

COPERNICUS EARTH OBSERVATION

DATA VISUALISATION WORKSHOP SERIES



PROGRAMME OF THE
EUROPEAN UNION

Copernicus
Europe's eyes on Earth



IMPLEMENTED BY



Being Practical: How to Access and Process EUMETSAT and Copernicus Data

Producing a Copernicus Image of the Day

Annamaria Luongo – Copernicus Support Office

Outline of the presentation

- My personal (Copernicus EO) story
- The Copernicus Image of the Day



Copernicus Earth Observation
Data Visualisation Workshop Series
Being Practical: How to Access & Process
EUMETSAT and Copernicus Data

My personal story



11 July 2017

Wildfires of Mt. Vesuvius, Italy

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My personal story

Pyro-cumulus generated by the wildfire



11 July 2017

Wildfires of Mt. Vesuvius, Italy

MODIS TERRA Imagery



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My personal story

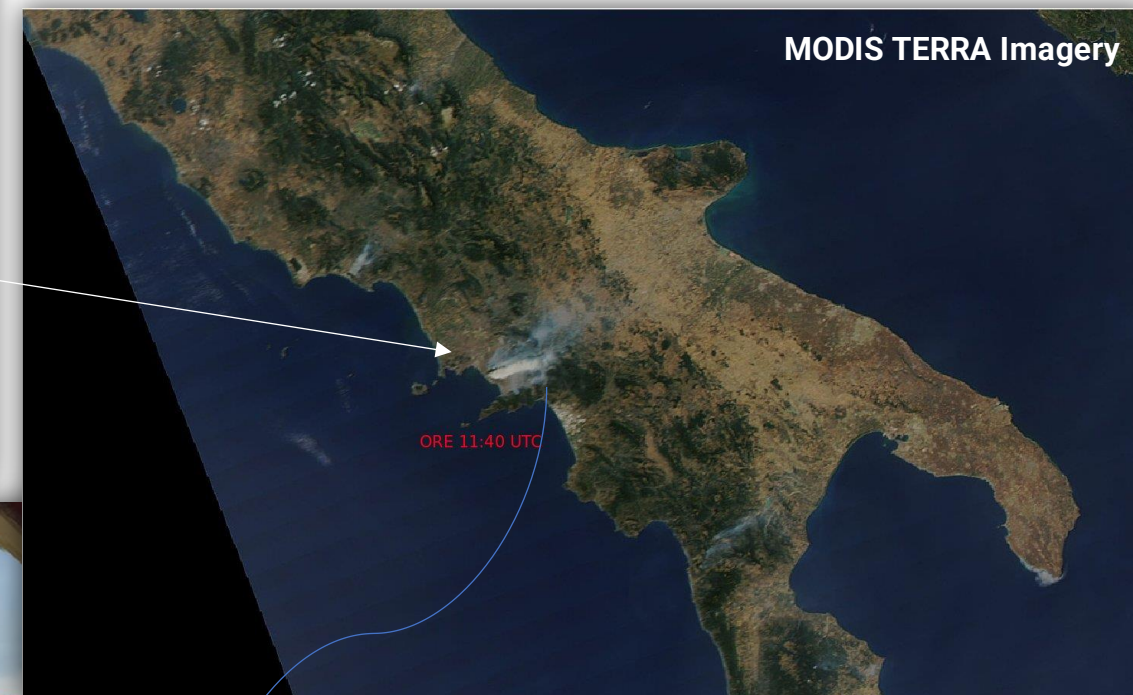
11 July 2017

Wildfires of Mt. Vesuvius, Italy

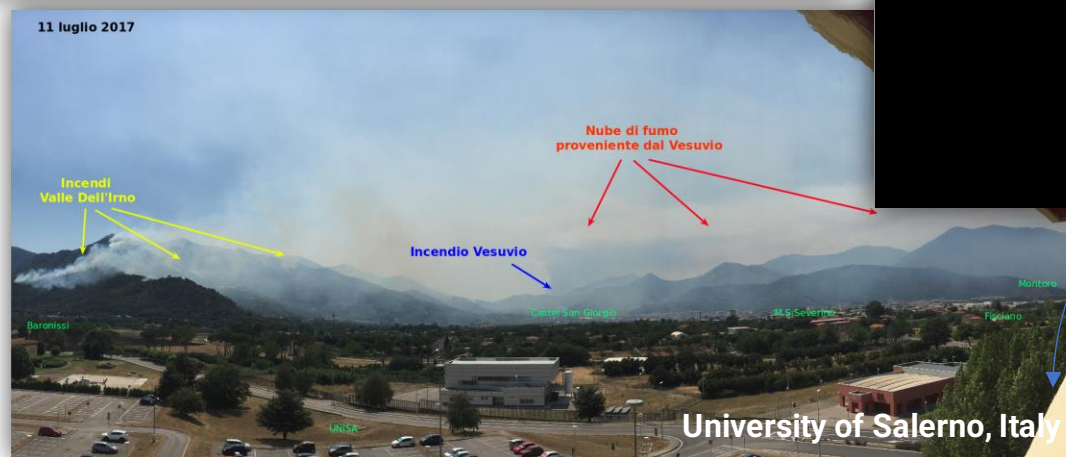
Pyro-cumulus generated by the wildfire



MODIS TERRA Imagery



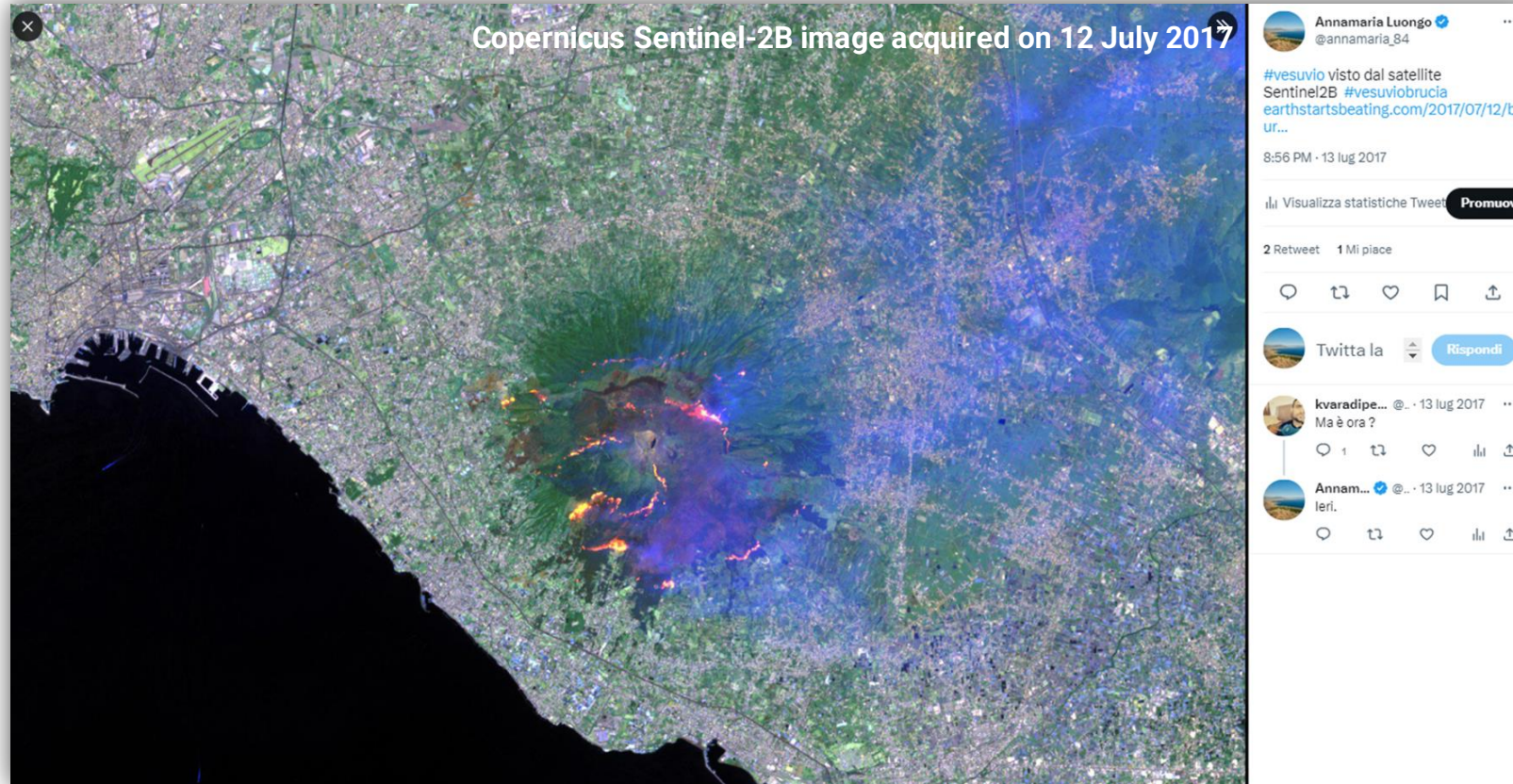
11 luglio 2017



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My personal story



12 July 2017

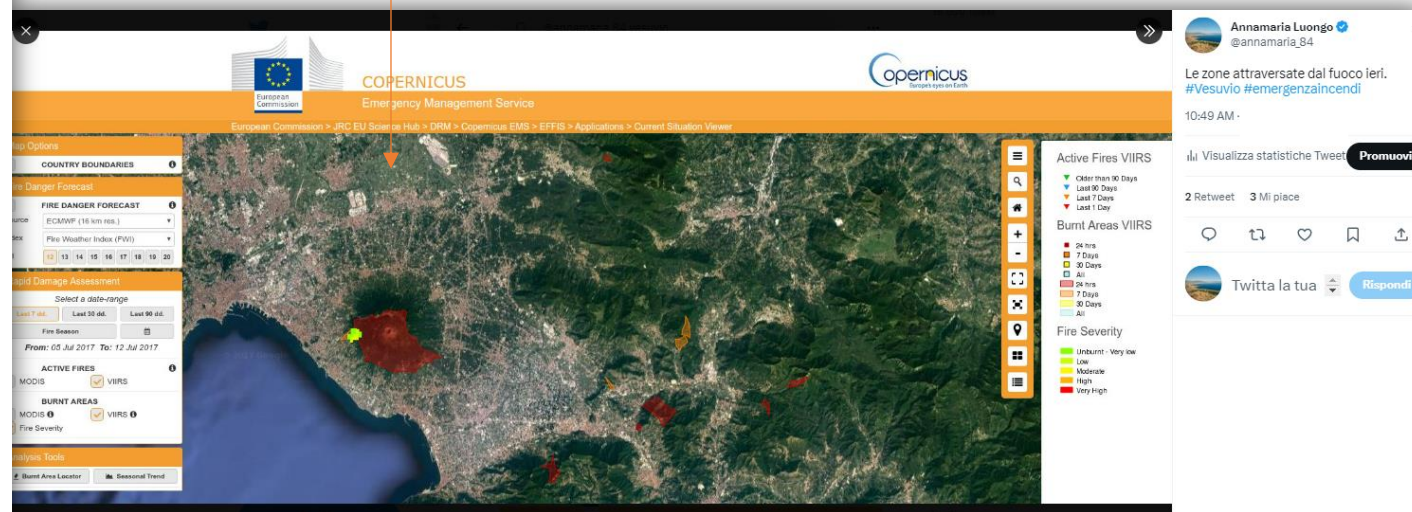
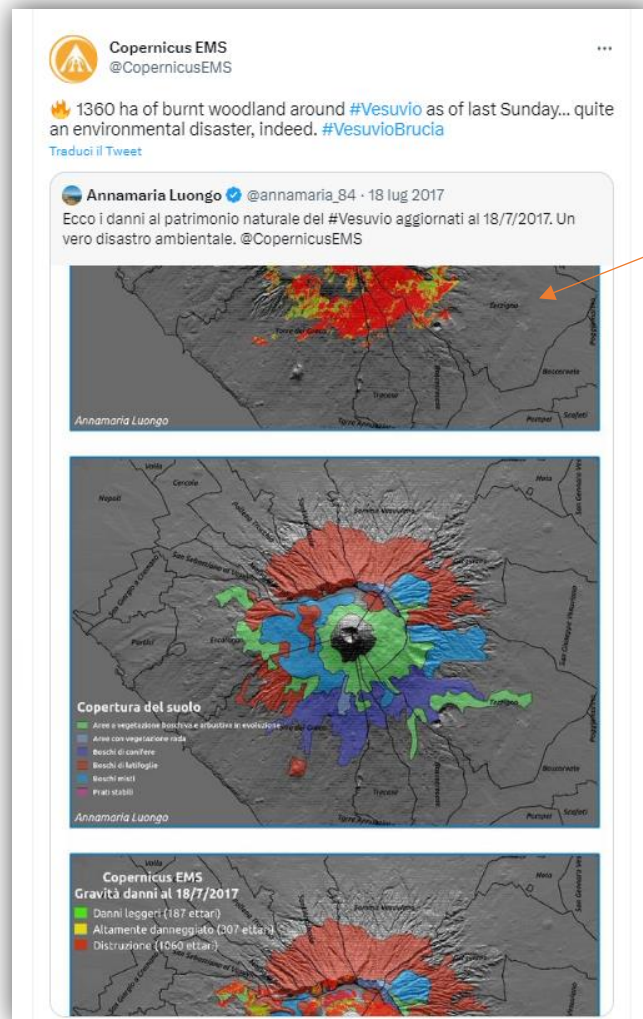
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My personal story

18 July 2017

Copernicus EMS data



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Who I am?



I'm the **Dataviz Lead** of the

- **Copernicus Support Office**
- **Copernicus Emergency Management Service** communication support team
- **Copernicus Marine Service** communication support team



...and multiple other things.

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Impact and Recognition

Copernicus Image of the Day

<https://www.copernicus.eu/en/media/image-day>

It serves as a bridge between complex satellite data and the general public, making information accessible and understandable.

Since 1 April 2020

- 1,068 images published (as of today)
- ~ 50 million impressions (DG DEFIS Twitter)
- ~ 40 thousand media mentions on AP, Reuters, BBC, Reuters, CNN, DW, The Times, The Guardian, Sky News etc.

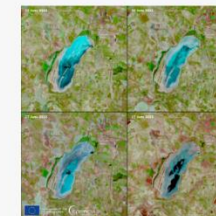


The Copernicus image of the day,
a new story every day!

The impact of the
drought on the Fuente
de Piedra wetlands in
Spain

Date: 20/06/2023

Land Biodiversity
Climate Change Drought



Exceptional
temperatures in
Egilsstaðir, Iceland

Date: 19/06/2023

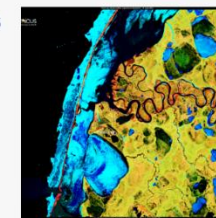
Atmosphere, Land
Climate Change Heat Waves



Point Lay, Alaska, faces
the consequences of
climate change

Date: 18/06/2023

Land Cities Climate Change
Land Monitoring



A sustainable future for
the Marceddi Lagoon

Date: 17/06/2023

Land Biodiversity
Marine Environment Ocean



Smoke from Québec
wildfires reaches the
Baltic Sea

Date: 16/06/2023

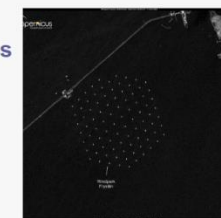
Atmosphere Fires



Windpark Fryslân in
Lake IJssel, Netherlands

Date: 15/06/2023

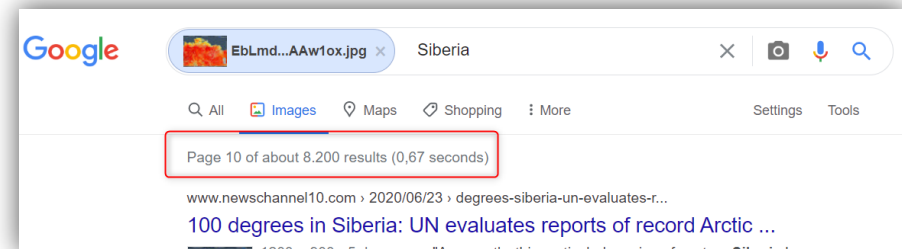
Water, Human Activities
Other Human Activities



Impact and Recognition



**The most successful images
produced/1**

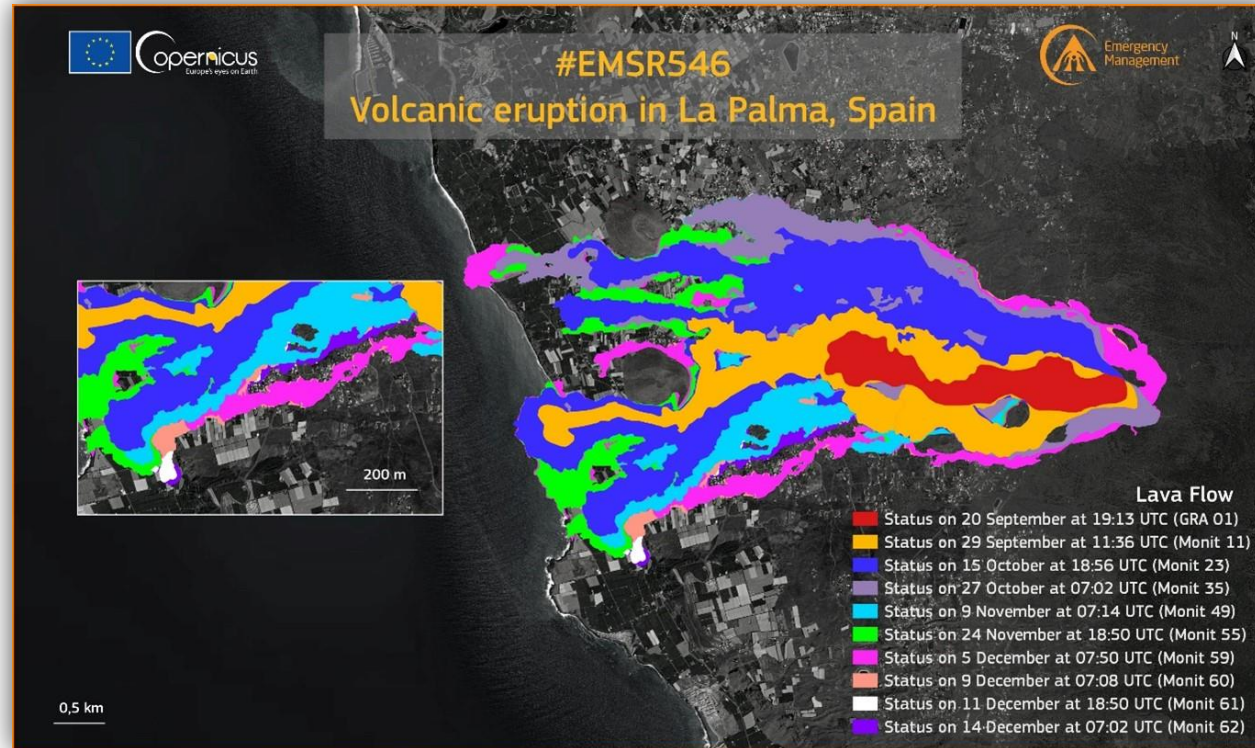


>8,200 unique publications

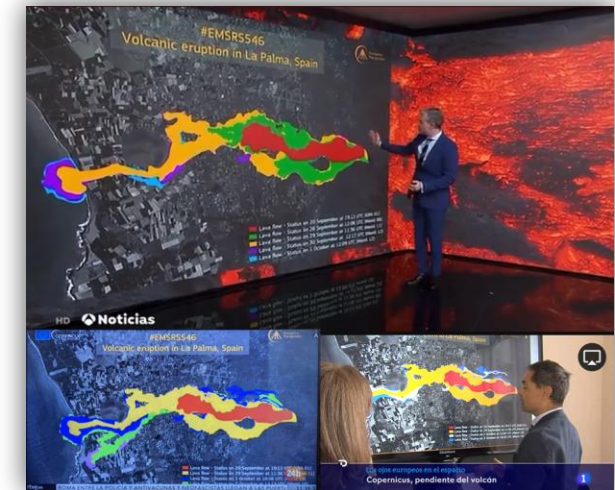
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Impact and Recognition



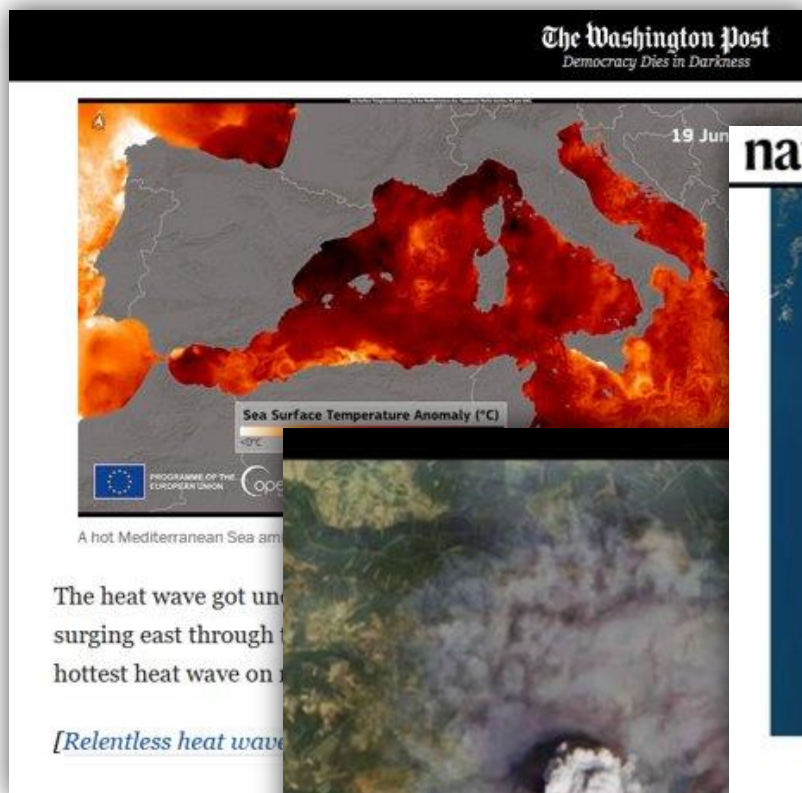
The most successful images produced/2



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Impact and Recognition



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Process

~ 3 hours or more

What is interesting for my public?

Source (weather events, news, Scientific papers, personal ideas etc)

Does the image visualise what I had in mind?

Image processing and caption writing

How I can visualise my idea?

Selection of the satellite (solid know-how in remote sensing, coding for the pre-processing, etc)

Does the image describe the same story of the source?

Image of the day

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Tools

Impactful Geodataviz = Motivation * (Copernicus Open Data + technical skills)



=



*



...and
several
others...

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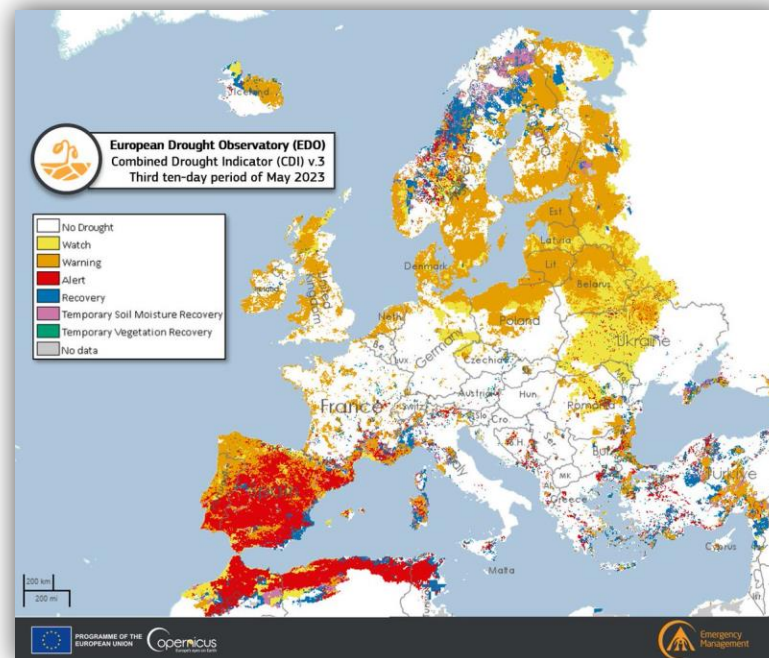


Example: Impact of drought in Sweden

What is interesting for my public?

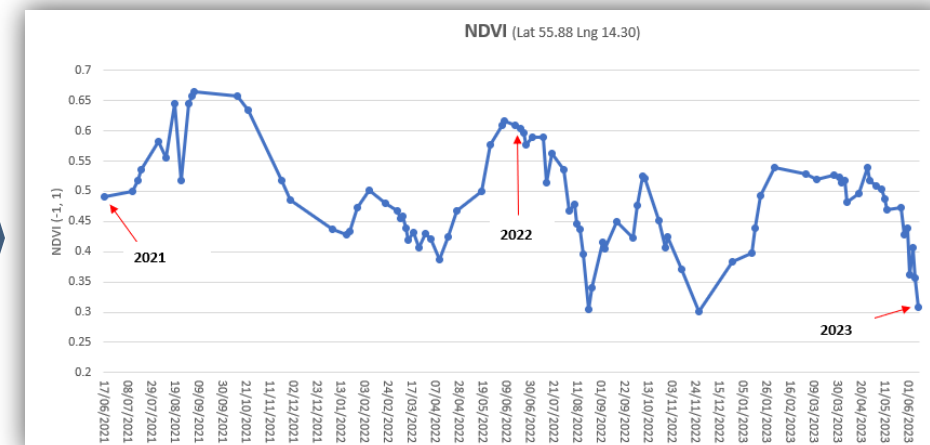


Stockholm: in-situ
image (7/6/2023)



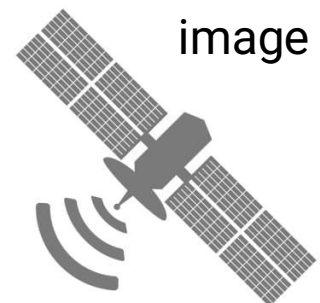
CEMS EDO

How I can visualise my idea?

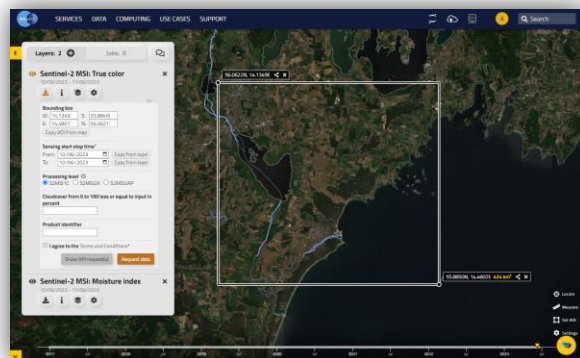


NDVI: Copernicus Sentinel-2 time
series

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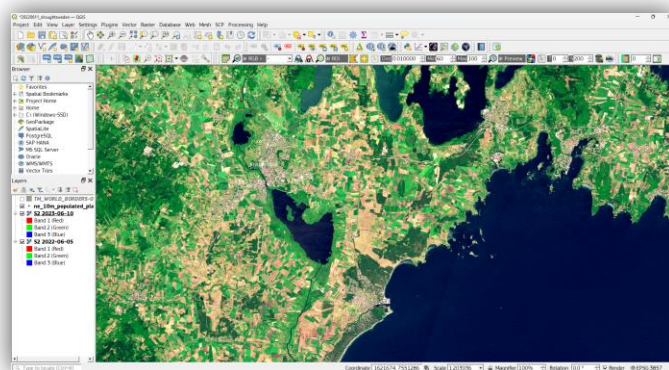


Example: Impact of drought in Sweden

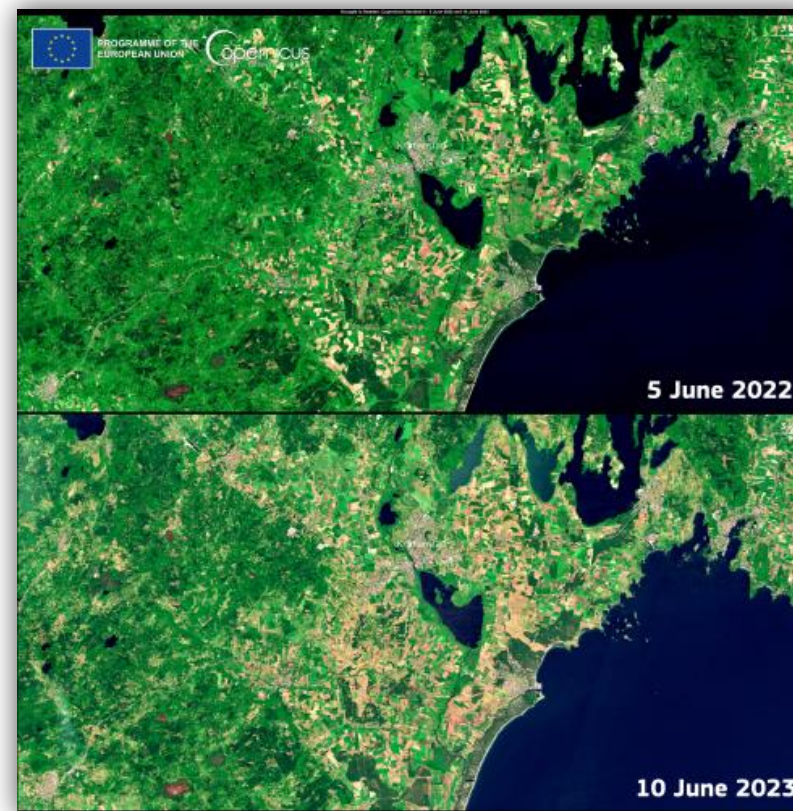


Download of the images

Does the image visualise what I had in mind?



Processing in QGIS



Impact of
drought in
Sweden

<https://www.copernicus.eu/en/media/image-day-gallery/impact-drought-sweden>

Does the image describe the
same story of the source?

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Conclusions



Never forget:

- 1) critical thinking
- 2) fact checking

#ImageOfTheDay

The Copernicus Image of the Day = #EOData4Storytelling

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Thank you!

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