

Call to action: Pushing scientific and technological innovation to develop an efficient AI flood mapper for operational SAR satellites

By Guy Schumann

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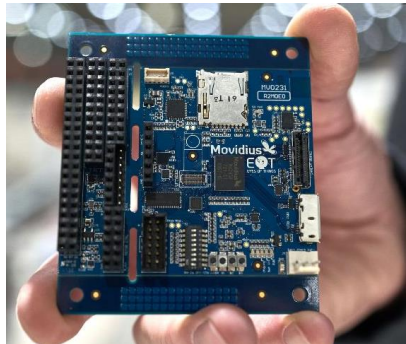
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An aerial view of the city of Beira, Mozambique, showing flooding in the wake of Cyclone Idai, March 2019.
© UNHCR/Alissa Everett



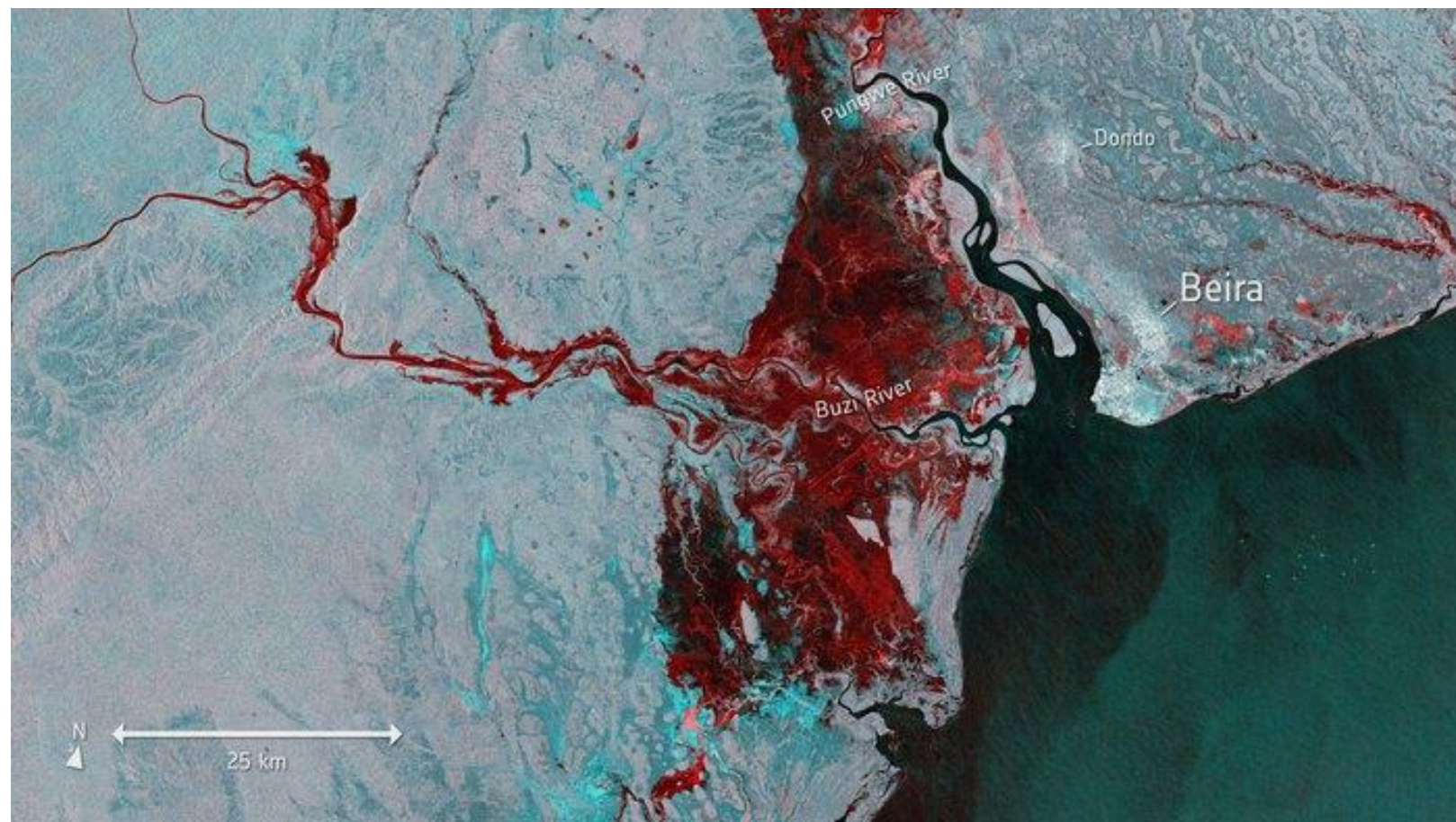
#Phisat1, the first artificial intelligence to be carried onboard a European #EarthObservation mission © ESA

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Review

Towards Global Flood Extent Mapping On Low Cost Satellites with Machine Learning



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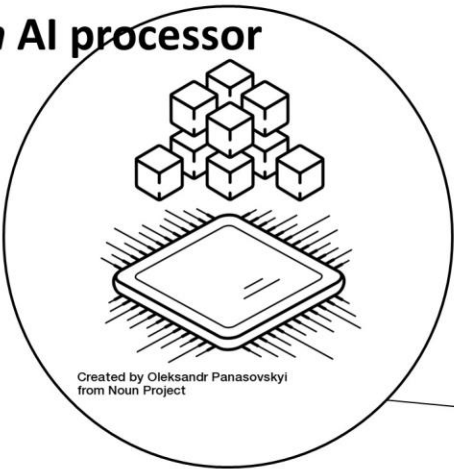
On March 14th 2019 Cyclone Idai made landfall in Mozambique with winds of up 185kph and more than 150mm of rain in 24 hours, destroying around 90% of Beira and affecting more than 600.000 people

emergency.lu

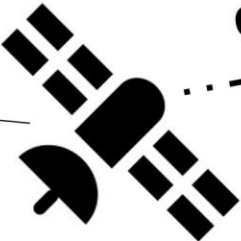


A MOBILE,
SATELLITE-BASED,
TELECOMMUNICATIONS
PLATFORM

Floodscan AI processor



Created by Nikita Kozin from Noun Project



LEO SAR satellite



Optical data link

Created by Dan Hetteix from Noun Project



GEO satellite

SMS direct downlink

Radio downlink

