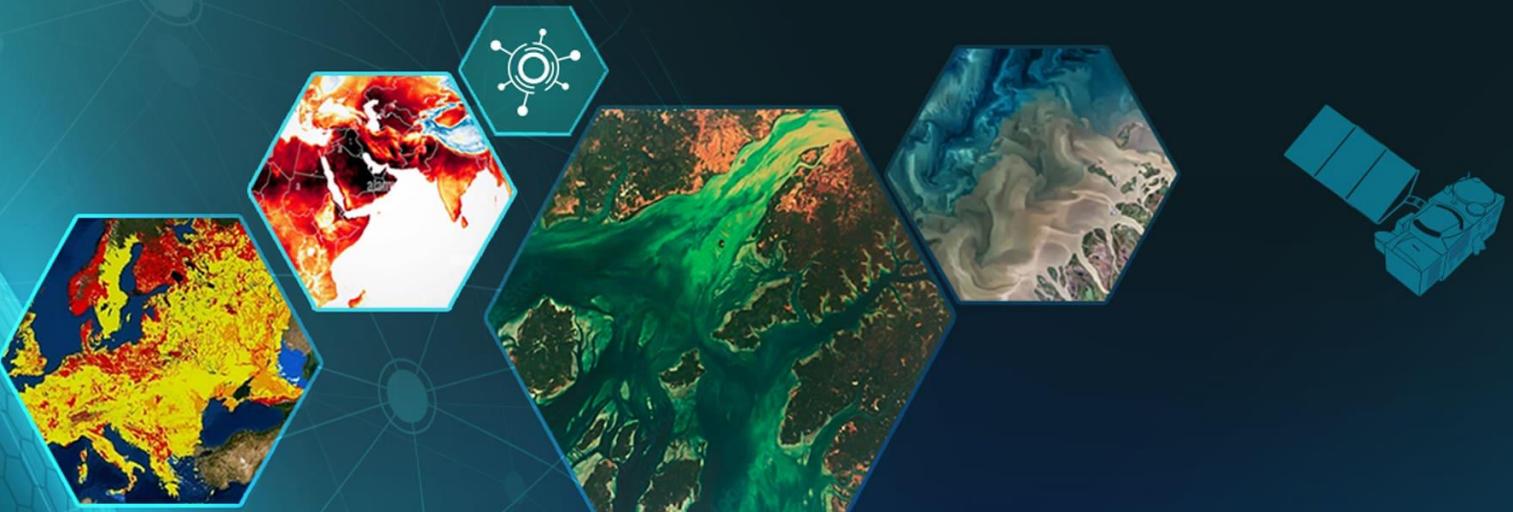


COPERNICUS EARTH OBSERVATION

DATA VISUALISATION WORKSHOP SERIES



PROGRAMME OF THE
EUROPEAN UNION



IMPLEMENTED BY



Climate and Weather

EUMETSAT Weather Data: Catalogue and Examples

Ivan Smiljanic, EUMETSAT @eumetsat_users / @InOrbitIvan

How and why do we (EUMETSAT/USC) use the data?

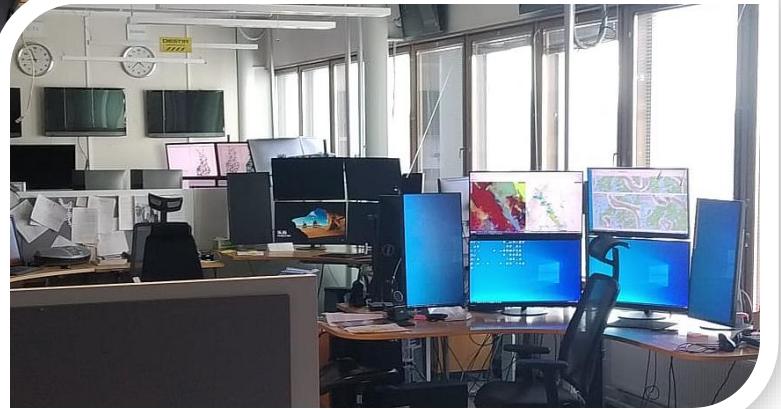
training



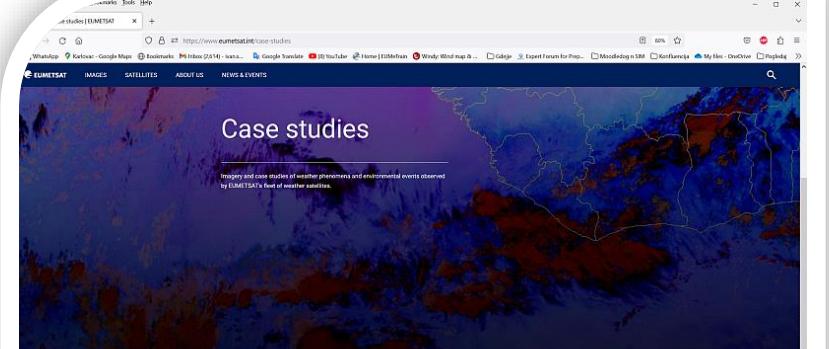
R&D



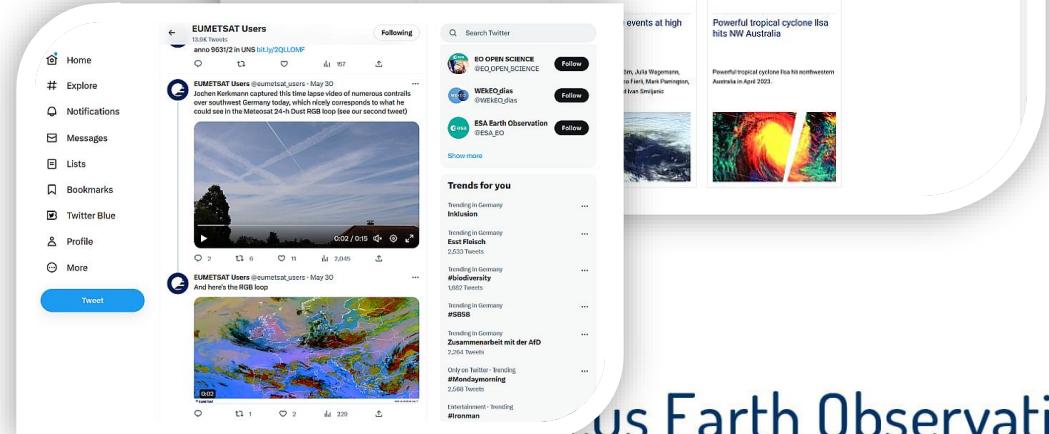
users



web publications



social media



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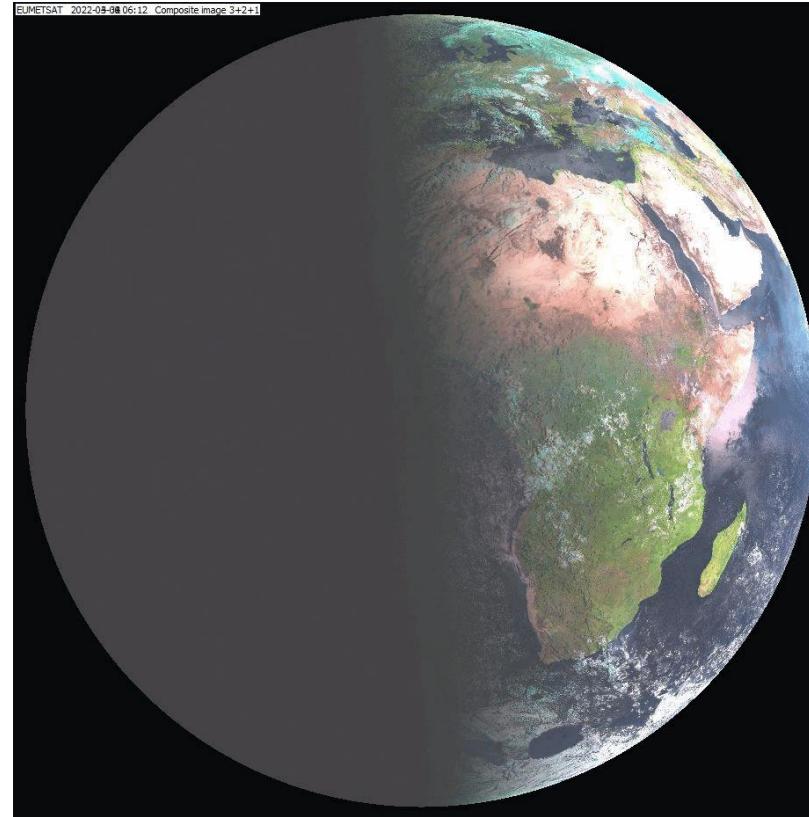
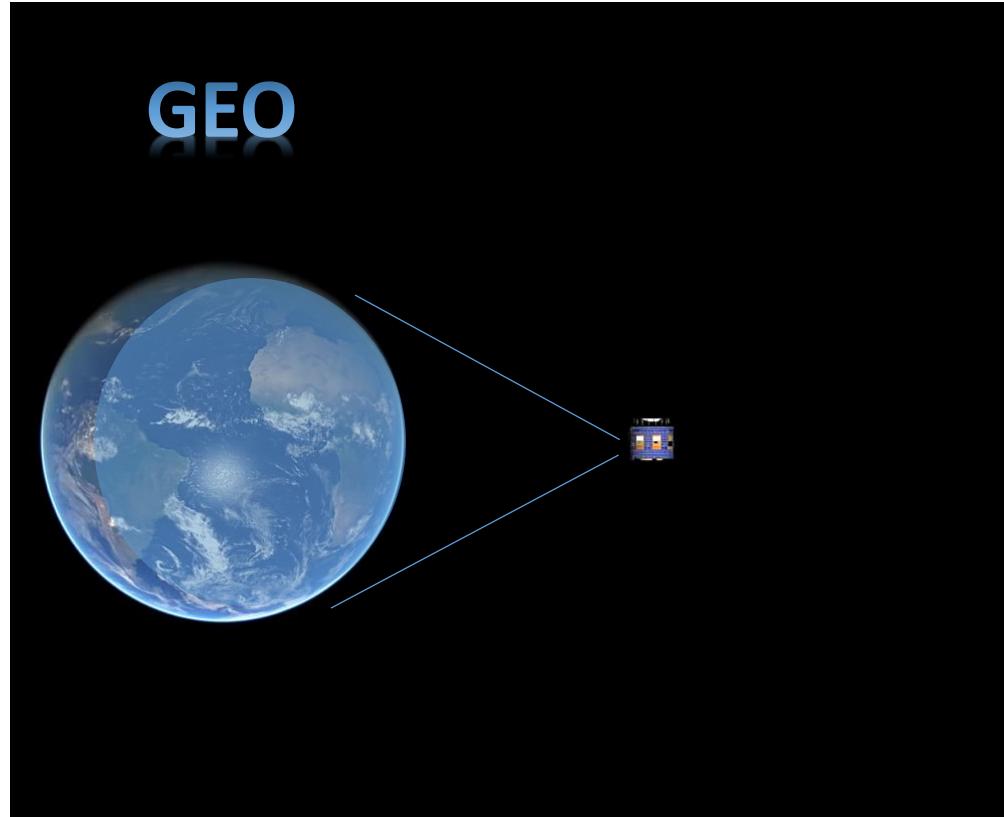


What kind of satellite data
we have out there?



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What kind of satellites observing the weather?



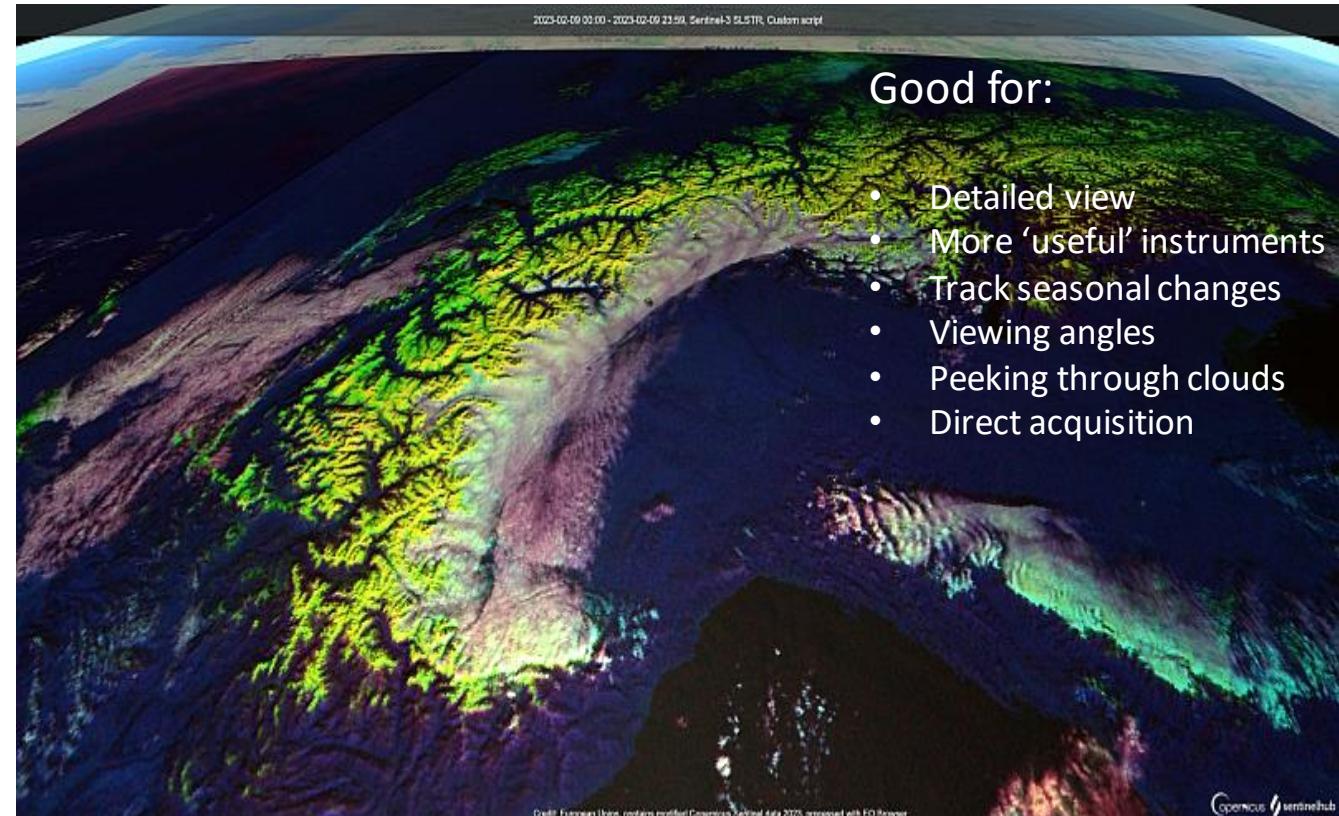
Good for:

- Wide view/ FD
- Track hourly/ diurnal/ seasonal changes
- Weather development
- Viewing angles
- Peeking behind clouds
- Quick look



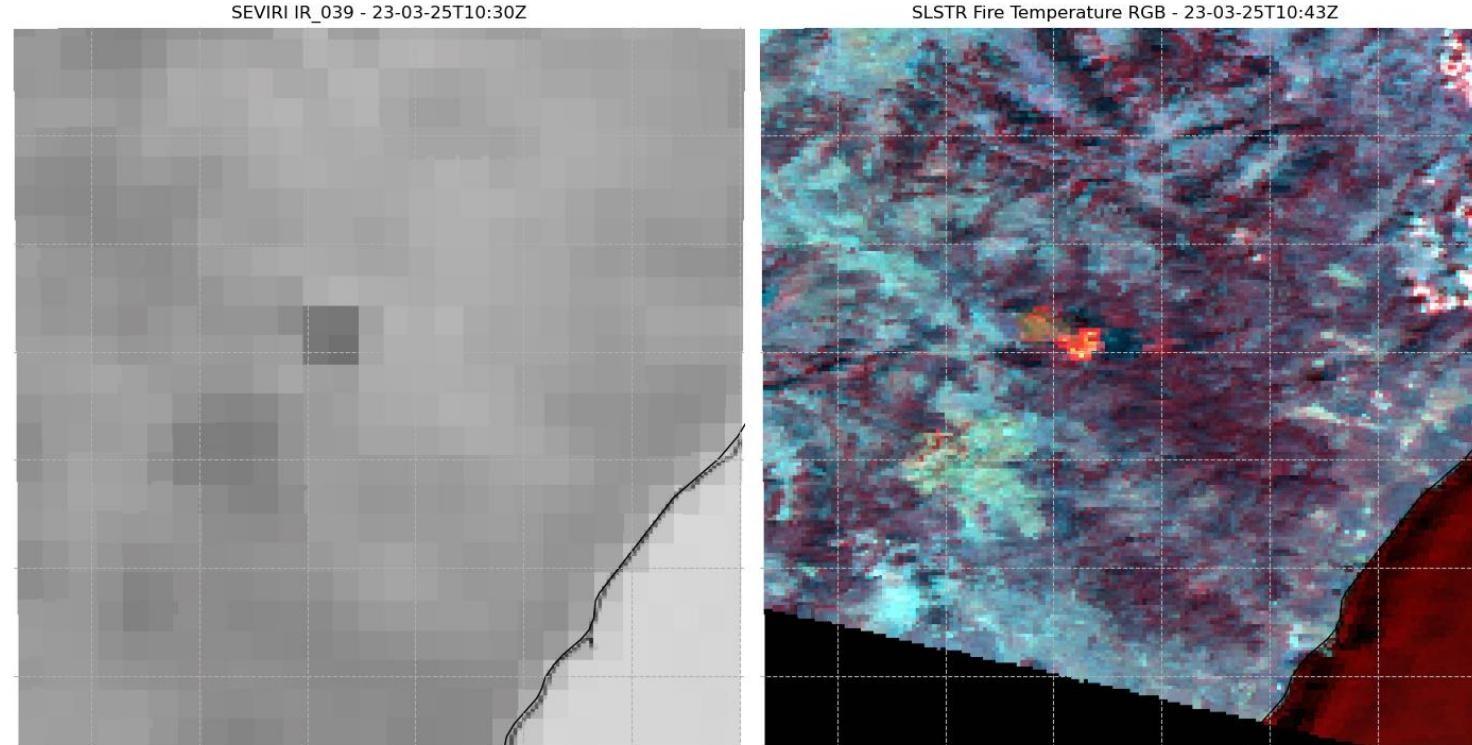
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What kind of satellites observing the weather?



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EUMETSAT operates Copernicus Sentinel satellites Sentinel-3 and Sentinel-6 (more to come!)



Crucial synergy with EU Space Program, ESA, other partners and European industry!

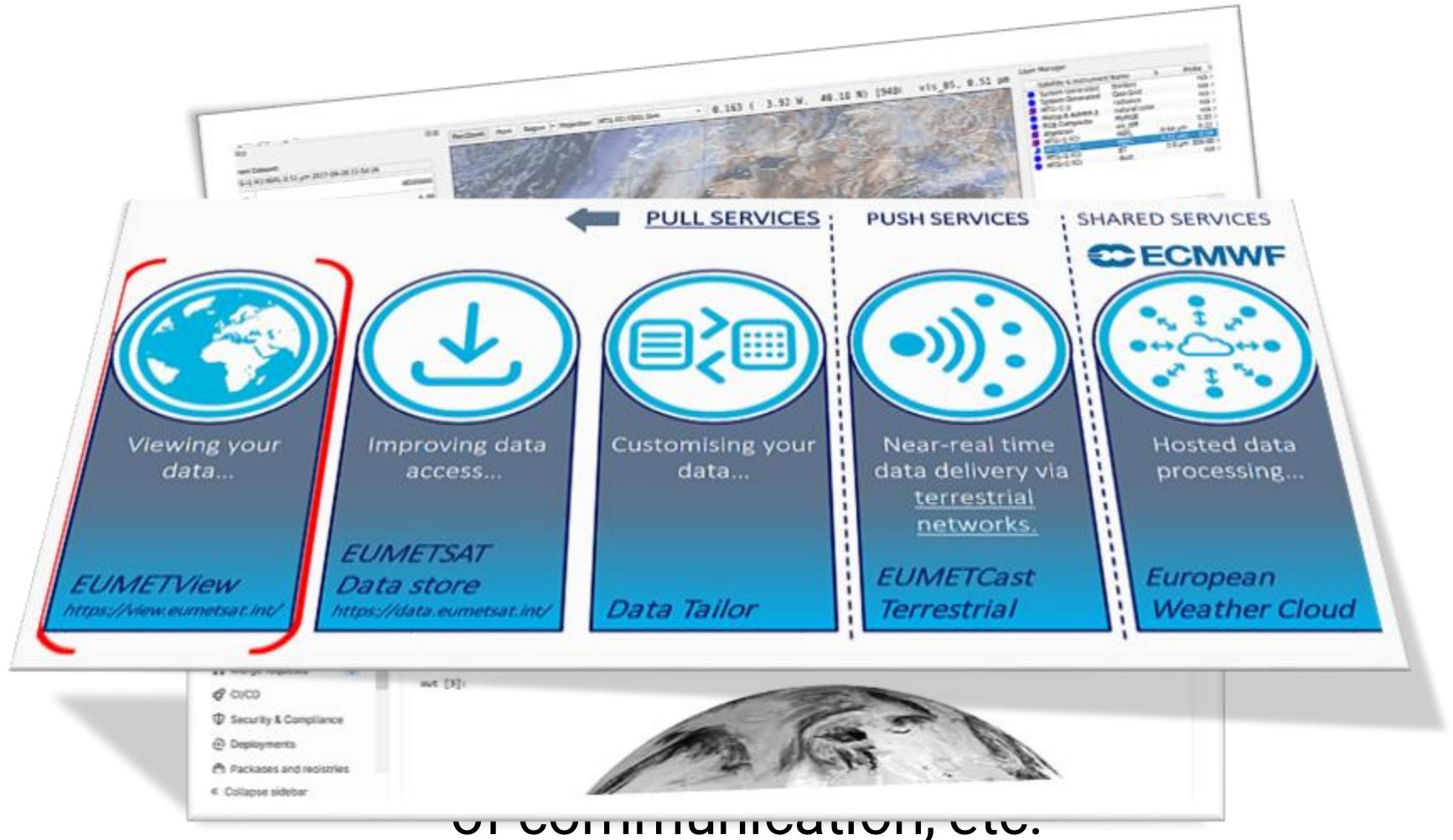


**Copernicus Earth Observation
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Event unfolds/ed...
What's next?



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OF COMMUNICATION, ETC.

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Climate & Weather

Eumetview

https://view.eumetsat.int/productviewer?v=default

67%

EUMETSAT DATA SERVICES

EUMETView

Eumetsat View * Add layers +

Layers

No Layers loaded on the map

Overlays

Basemap

Projection

API access

Download queue

My Views

Log in

+

-

500 km

May 20 08 : 00 UTC

May 2023

June 2023

Days

Eumetview

https://view.eumetsat.int/productviewer/addProducts/theme.par.Mission;mode=tree?v=session

67%

EUMETSAT DATA SERVICES

API access Download queue My Views ivansmilja

EUMETView

Search / Browse

Search something like "MSG" or "Airmass"

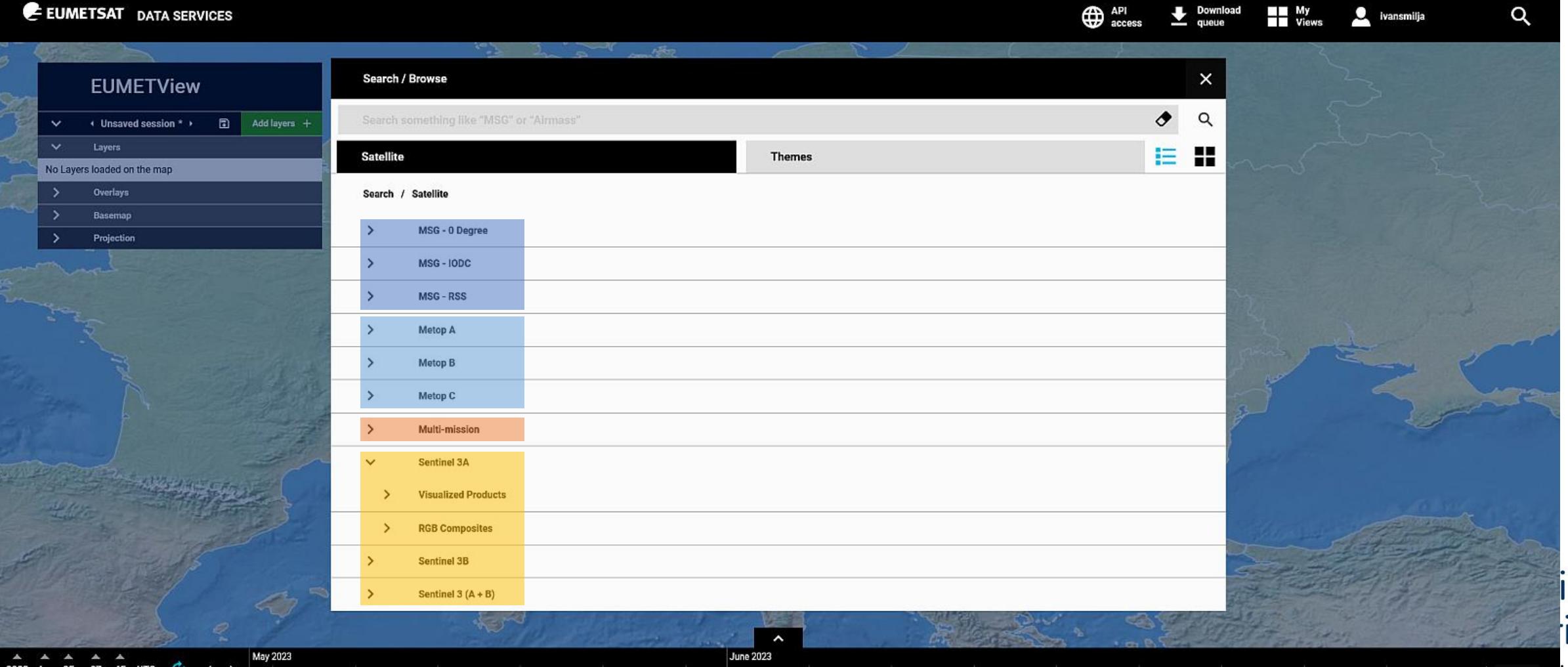
Satellite Themes

Search / Satellite

- > MSG - 0 Degree
- > MSG - IODC
- > MSG - RSS
- > Metop A
- > Metop B
- > Metop C
- > Multi-mission
- > Sentinel 3A
 - > Visualized Products
 - > RGB Composites
- > Sentinel 3B
- > Sentinel 3 (A + B)

May 2023 June 2023

2023 Jun 05 07 : 45 UTC 21 23 25 27 29 31 1 3 5 7 9 11 13 15 17 Days



Eumetview

<https://view.eumetsat.int/productviewer/addProducts/theme.par.Mission;mode=tree?v=session>

EUMETSAT DATA SERVICES

API access Download queue My Views ivansmilja

EUMETView

Search / Browse

Search something like "MSG" or "Airmass"

Satellite Themes

MSG - 0 Degree

Channels Visualized Products RGB Composites

Airmass RGB - MSG - 0 degree

The Airmass product is an RGB (Red, Green, Blue) composite based upon data from infrared and water vapour channels from the SEVIRI instrument. It is ...

GEO WMS Add to map + i

Convection RGB - MSG - 0 degree

The Convection RGB combines the brightness temperature difference (BTD) between the WV6.2 and WV7.3 channels (on red), the BTD between the IR3.9 and ...

GEO WMS Add to map + i

Day Microphysics RGB - MSG - 0 degree

The Day Microphysics RGB (Red, Green, Blue) was inherited from Rosenfeld and Lensky (1998): the VIS0.8 reflectance in red approximates the cloud optical depth ...

GEO WMS Add to map + i

Dust RGB - MSG - 0 degree

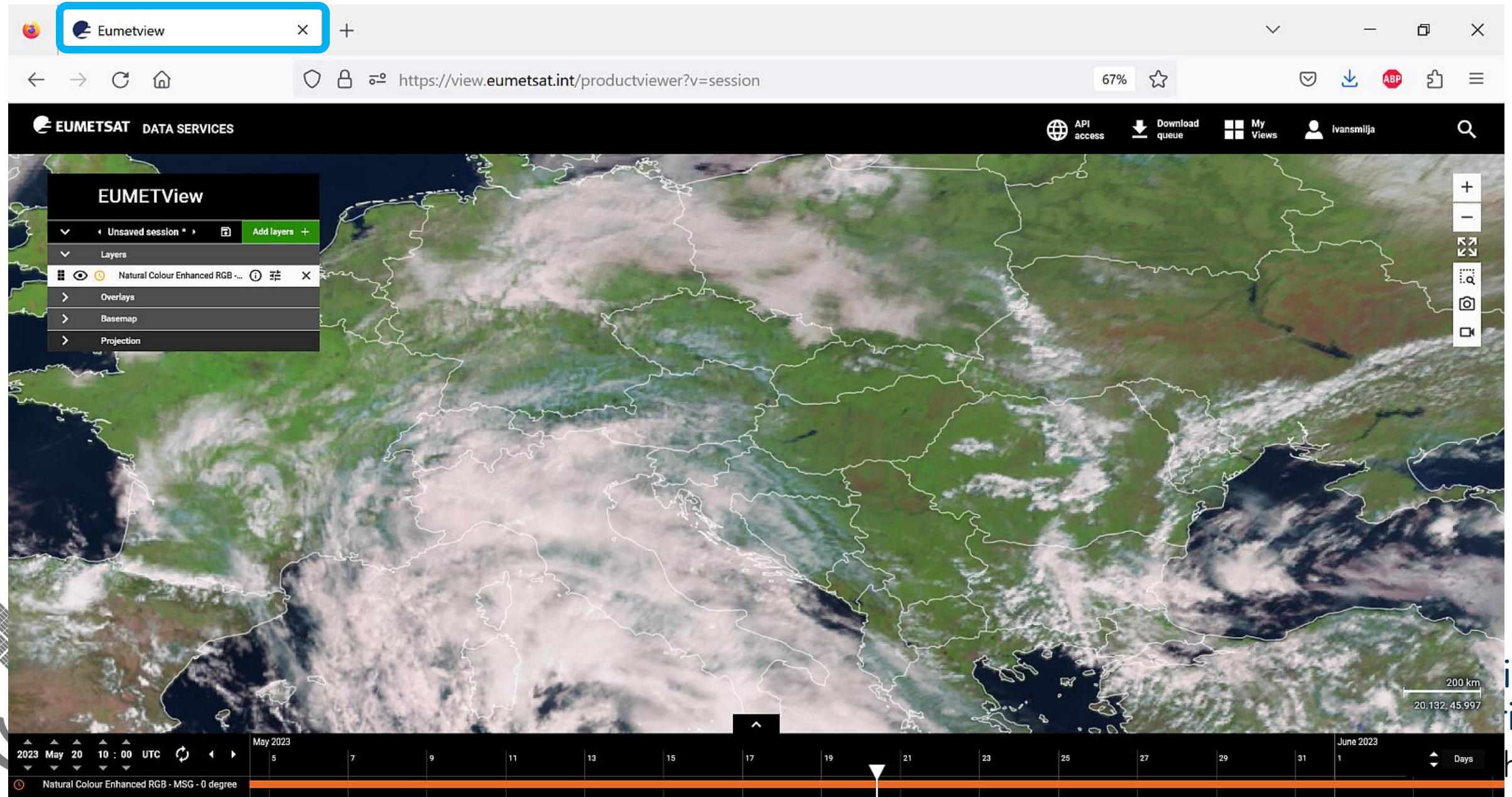
The Dust product is an RGB (Red, Green, Blue) composite based upon infrared channel data from the Meteosat Second Generation satellite. It is designed to ...

GEO WMS Add to map + i

European HRV RGB

May 2023 June 2023

2023 Jun 05 07 : 45 UTC 21 23 25 27 29 31 1 3 5 7 9 11 13 15 17 Days



EUMETView

https://view.eumetsat.int/productviewer?v=session

67%

EUMETSAT DATA SERVICES

EUMETView

Unsaved session

Add layers

Layers

Natural Colour Enhanced RGB - 0 degree

Overlays

Basemap

Projection

API access

Download queue

My Views

ivansmilja

+

-

200 km

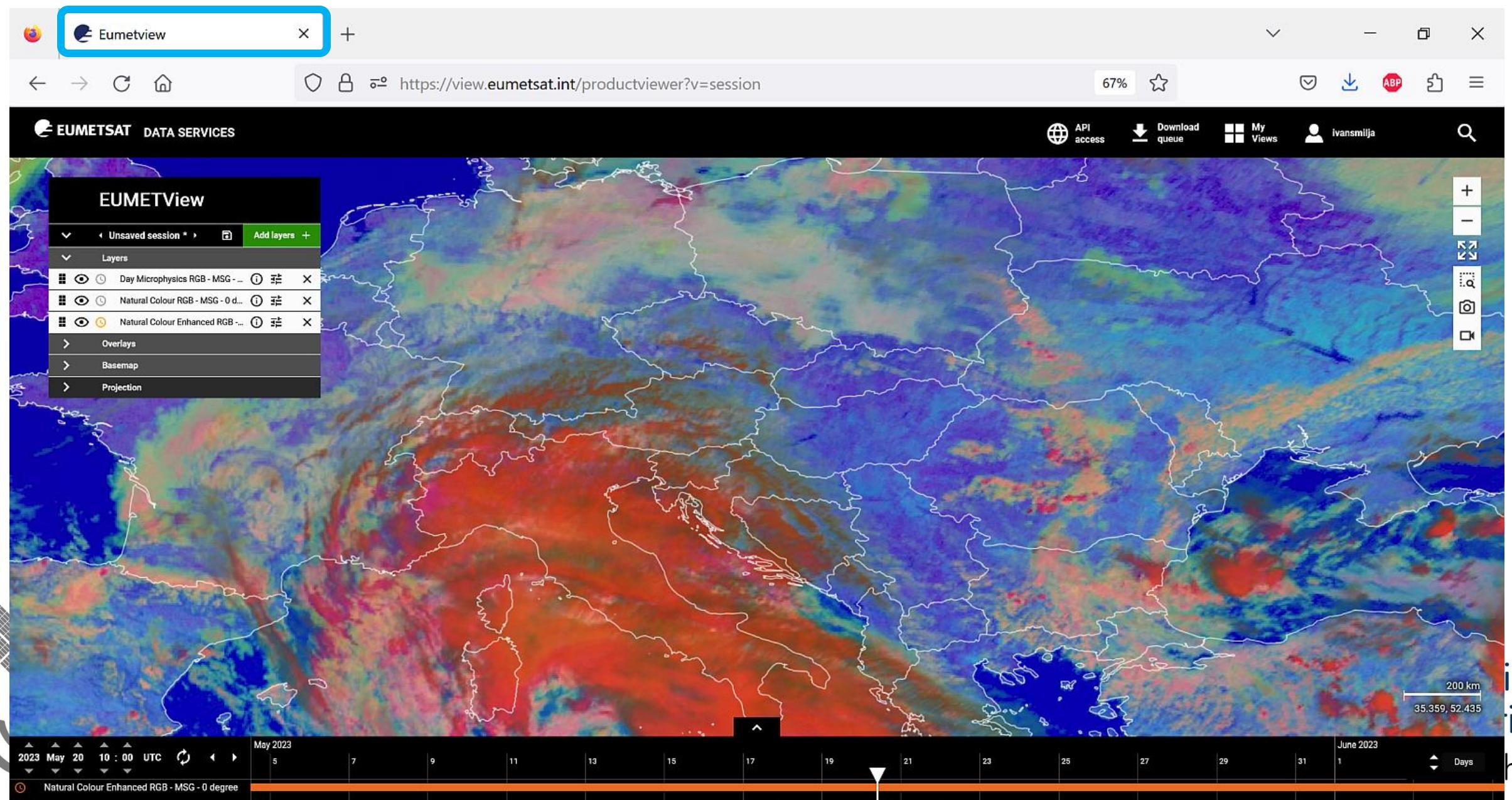
20.132, 45.997

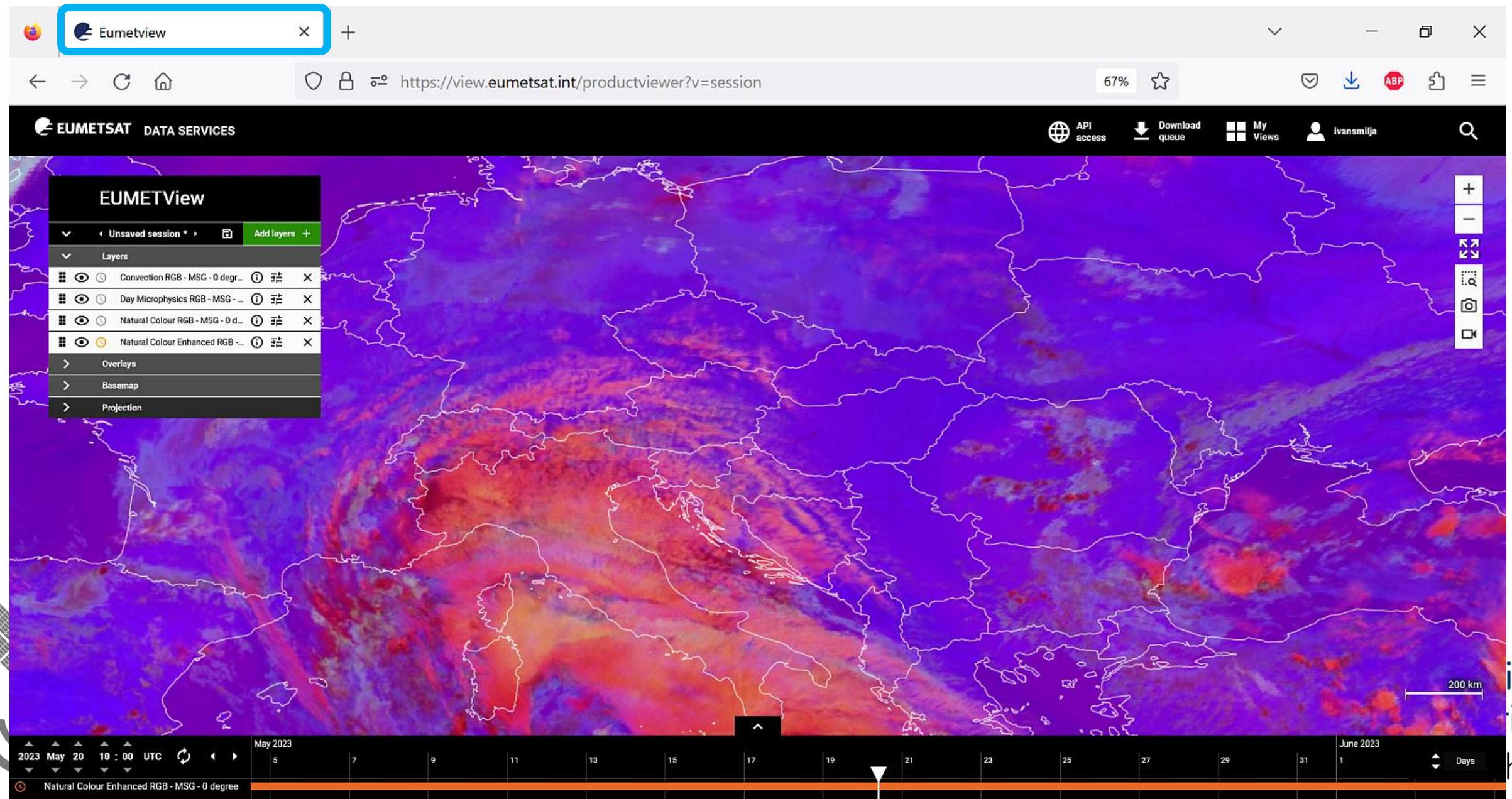
May 20 10 : 00 UTC May 2023

May 5 7 9 11 13 15 17 19 21 23 25 27 29 31 June 1 2023

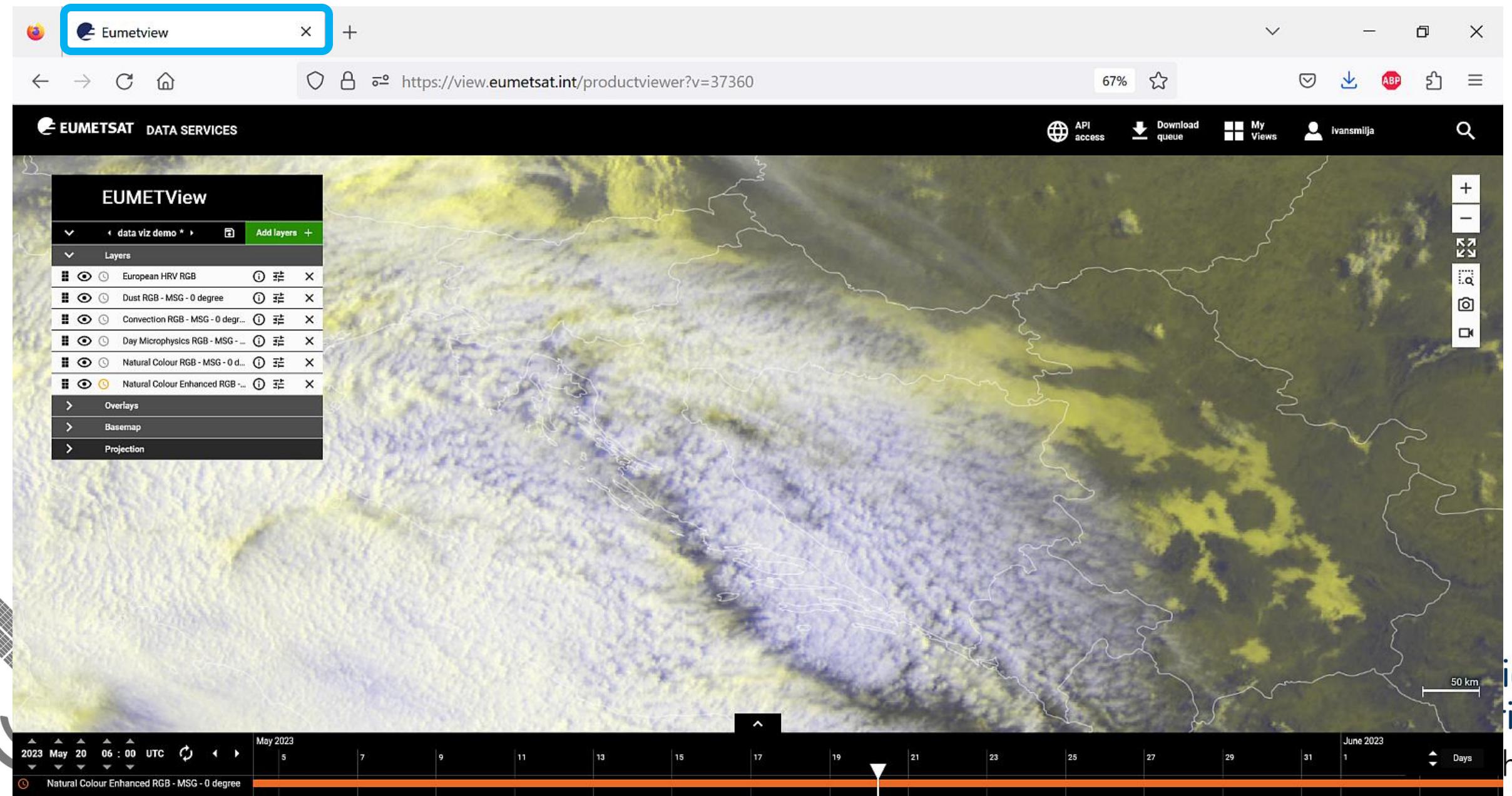
Days

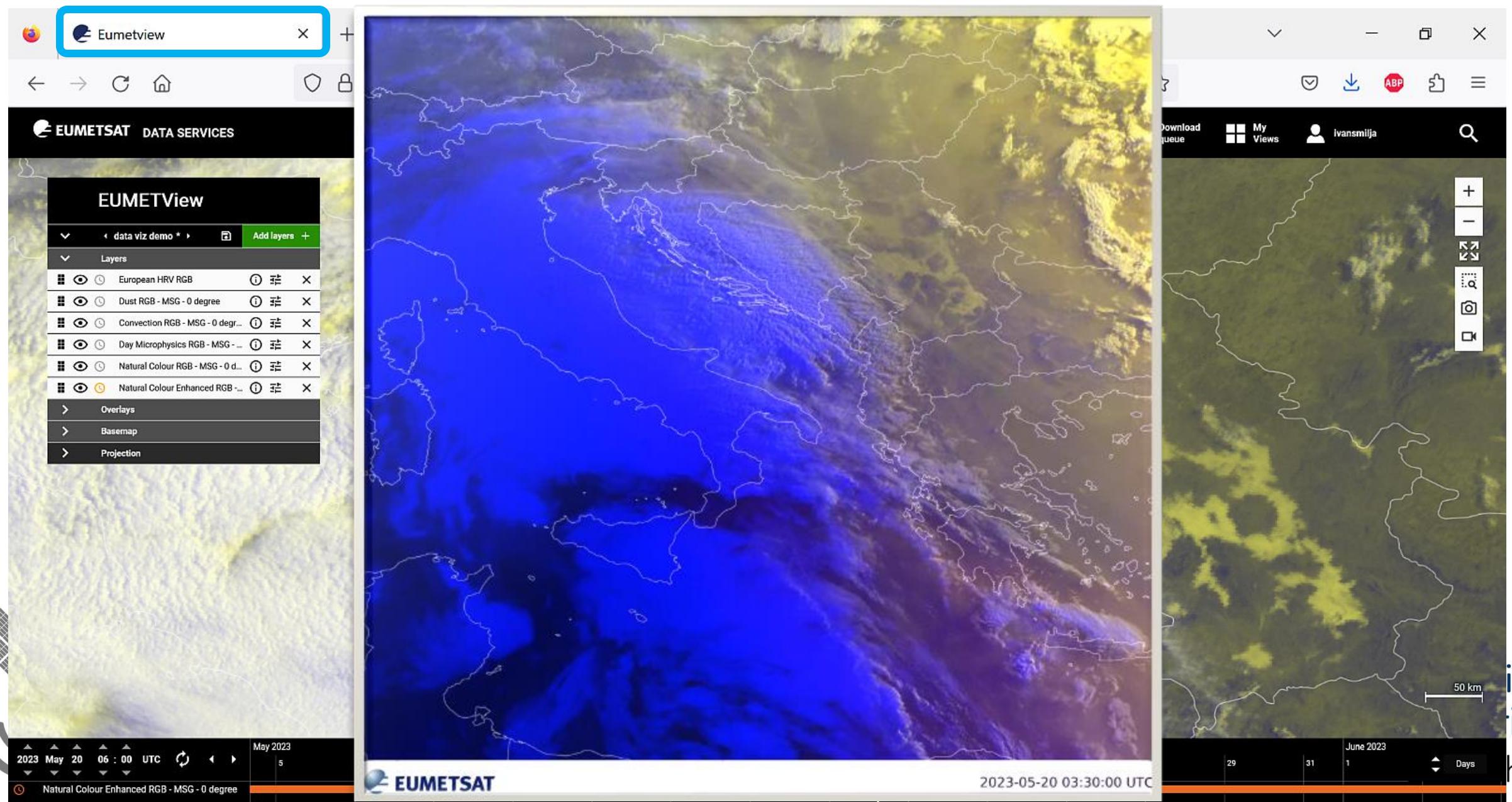
Natural Colour Enhanced RGB - MSG - 0 degree

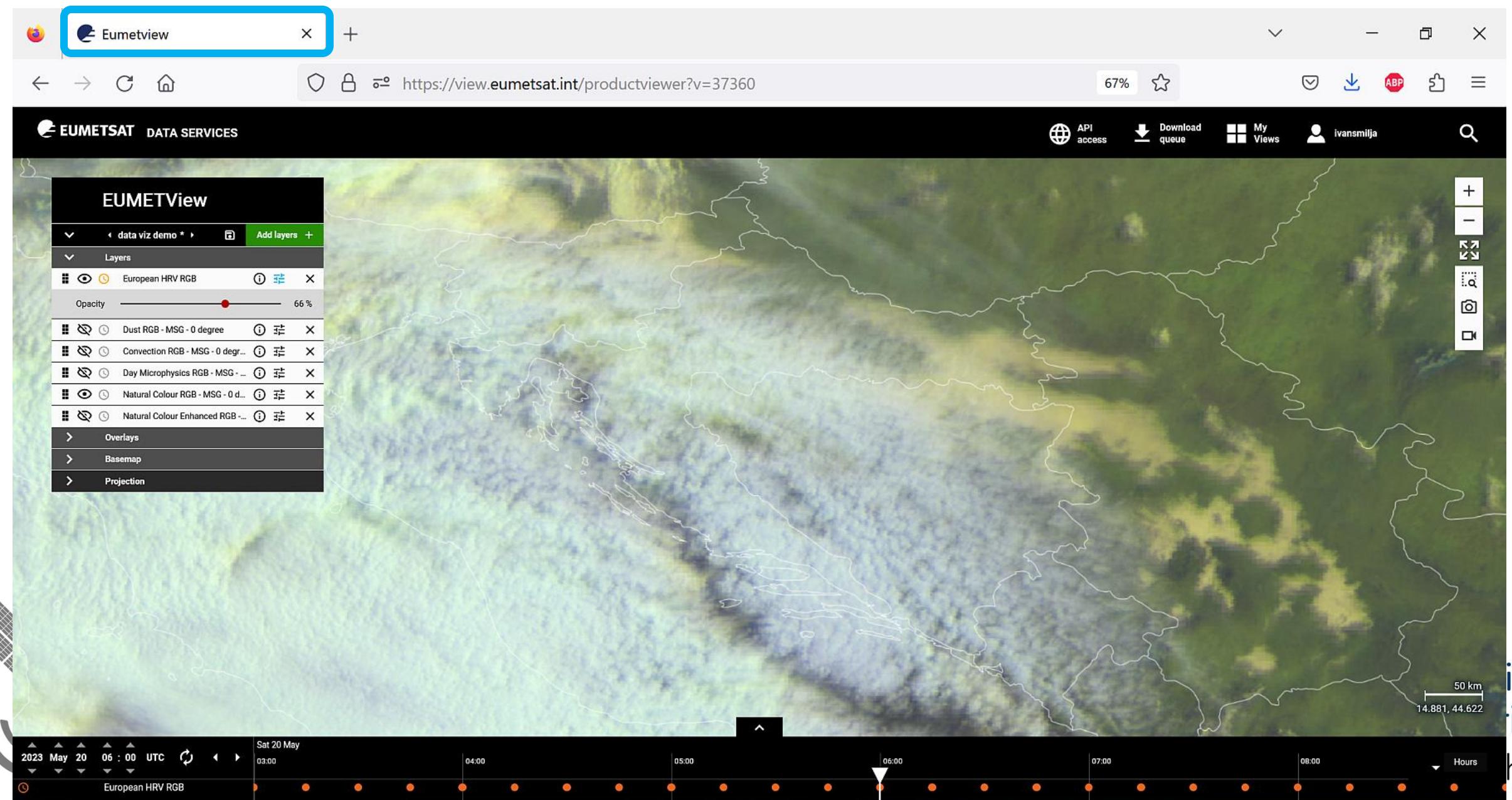


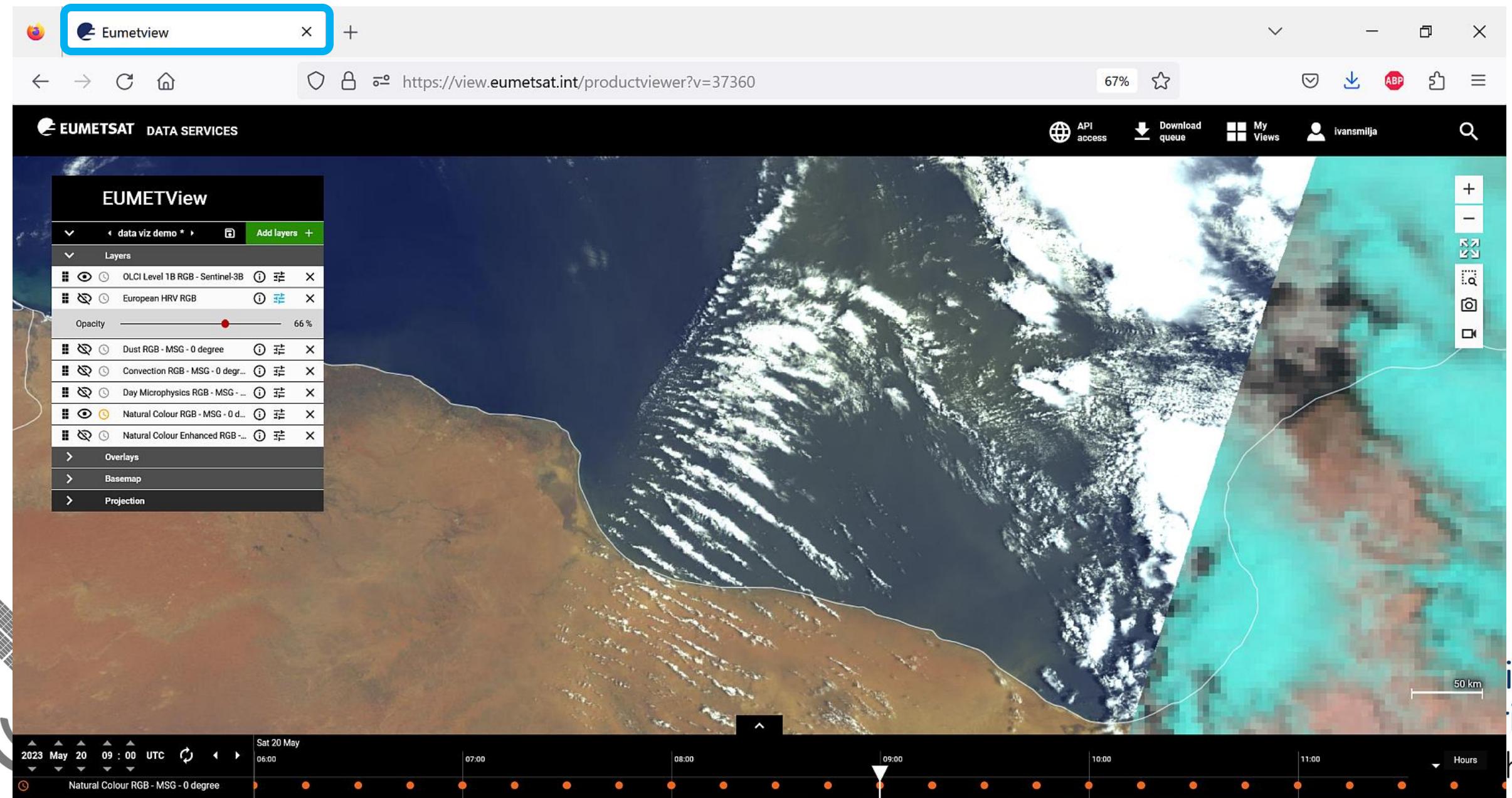


The screenshot shows the EUMETView web interface. At the top, there's a header with the EUMETView logo, a search bar, and various browser controls. Below the header is the EUMETSAT DATA SERVICES logo. The main area is a satellite map of Europe and the Mediterranean. On the left, a sidebar titled 'EUMETView' lists several layers: 'data viz demo *' (selected), 'Layers' (Dust RGB - MSG - 0 degree, Convection RGB - MSG - 0 degre..., Day Microphysics RGB - MSG - ..., Natural Colour RGB - MSG - 0 d..., Natural Colour Enhanced RGB - ...), 'Overlays', 'Basemap', and 'Projection'. To the right of the map are zoom and navigation controls. At the bottom, a timeline shows dates from May 20 to June 1, 2023, with a specific layer selected: 'Natural Colour Enhanced RGB - MSG - 0 degree'.









Eumetview

<https://view.eumetsat.int/productviewer?v=37360>

67%  

EUMETSAT DATA SERVICES

EUMETView

Layers

- Geostationary Ring Natural Col...   
- OLCI Level 1B RGB - Sentinel-3B   
- European HRV RGB   
- Dust RGB - MSG - 0 degree   
- Convection RGB - MSG - 0 degr...   
- Day Microphysics RGB - MSG - ...   
- Natural Colour RGB - MSG - 0 d...   
- Natural Colour Enhanced RGB - ...   

Opacity: 66 %

Overlays

Basemap

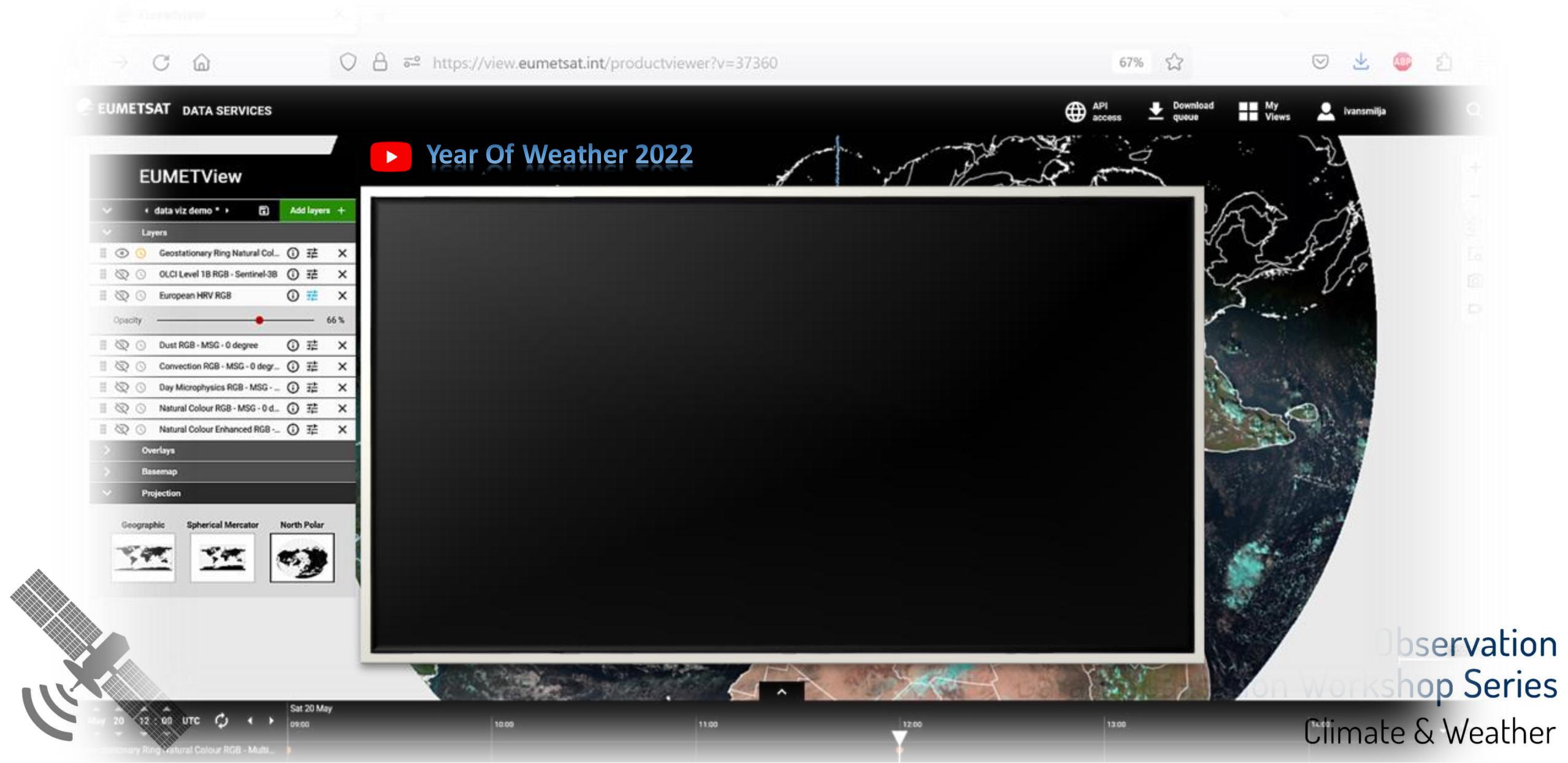
Projection

Geographic  Spherical Mercator  North Polar 

2000 km

Sat 20 May 12 : 00 UTC 09:00 10:00 11:00 12:00 13:00 14:00 Hours

Geostationary Ring Natural Colour RGB - Multi...



EUMETView

Year Of Weather 2022

Layers

- Geostationary Ring Natural Col...
- OLCI Level 1B RGB - Sentinel-3B
- European HRV RGB
- Dust RGB - MSG - 0 degree
- Convection RGB - MSG - 0 deg...
- Day Microphysics RGB - MSG - ...
- Natural Colour RGB - MSG - 0 d...
- Natural Colour Enhanced RGB - ...

Opacity: 66%

Overlays

Basemap

Projection

Geographic Spherical Mercator North Polar

Sat 20 May 09:00 10:00 11:00 12:00 13:00

Geostationary Ring Natural Colour RGB - Multi

Observation on workshop Series
Climate & Weather

Did you know –
- there is more data than satellite data!?



Copernicus Earth Observation
Data Visualisation Workshop Series
Climate & Weather

The screenshot shows a web browser window with the URL <https://eumetrain.org>. The page is titled "Metropolitan Satellite Data Training". The navigation bar includes links for "All Resources", "ePort" (which is currently selected and highlighted with a blue box), "User Manual", "Past Events", "SatCams*", "MTG*", and "About Us". A search bar is also present. The main content area features a large "GO TO RESOURCES" button and a "GO TO PAST EVENTS" button. The "ePort" dropdown menu is open, showing options: "ePort JavaScript", "ePort Pro", and "About ePort". The entire "ePort" menu is highlighted with a blue box.

Home | EUMeTrain

All Resources ▾ ePort ▾ User Manual Past Events SatCams* MTG* About Us

Search

ePort JavaScript

ePort Pro

About ePort

Meteorological Satellite Data Training

Exercises, simulators, manuals and courses on how to efficiently use satellite data for meteorological applications

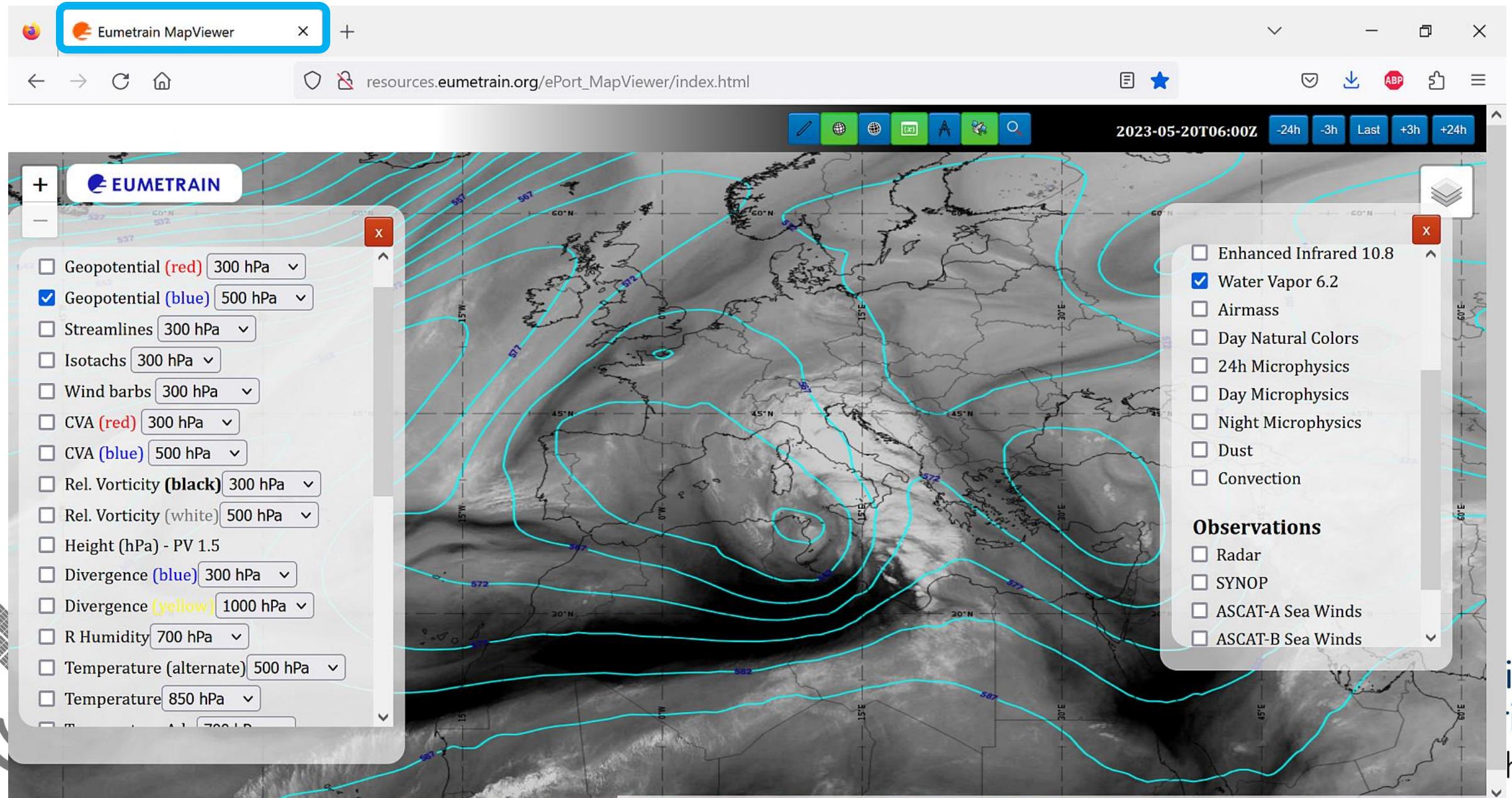
GO TO RESOURCES

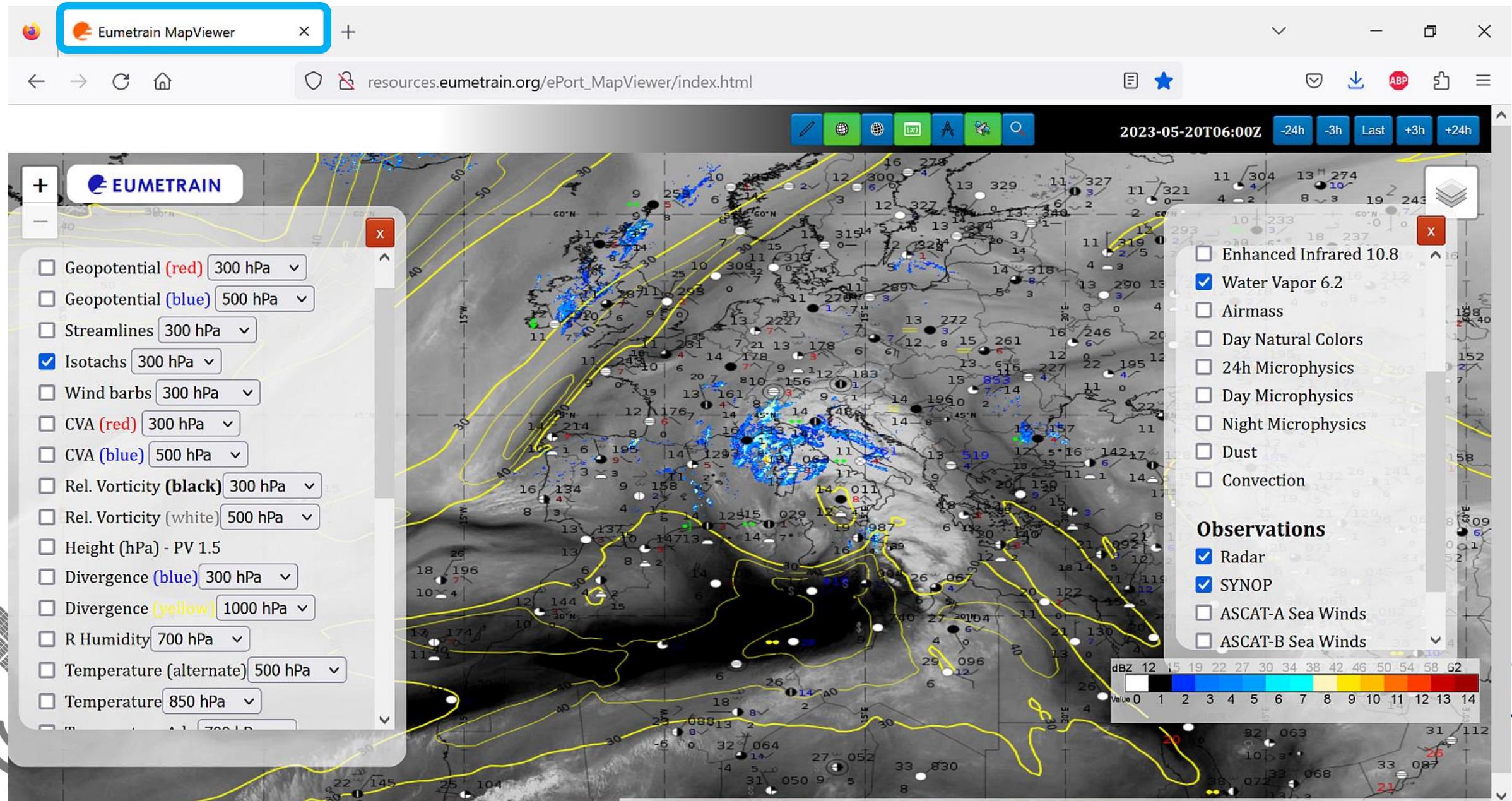
GO TO PAST EVENTS

LATEST NEWS

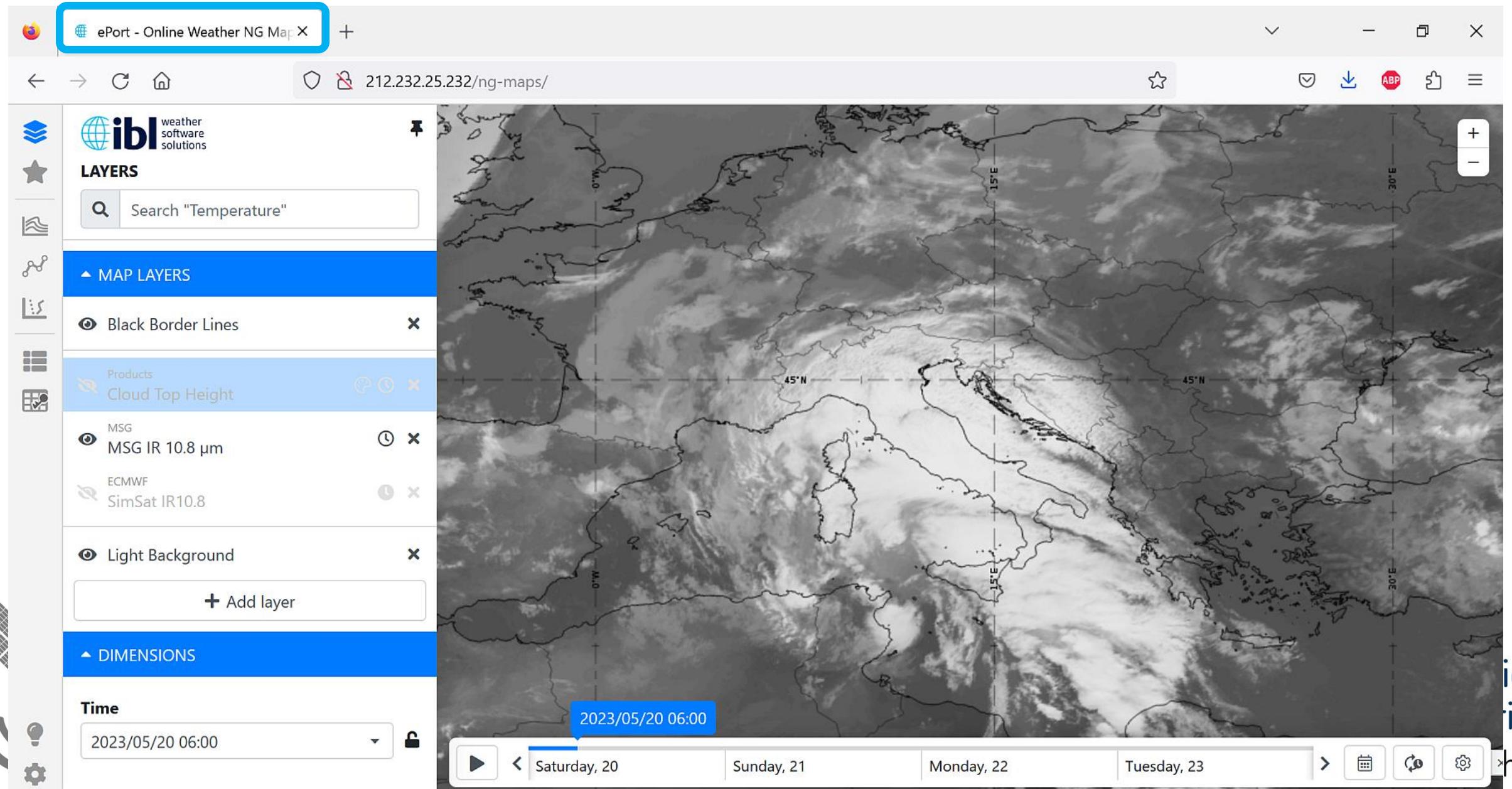


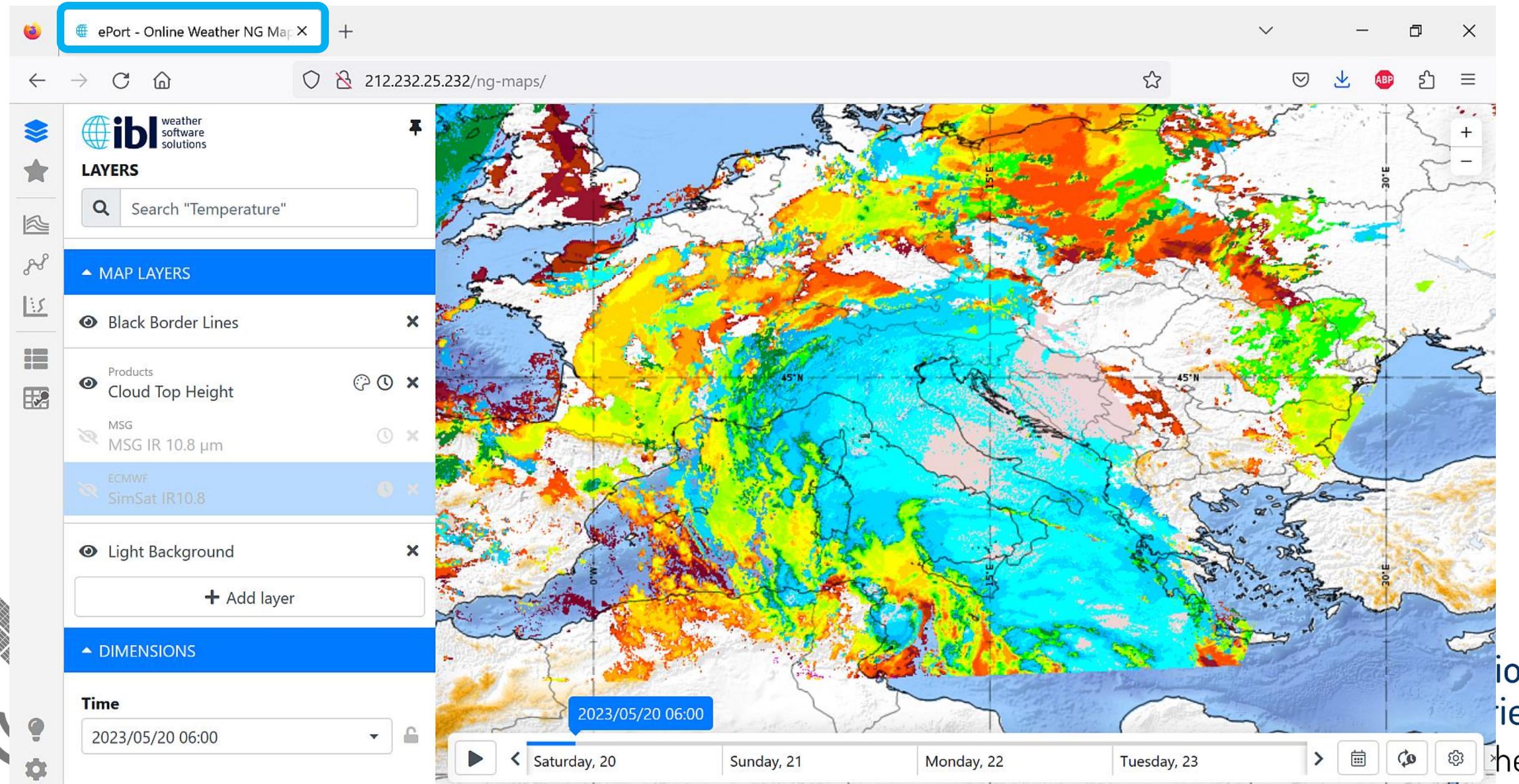
on
ies
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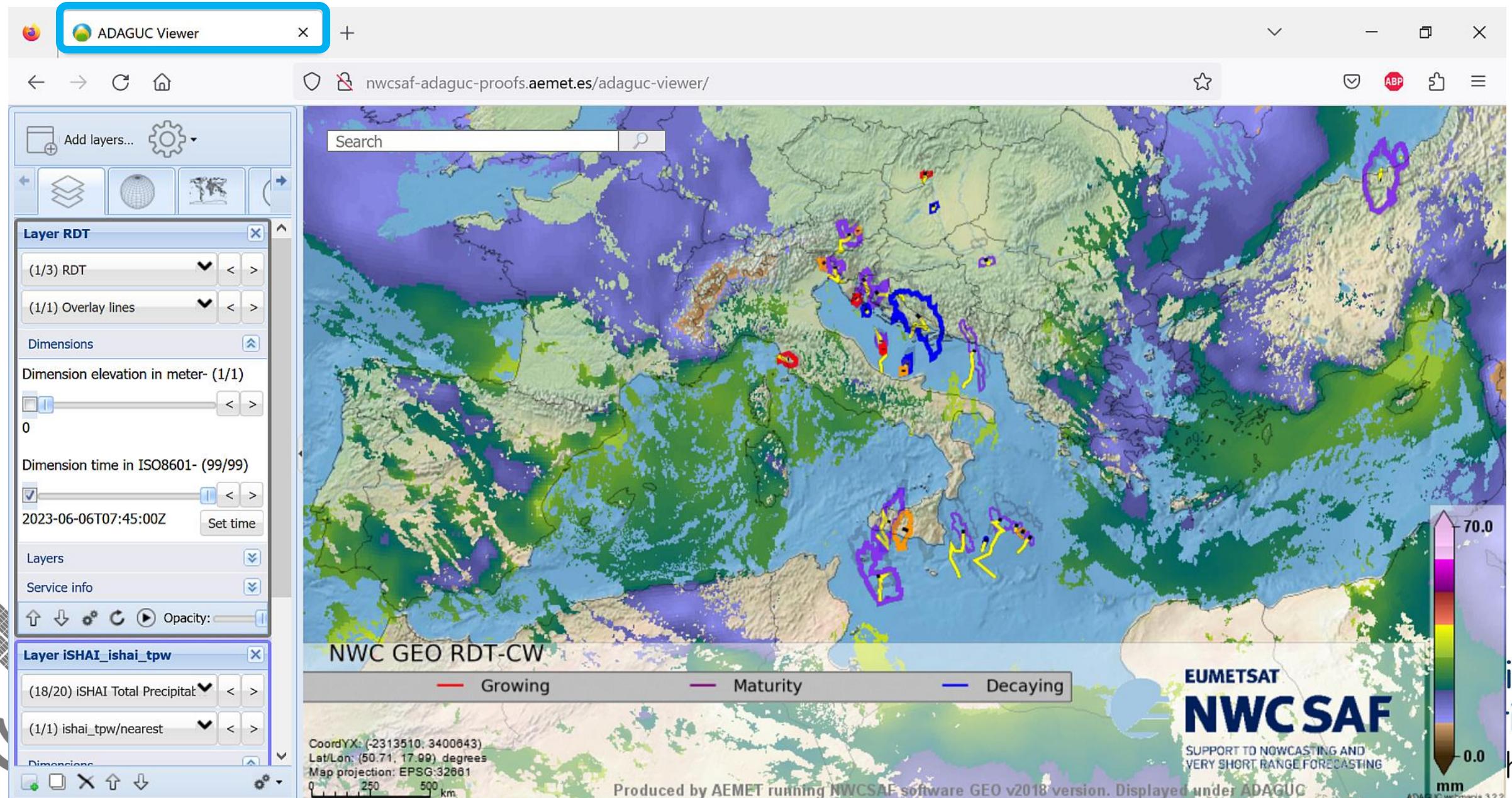




The screenshot shows a web-based weather map interface. At the top, there's a header bar with the title "ePort - Online Weather NG Map" and a URL "212.232.25.232/ng-maps/". The left sidebar contains several icons for different data layers: "Black Border Lines", "Cloud Top Height", "MSG", "MSG IR 10.8 μm", "ECMWF SimSat IR10.8", and "Light Background". A search bar for "Temperature" is also present. Below these are sections for "MAP LAYERS" and "DIMENSIONS". The "MAP LAYERS" section has "Black Border Lines" selected. The "DIMENSIONS" section shows a date and time selector set to "2023/05/20 06:00". The main area of the screen displays a grayscale satellite map of Europe, specifically focusing on the Iberian Peninsula, the Mediterranean Sea, and Eastern Europe. The map includes latitude and longitude lines (0°W, 45°N, 15°E, 30°E). A blue box highlights the date and time at the bottom of the map. At the very bottom, there's a navigation bar with arrows for date selection and other control icons.









c. Jonathan Amos - BBC



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Climate & Weather



Enjoy the beauty!
(training@eumetsat.int)



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EUROPEAN UNION



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MERCATOR
OCEAN
INTERNATIONAL



ECMWF

