GAMES FOR HEALTH EUROPE

2025

DISCLOSURE SLIDE

for presentations at the

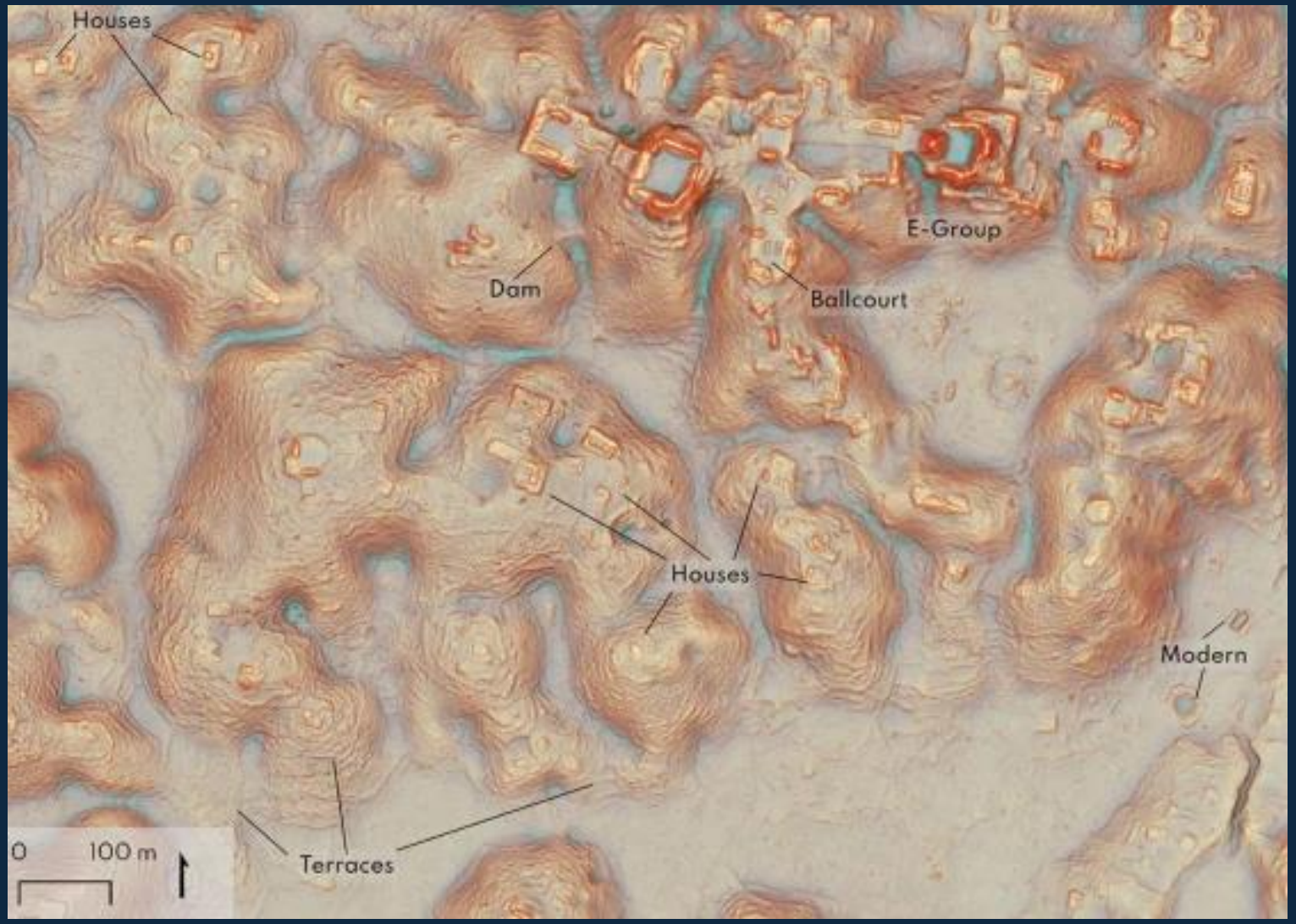
GAMES FOR **HEALTH** EUROPE **2025** CONFERENCE

I herewith confirm that there is not any conflict of interest with the conference organization or any of its sponsors.

Games 4 Society – How Gaming Can Improve Remote Sensing of the Earth

Marco Beijersbergen, cosine | Leiden University

December 2024

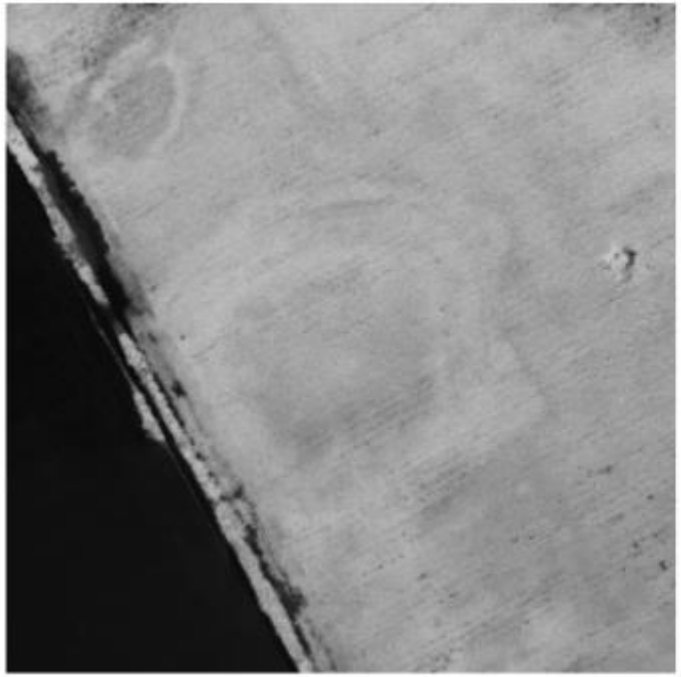


Aerial lidar surveys reveal ancient settlements in the Campeche region of Mexico
By Luke Auld-Thomas / Antiquity via Cambridge University Press

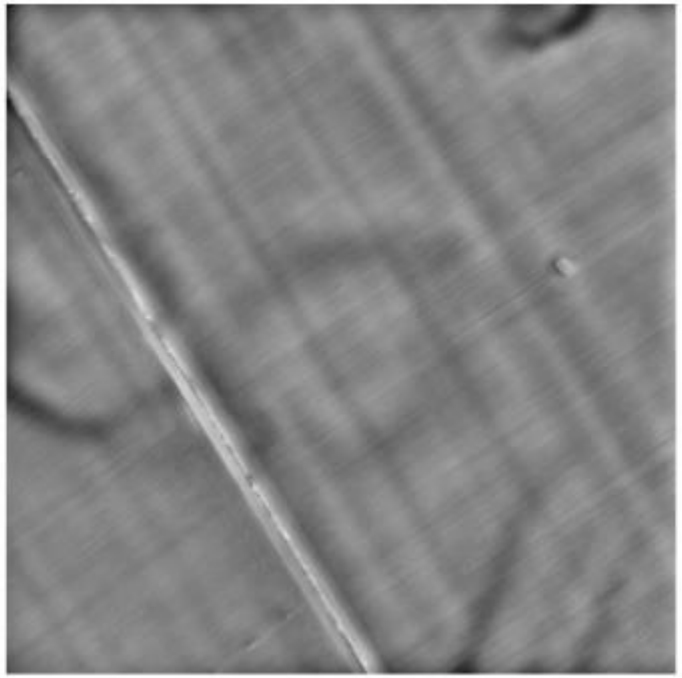
Aerial image of a Neolithic rondel enclosure from Drzemlikowice, SW Poland revealing a series of broad and narrow curvilinear crop marks which are caused by subsurface man-made changes in the soil.
By Piotr Wroniecki, CC BY-SA 2.0

RGB image of rondel
By cosine

Neolithic wooden circular ditch (4840-4590 BC) in Künzing-Unternberg (reconstruction).
By Museum Quintana , CC BY-SA 2.0



infrared



LIDAR

visible

By cosine

By Joostik, CC BY-SA 3.0

Too small training set for AI:
120 – 150

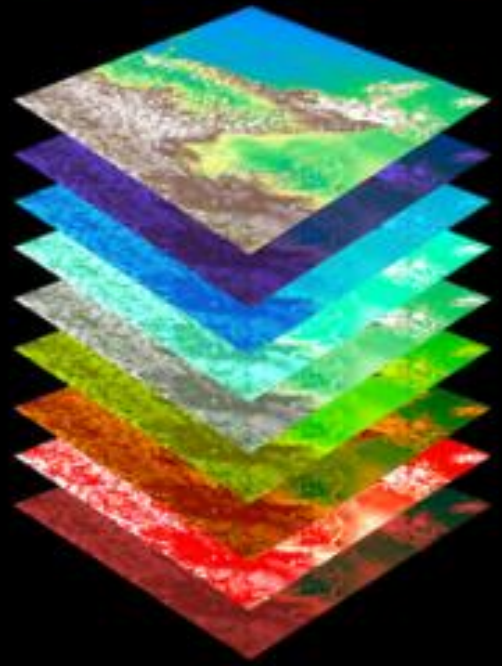
Too much data for experts alone

IABG
IABG
Sentinel 3 SLOSU
Instrument in 2m-TVA

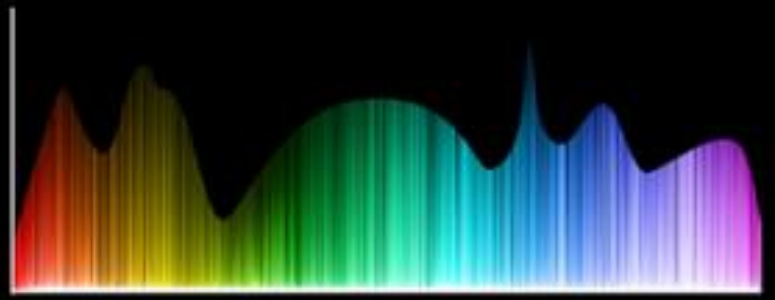
cosine

cosine | remote sensing

credits cosine/Hyperscout



hyperspectral imaging



cosine

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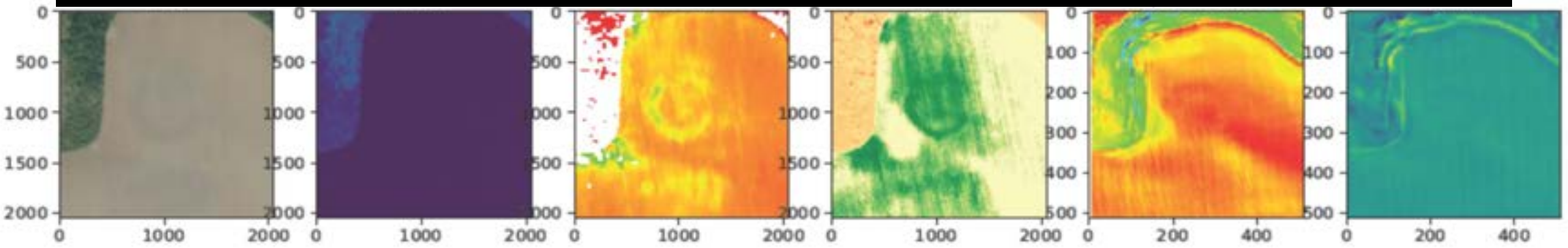

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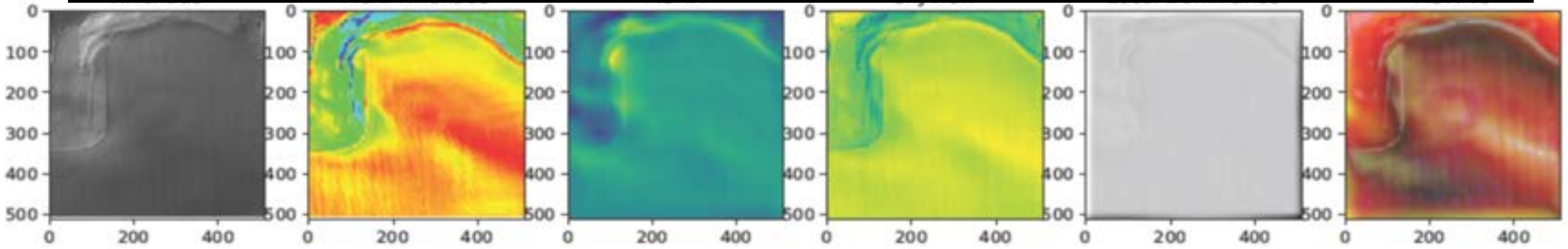
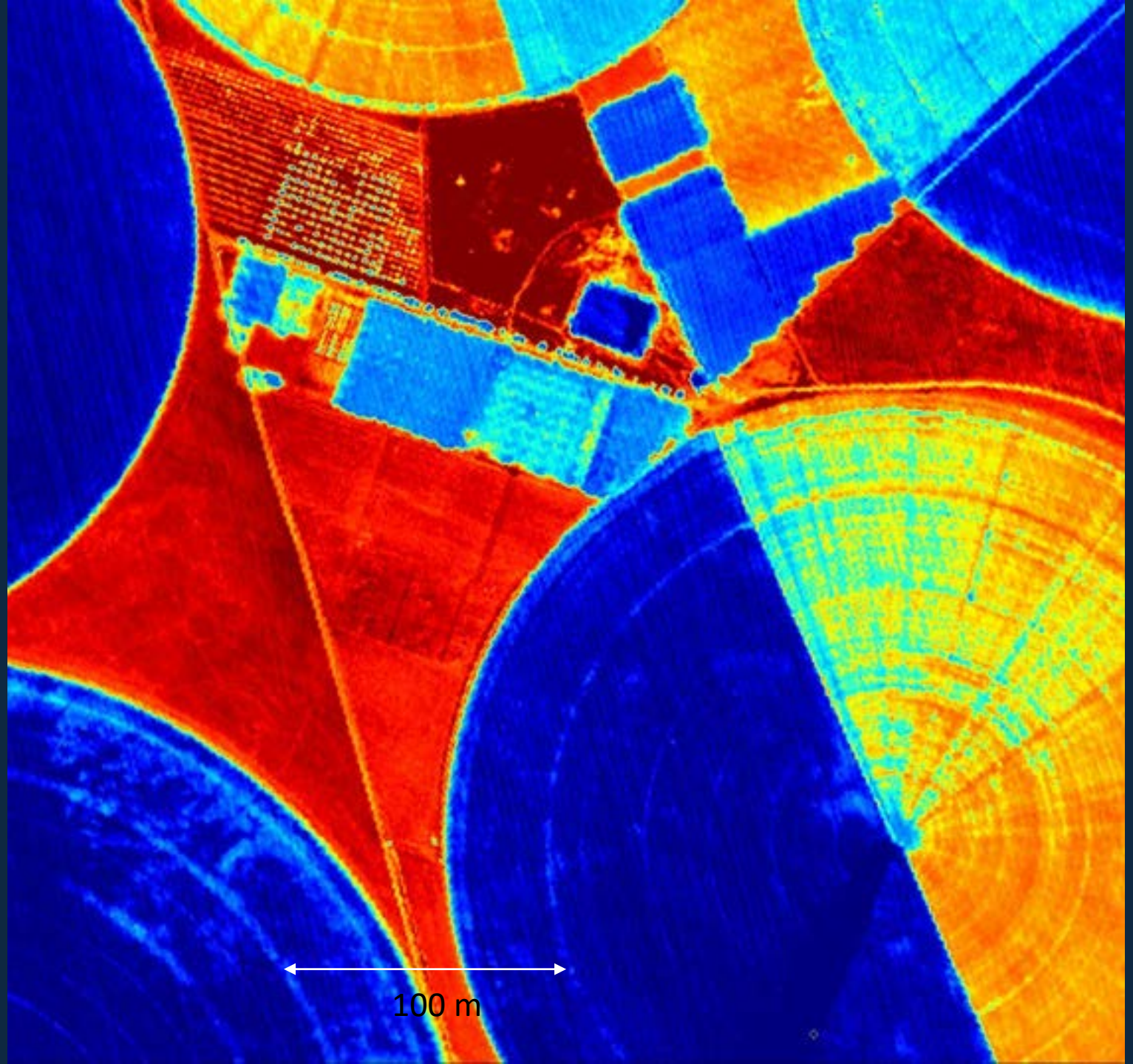


By cosine



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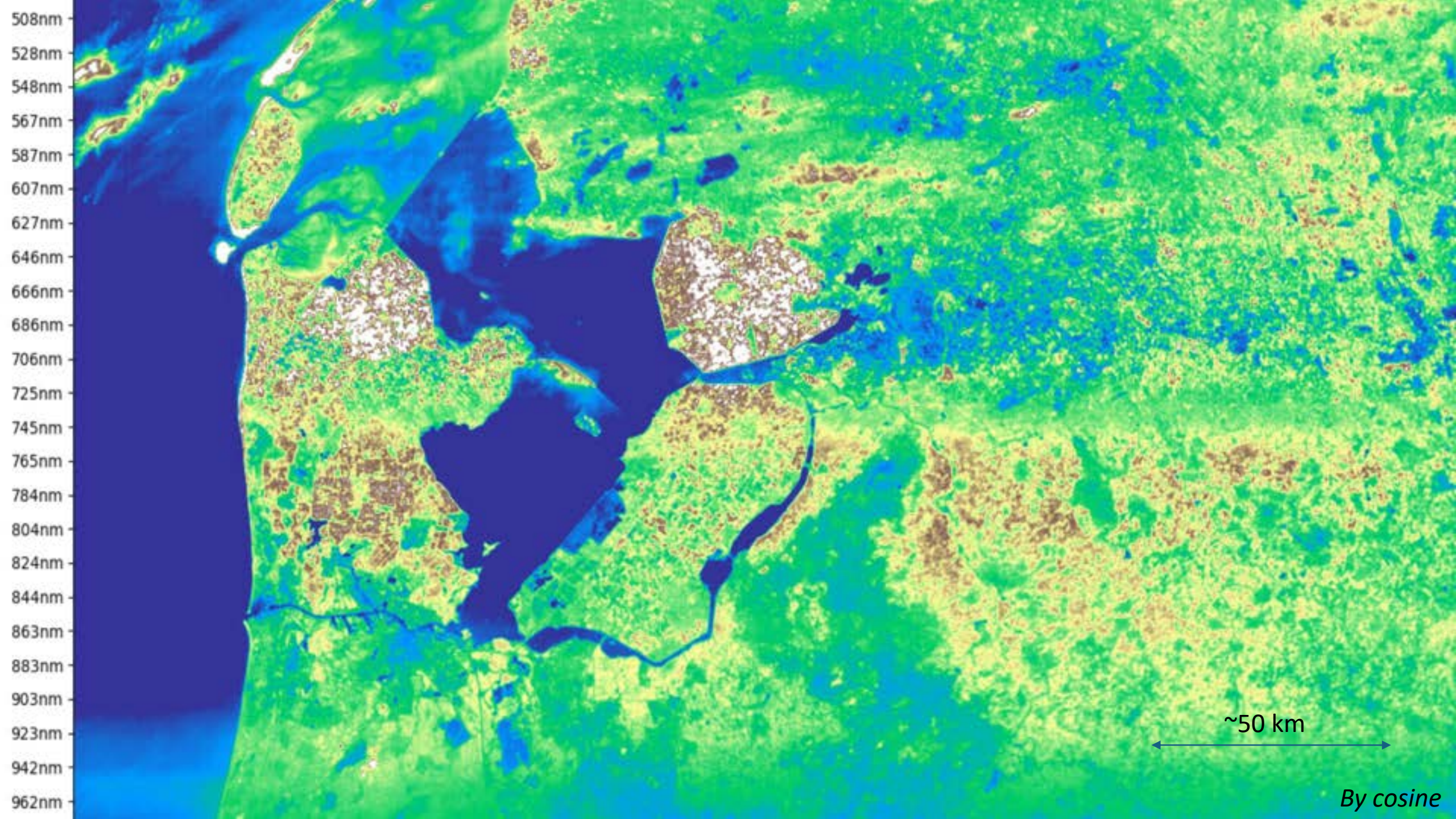
508nm
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607nm
627nm
646nm
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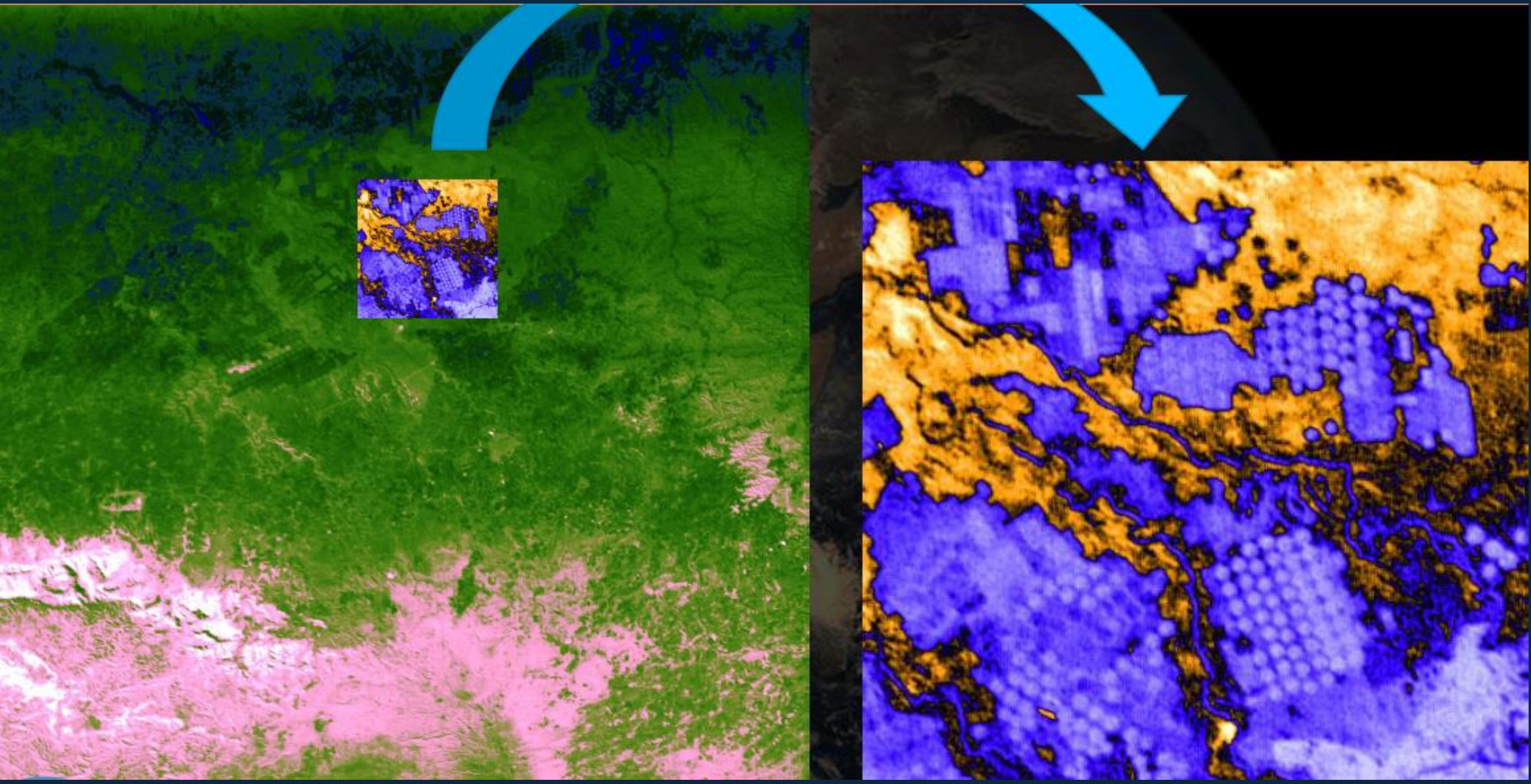
745nm
765nm
784nm
804nm
824nm
844nm
863nm
883nm
903nm
923nm
942nm
962nm
~50 km
By cosine



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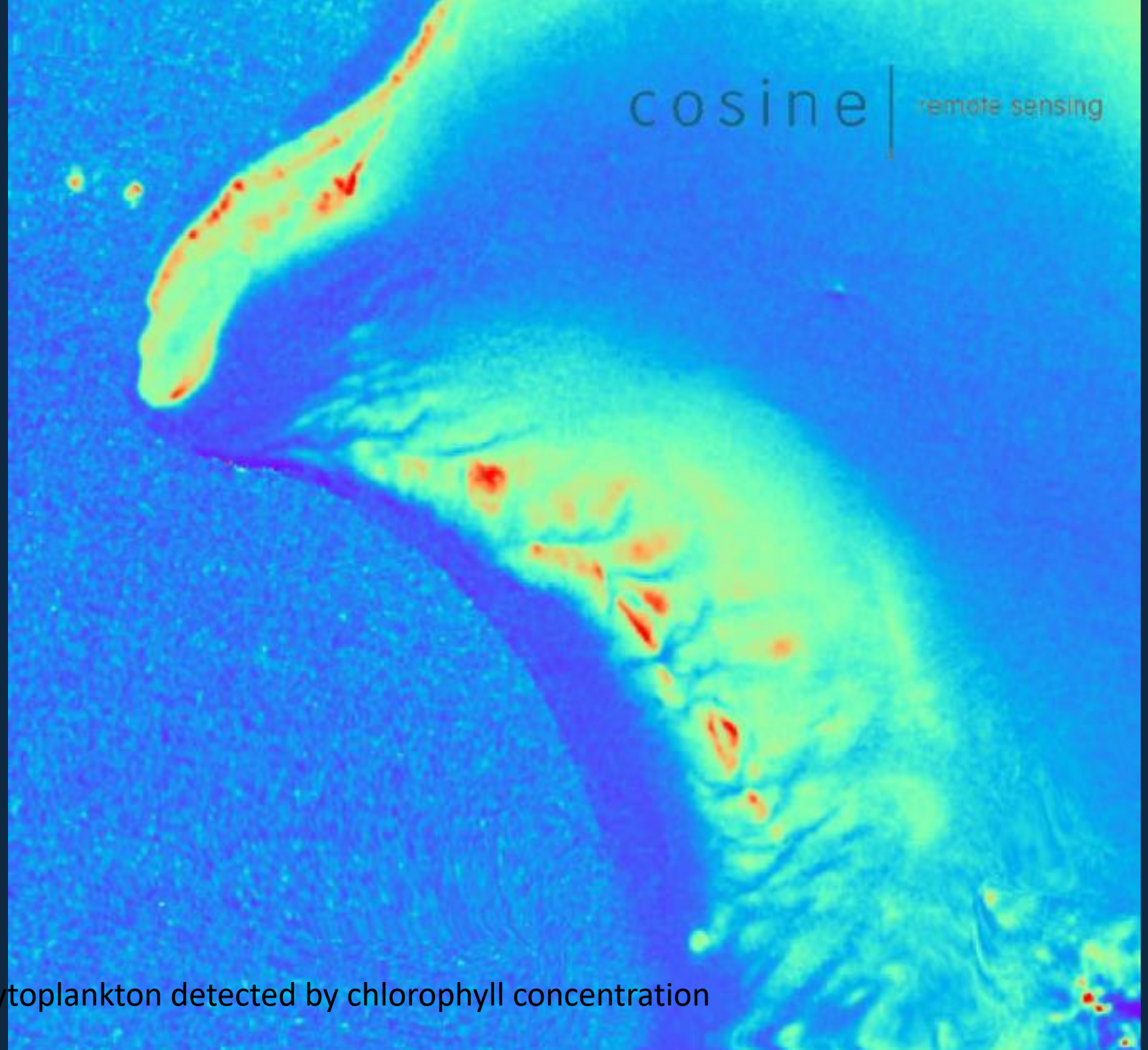
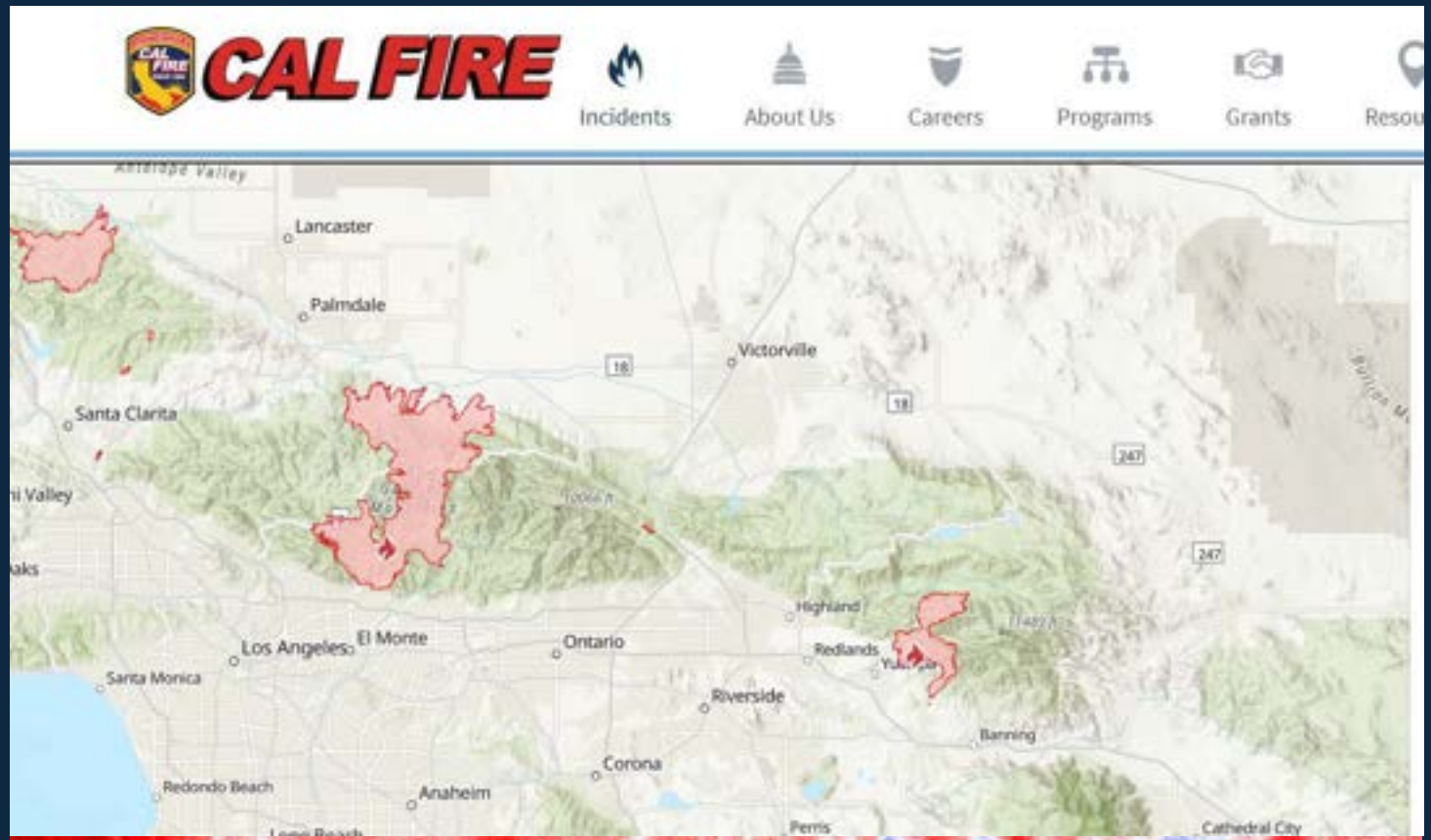


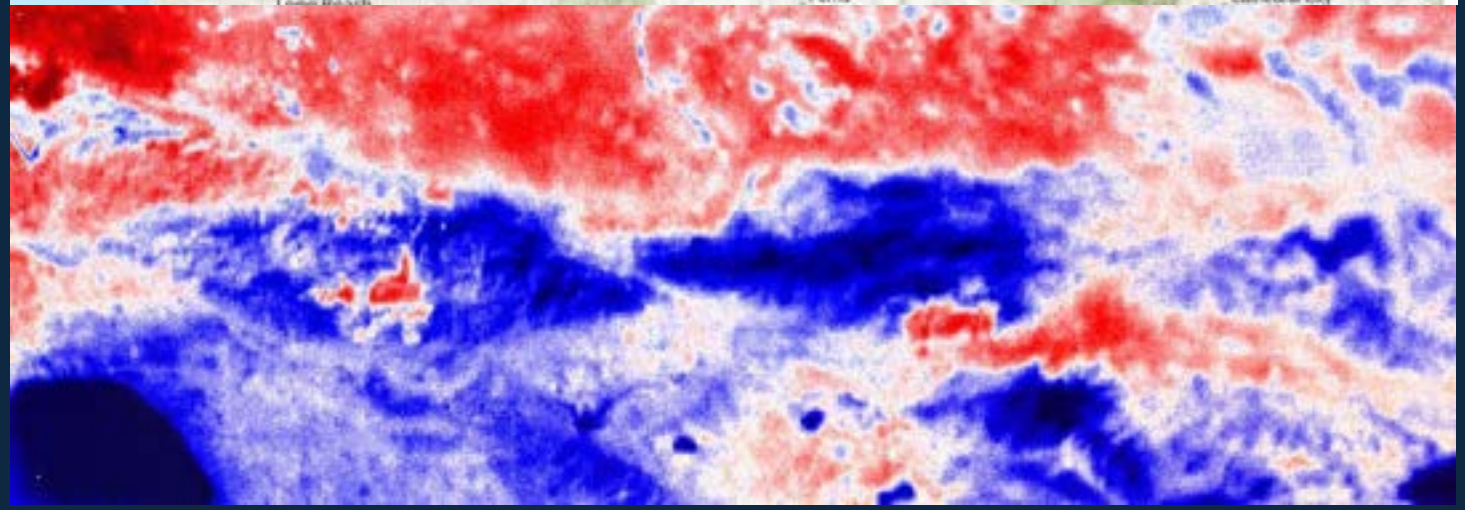
phytoplankton detected by chlorophyll concentration

By cosine

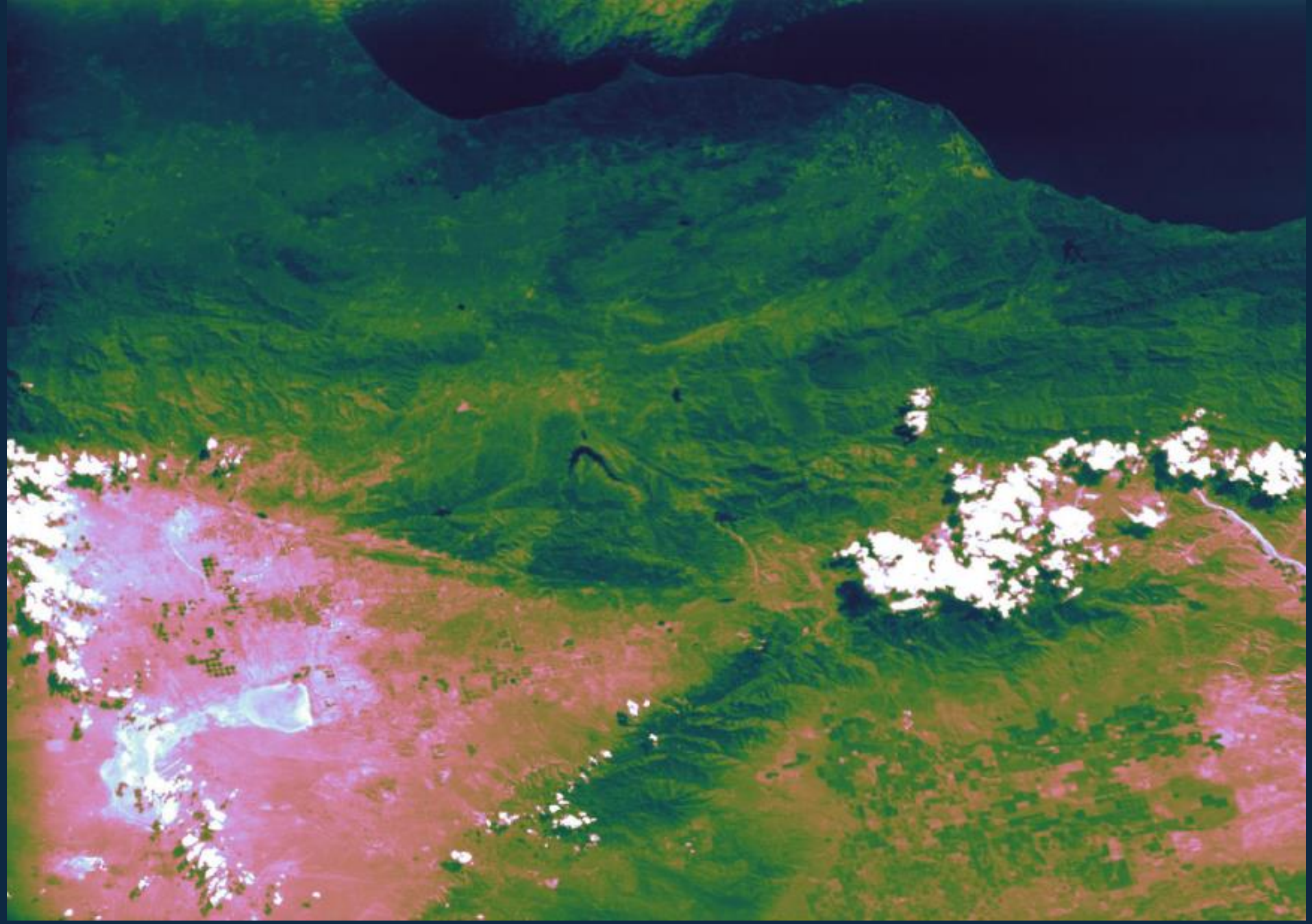
California wildfires 2020



By CalFire



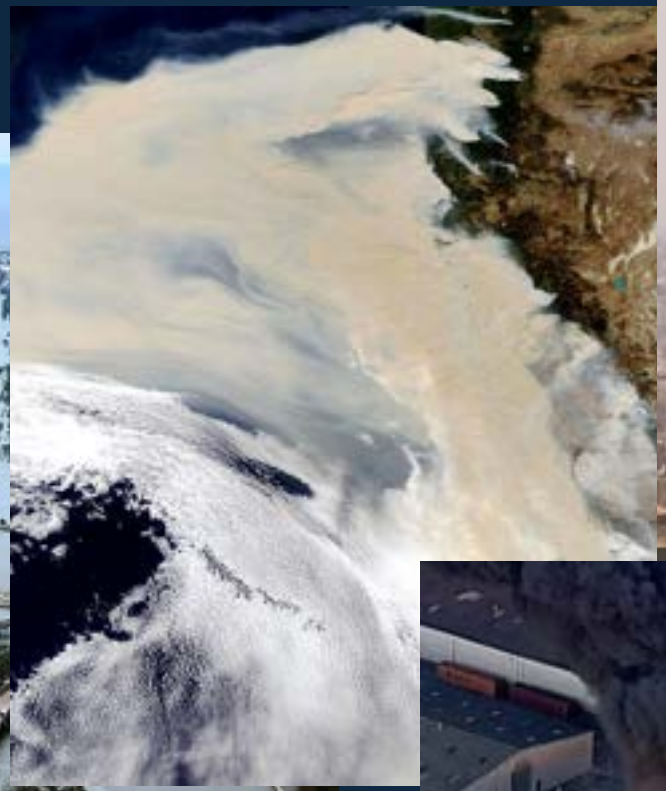
By cosine



By cosine

Who can find this in near-real-time satellite data?

By NASA Earth Observatory



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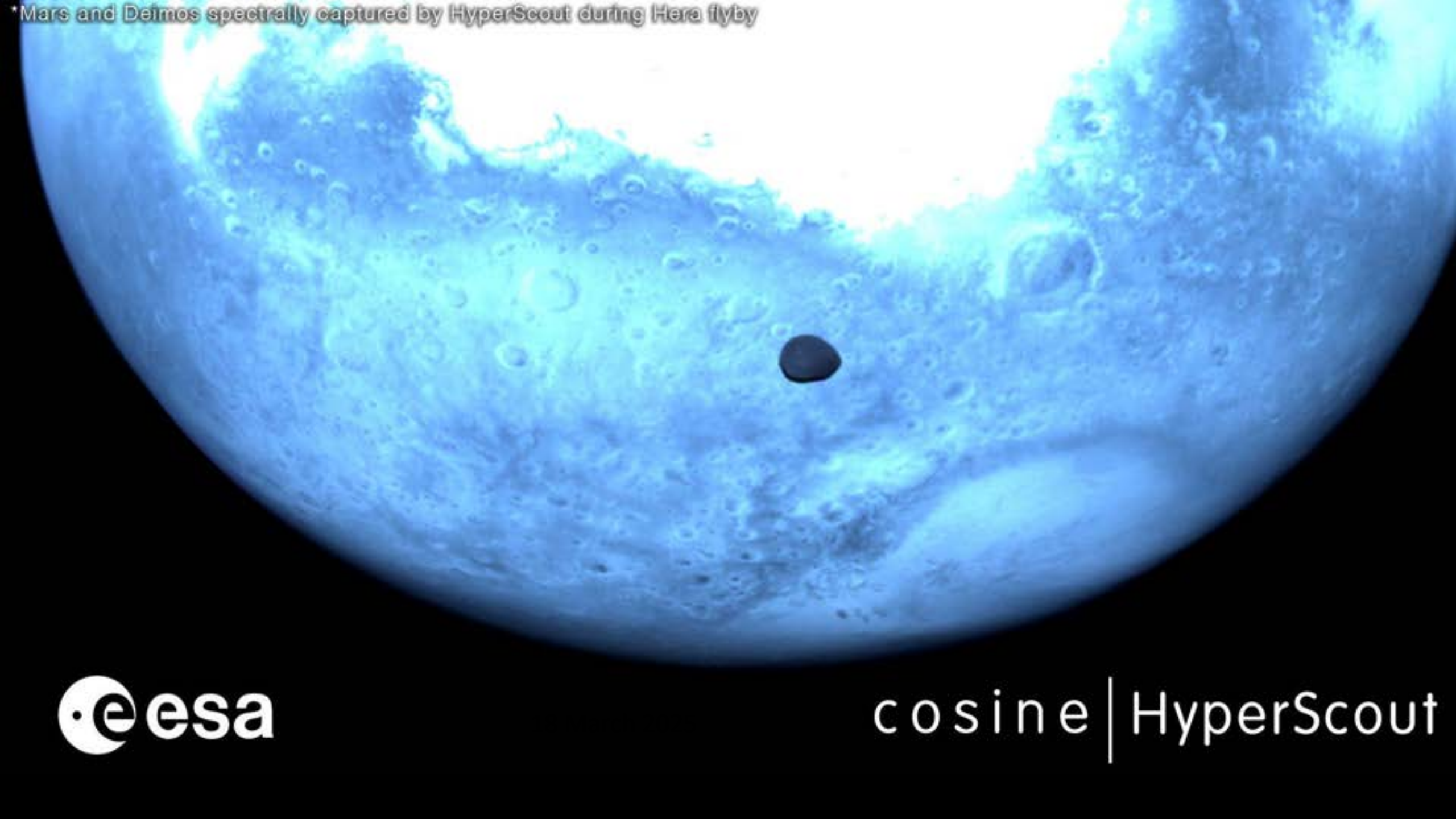
By Environment Protection Authority Victoria, CC BY 4.0

By U.S. Space Force photo by Kadielle Shaw


*Mars and Deimos spectrally captured by HyperScout during Hera flyby
esa
cosine | HyperScout

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