

Xiaozhai Tiankeng "Heavenly Pit", China

Sentinel-1 CSAR IW acquired on 17 June 2020 at 10:44:09 UTC

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Sentinel-1 CSAR IW acquired on 11 July 2020 at 10:44:11 UTC

Sentinel-2 MSI acquired on 04 June 2021 at 03:15:39 UTC

Sentinel-2 MSI acquired on 06 December 2021 at 03:21:21 UTC

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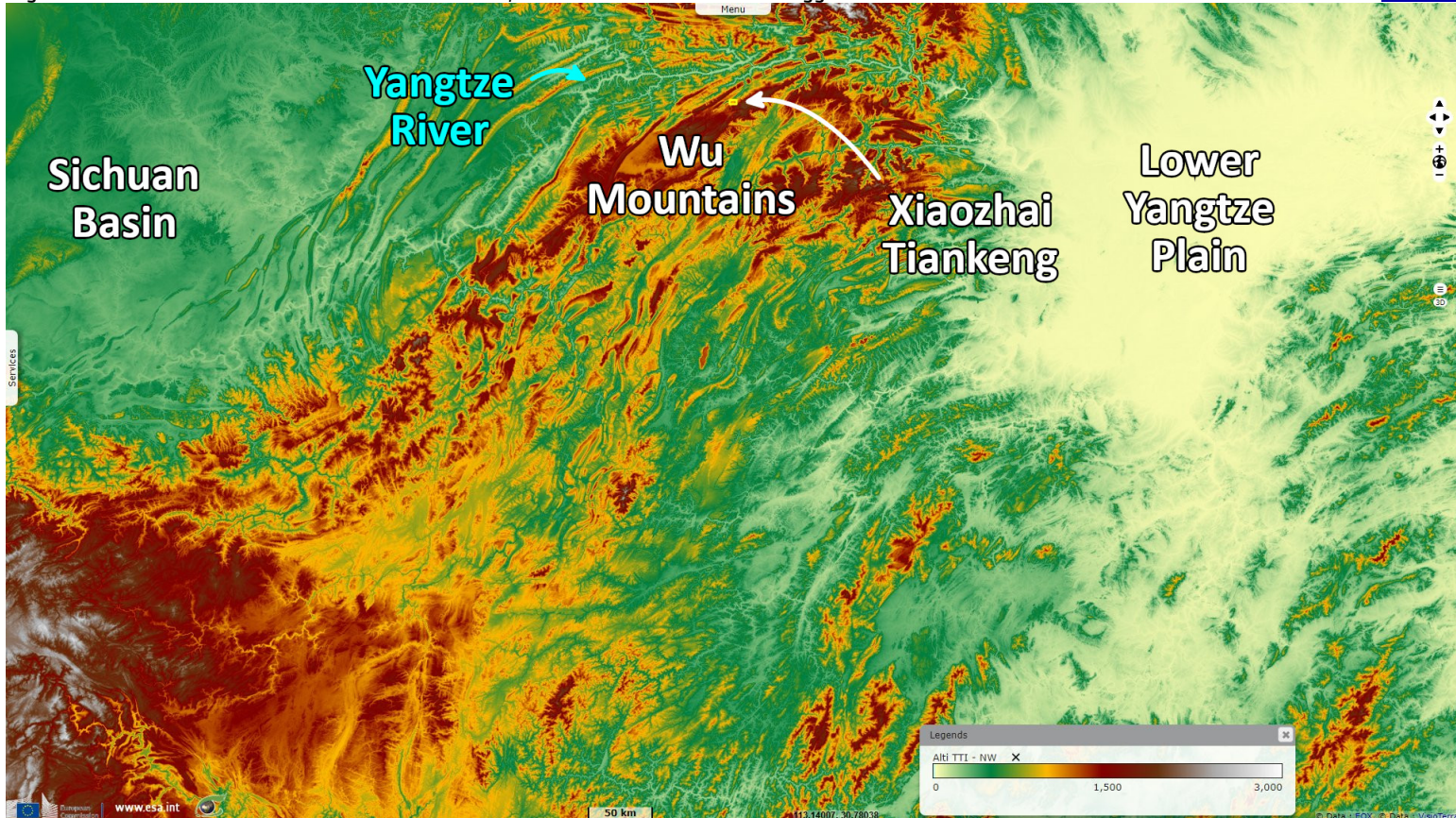
Keyword(s): Land, geology, erosion, UNESCO World Heritage, biodiversity, China



[2D Layerstack](#)

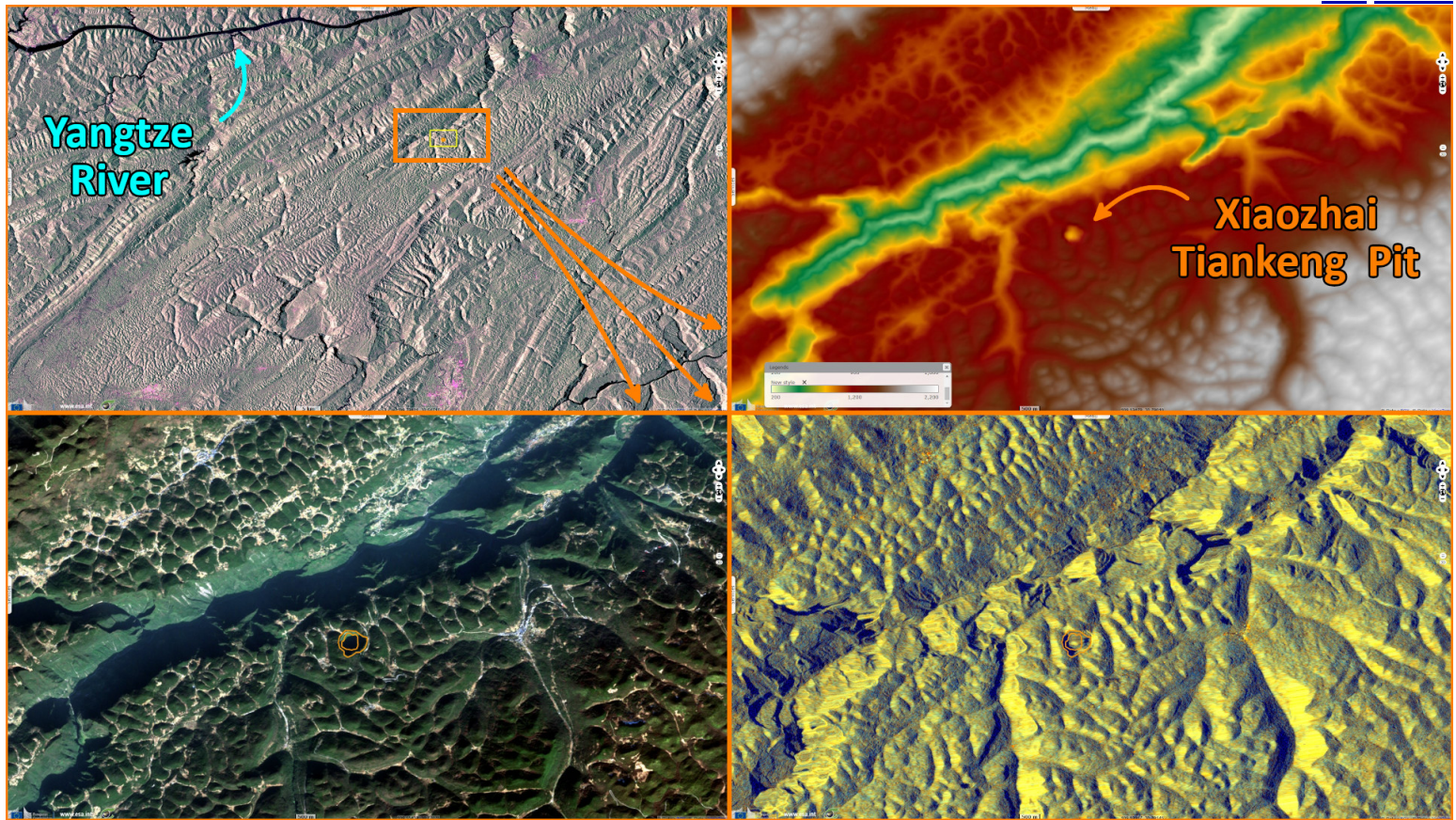
Fig. 1 - COP-DEM - Formed within a karst formation, Xiaozhai Pit in China is the biggest sinkhole on Earth.

[2D view](#)



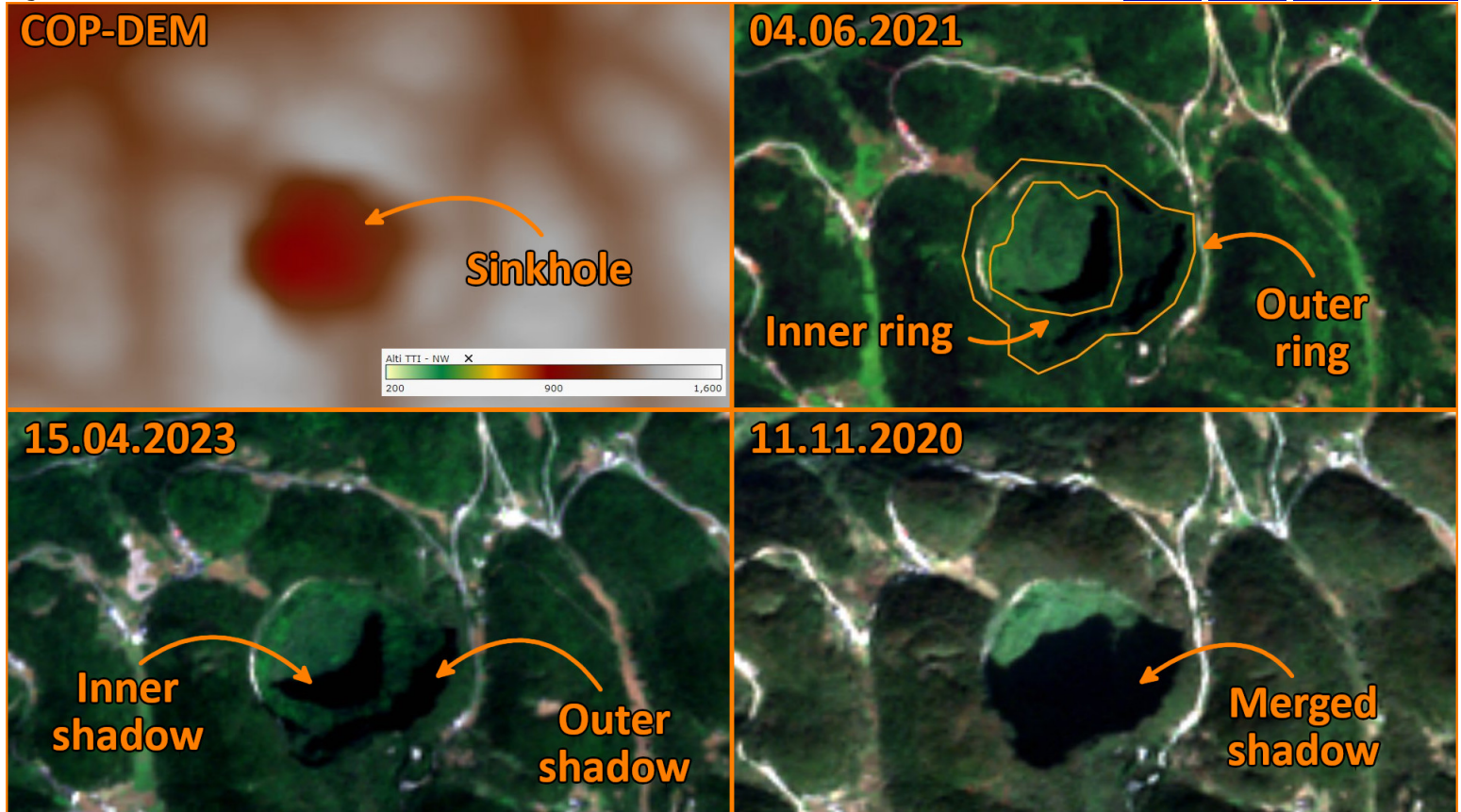
The Xiaozhai Tiankeng or Heavenly Pit is both the deepest and largest sinkhole in the world with 626 m length, 537 m width, 511-662 m depth with vertical walls. Its volume is 120 million m³. The sinkhole is a doubly nested structure—the upper bowl is 320 m deep, the lower bowl is 342 m deep, and the two bowls are 257-268 m across.

Fig. 2 - S1 (2023.06.17-2020.07.11) / S2 (06.12.2021) / COP-DEM - It has become known to the outside World only recently. [2D view](#) [2D view](#) [2D view](#) [2D view](#)















Known only by locals, it was only "discovered" by the outside world in 1994. The region was added to the UNESCO World Heritage list in 2007. It is home to a thriving ecosystem of some 1285 plant and animal species – including the rare ginkgo and clouded leopard.

Fig. 3 - S2 (04.06.2021 / 15.04.2023 / 11.11.2020) / COP-DEM - The shadows show its double-nested structure. [2D view](#) [2D view](#) [2D view](#) [2D view](#)



Despite attempting to map the underground river five times in a 10-year period, speleologists found the gushing torrent too difficult to navigate and the team never succeeded.

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