

## Alaskan community cut off by permafrost thaw

Sentinel-3 SLSTR RBT acquired on 20 March 2017 at 21:19:20 UTC

Sentinel-1 CSAR IW acquired on 16 October 2017 at 17:19:00 UTC

Sentinel-2 MSI acquired on 07 November 2017 at 22:37:19 UTC

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Fig. 1 - SLSTR (20.03.2017) - S5,S3,S2 - Like most Alaska communities off the road system, Tununak relies on air travel for goods & services. [3D view](#)

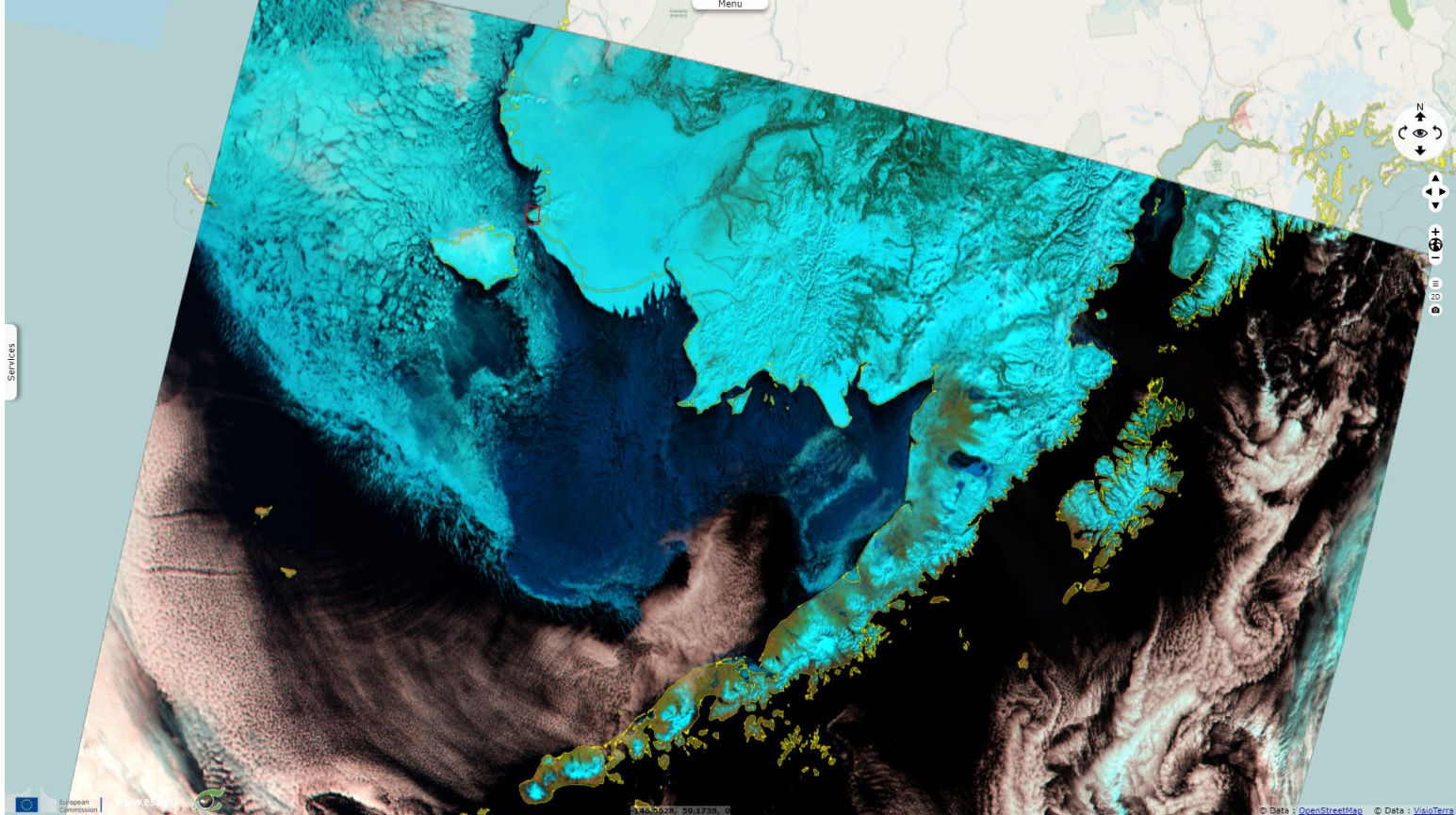


Fig. 2 - S2 (07.11.2017) - 11,8,2 - Its old runway was built near the coast, and winter weather made it difficult for planes to land there. [2D view](#)



Tununak opened a \$19 million, state-of-the-art airport in 2016. In 2017, the lower third of the runway was riddled with potholes & started to sink.



Fig. 3 - S1 (16.10.2017) - vv,vh,ndi(vh,vv) composite - The village's shifting permafrost is buckling the runway under the airport's weight. [2D view](#)

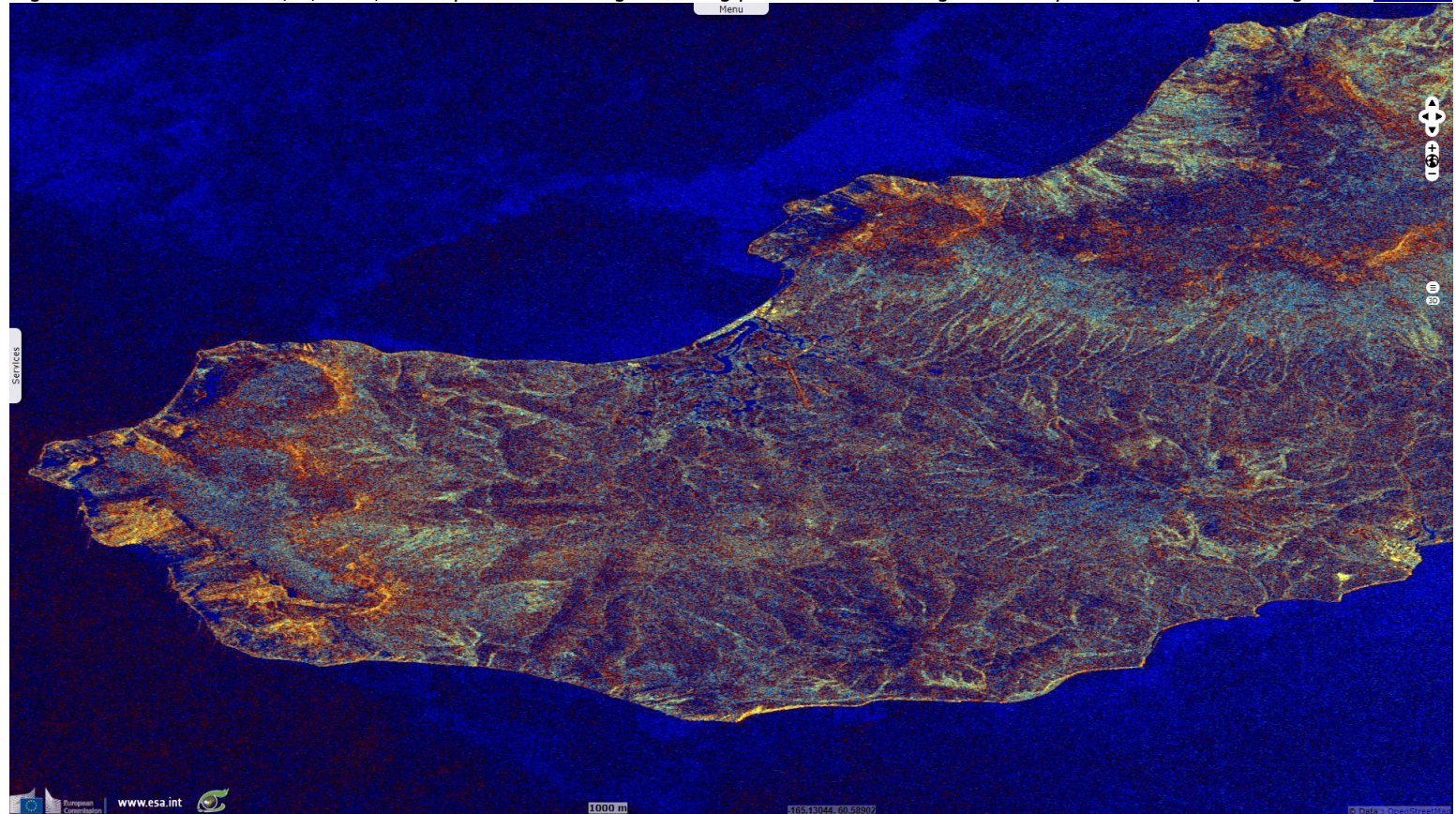
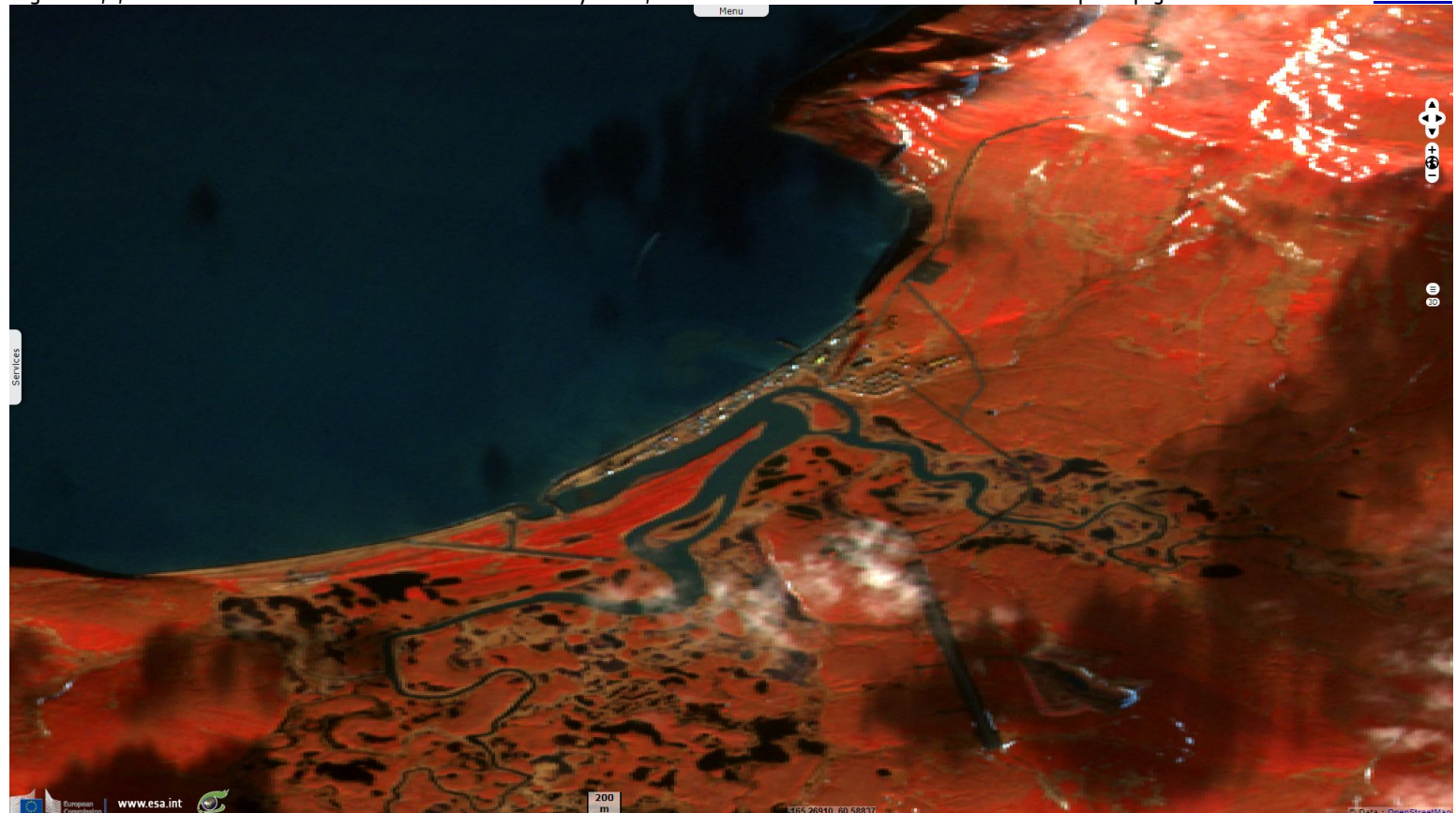


Fig. 4 - 8,4,3 - Since October 2017 local airlines refuse to fly there, residents drive across the tundra on 4x4 to pick up groceries & mail. [2D view](#)



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