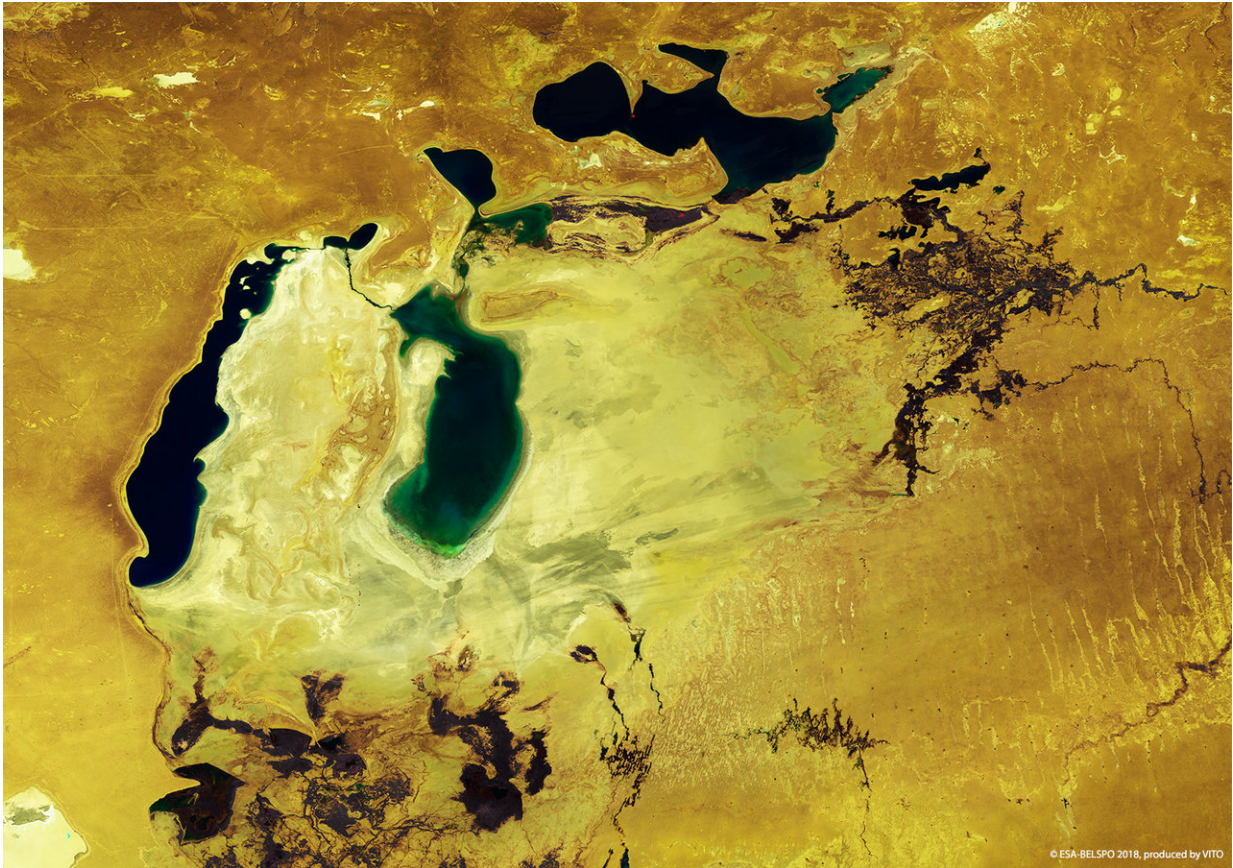


Proba-V view of Aral Sea

January 9 2019



Credit: ESA/Belspo – produced by VITO

This Proba-V view shows all that is left of the Aral Sea, once one of the four largest lakes in the world and now one of the world's major ecological disaster areas. It has shrunk into separate lakes, surrounded by Earth's youngest desert.

The Aral Sea was once a large land-locked [lake](#) between Kazakhstan in the North and Uzbekistan in the South, possessing an area of 68,000 sq. km – twice that of Belgium.

However, the Aral Sea has dramatically shrunk since the 1960s when Soviet irrigation projects diverted water from the rivers supplying it. By the 2000s, the lake had shrunk to about 10 percent of its original size and by 2014 the horseshoe-shaped Southern Lake had virtually dried up.

Groundwater levels also fell, vegetation was laid waste and a once-thriving fishing industry collapsed. The exposed lakebed formed the newly-christened Aralkum Desert, spawning pesticide-laced sandstorms that can reach as far as the Himalayas.

Efforts to stabilise the situation are ongoing, including the replanting of hardy vegetation to reduce sandstorms. In 2005, the Kok-Aral Dam was completed to restore water levels in the Northern Lake—located at its bottom-east side. In addition, a sluice is periodically opened to replenish the Southern Lake.

Launched on 7 May 2013, Proba-V is a miniaturised ESA satellite tasked with a full-scale mission: to map land cover and vegetation growth across the entire planet every two days.

Its main camera's continent-spanning 2250 km swath width collects light in the blue, red, near-infrared and mid-infrared wavebands at 300 m resolution and down to 100 m resolution in its central field of view.

VITO Remote Sensing in Belgium processes and then distributes Proba-V data to users worldwide. An online image gallery highlights some of the mission's most striking images so far, including views of storms, fires and deforestation.

This 100 m-resolution image was acquired on 15 June 2018.

Proba-V is currently the subject of ESA's latest 'citizen science' competition, requesting teams to produce 'super-resolution' images equivalent to its 100 m mode from sets of 300 m imagery.

Provided by European Space Agency

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