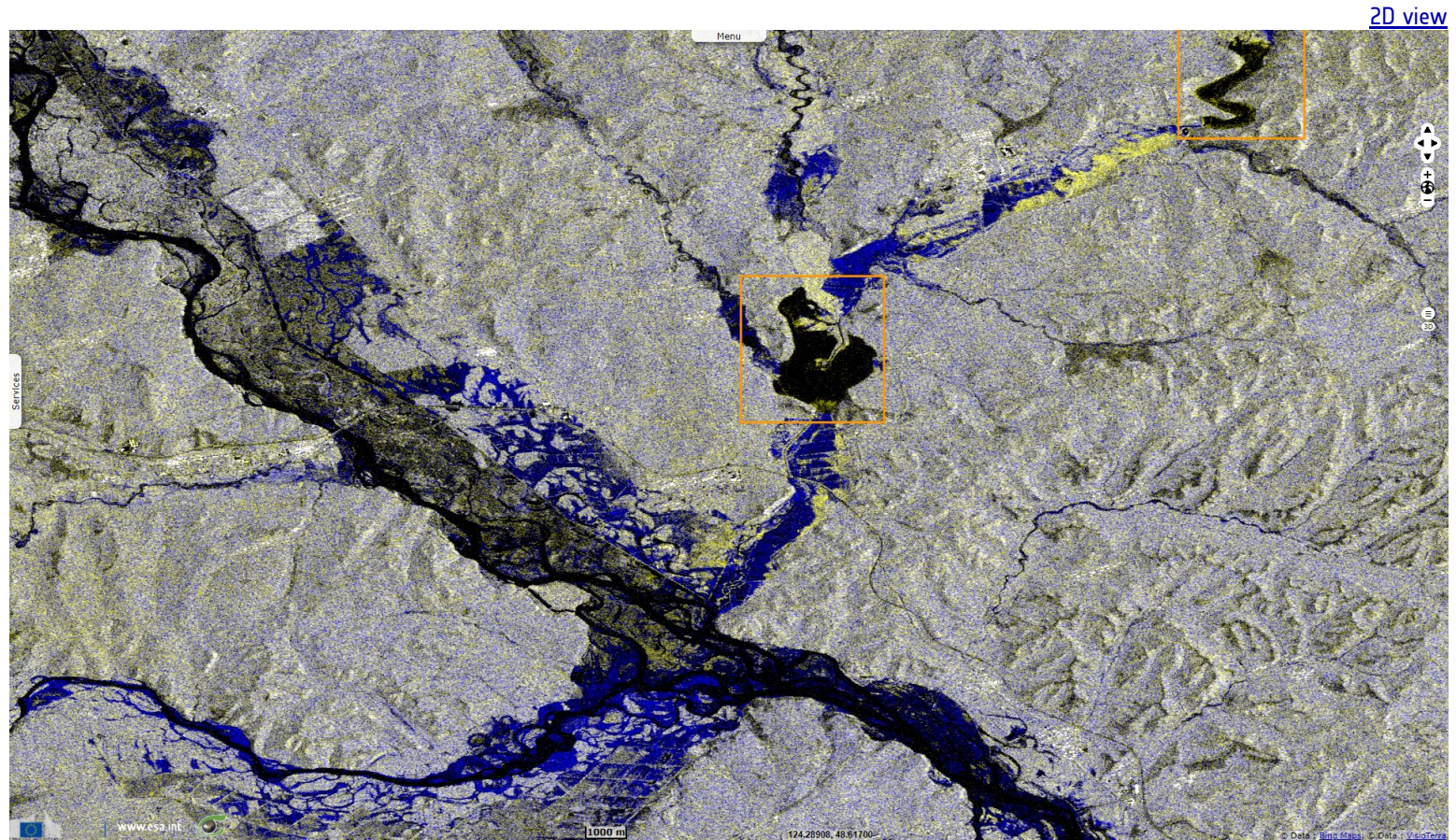














Fig. 5 - S1 (06 & 18.07.2021) - The collapse of Yong'an dam upstream likely released a catastrophic volume of water that overtopped Xinfa dam downstream.



16660 people were affected; 218 km² of farmland was flooded; 22 bridges, 124 culverts, and 15.6 kilometres of highway were destroyed... Casualties are unknown. Exceptional rainfalls on the more urbanized province of Hunan two days later caused another dam failure and largely breached another which may cause a worse toll.

*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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