EUMETSAT Data platforms (EUMETView, Data Store)

EUMETSAT Data Services
1-3 July 2025, Casablanca

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EUMETSAT

Agenda

- **EUMETView**
  - **WebUI/API**
  - **WebUI Key features**
  - **MTG Products on EUMETView**
- **Data Store**
  - **WebUI**
  - **API**

Overview of Data Services Portfolio

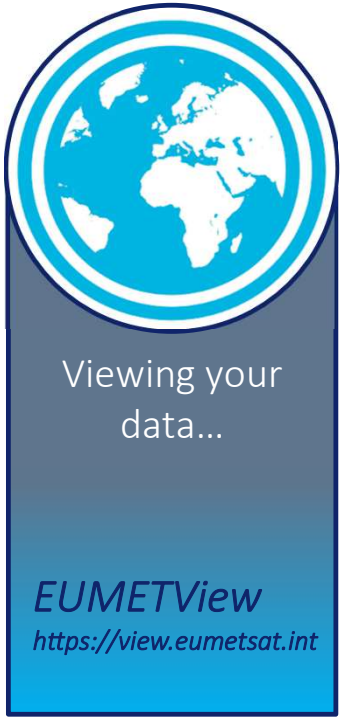
Near-real time data delivery via satellite broadcasts.

EUMETCast Satellite

Near-real time data delivery via terrestrial networks.

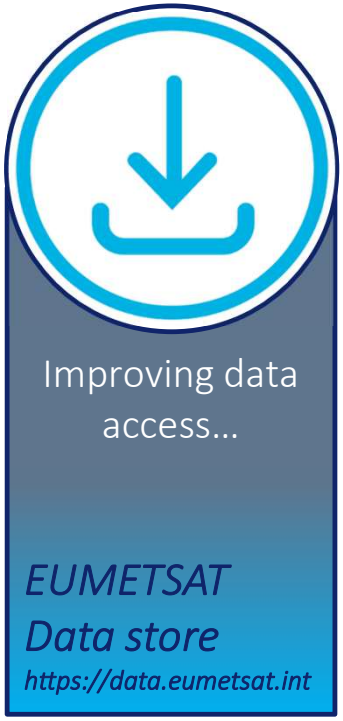
EUMETCast Terrestrial

PUSH SERVICES



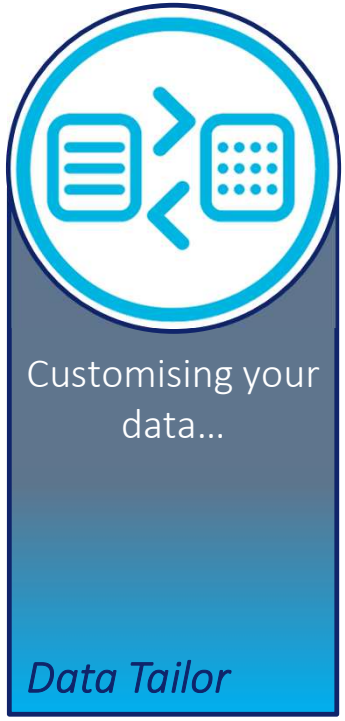
Viewing your data…

EUMETView
https://view.eumetsat.int



Improving data access…

EUMETSAT Data store
https://data.eumetsat.int

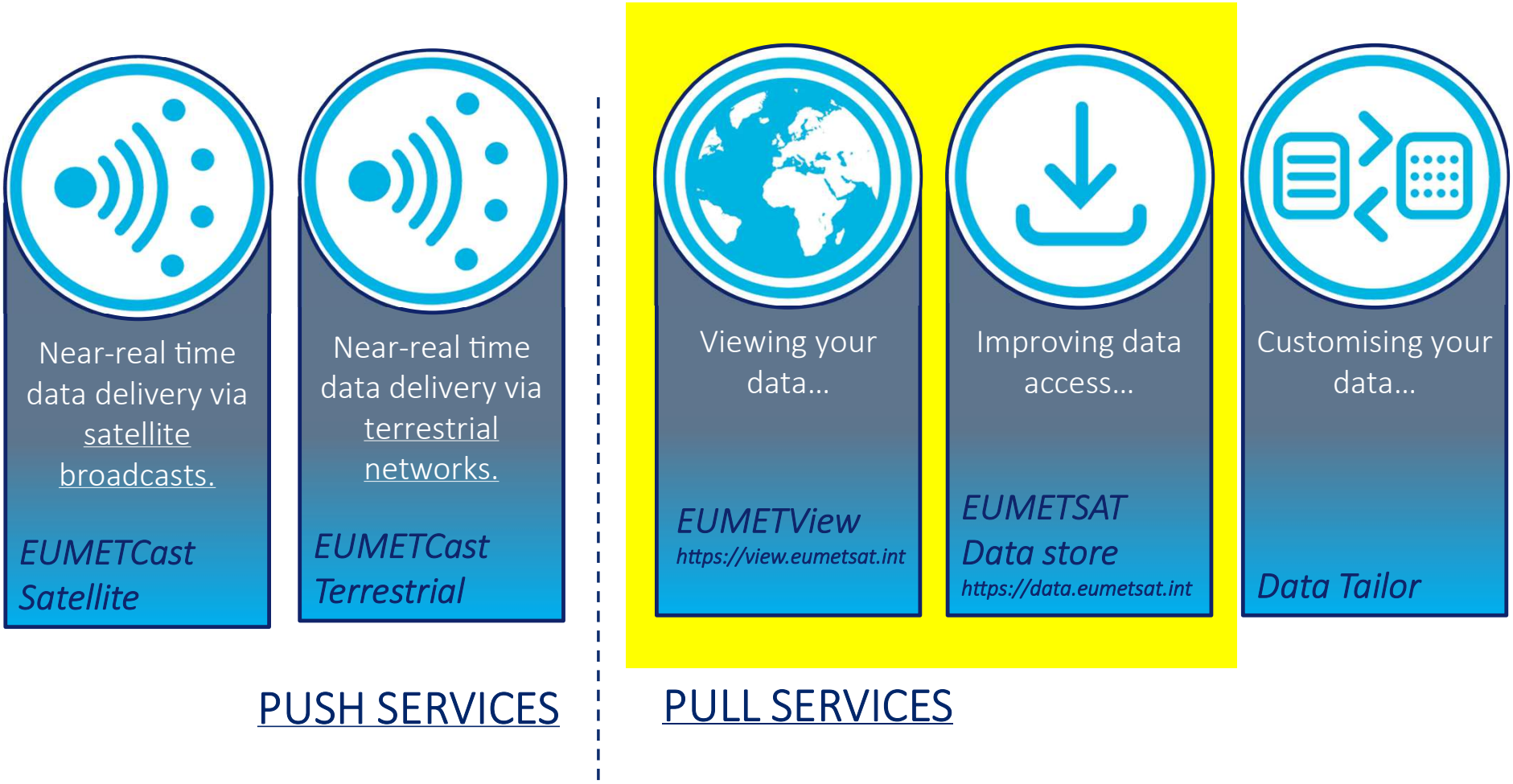


Customising your data…

Data Tailor

PULL SERVICES

Overview of Data Services Portfolio



EUMETView

- EUMETSAT's **Online Map Service (OMS)**
- Provides **interactive data visualization** via a customisable **Web user interface (WebUI)**
- Offers a set of **Open Geospatial Consortium standard APIs (Application Programming Interfaces)** for automated access to data

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- **Features near-real time and historical data products**

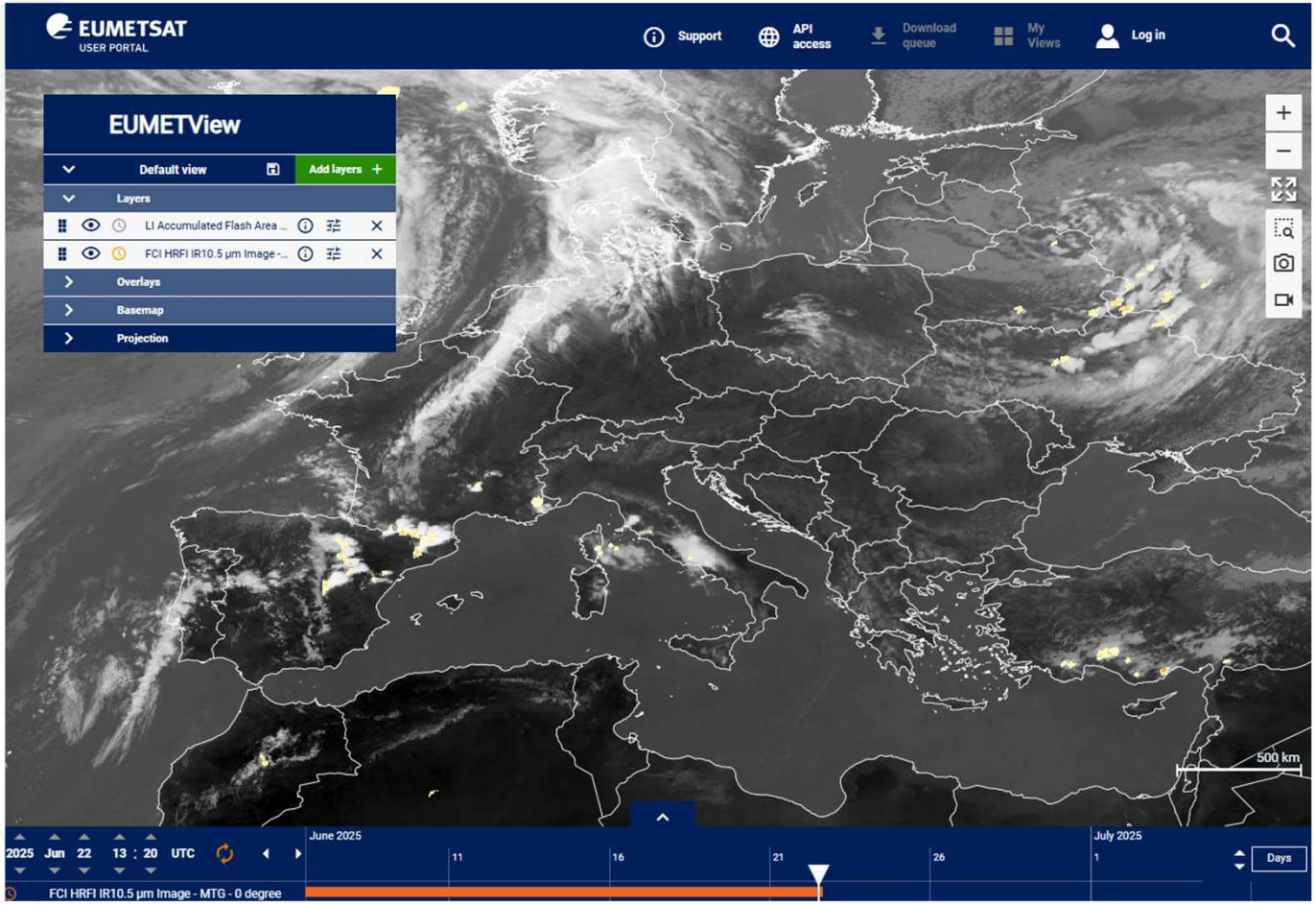
EUMETView

Yet, EUMETView…

- Does not include all data
- Archive is limited in time
- For extensive data needs, downloading images one by one from EUMETView quickly becomes impractical.

EUMETView WebUI

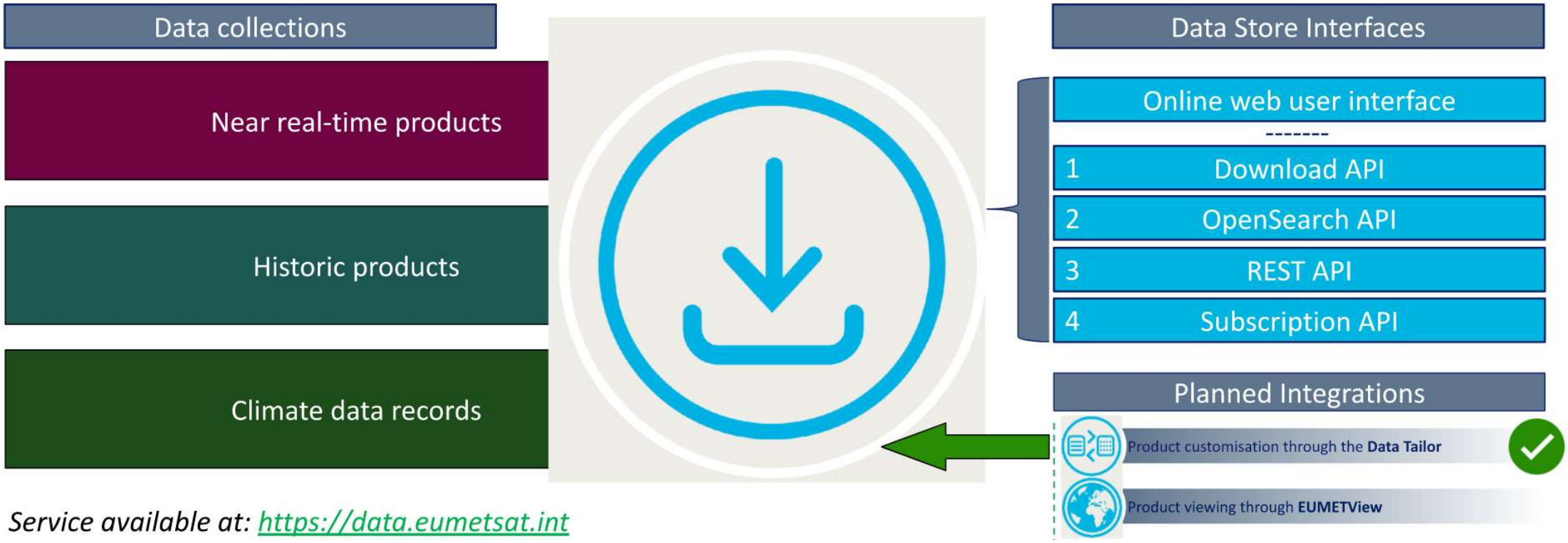
https://view.eumetsat.int/



https://user.eumetsat.int/resources/user-guides/eumet-view-user-guide

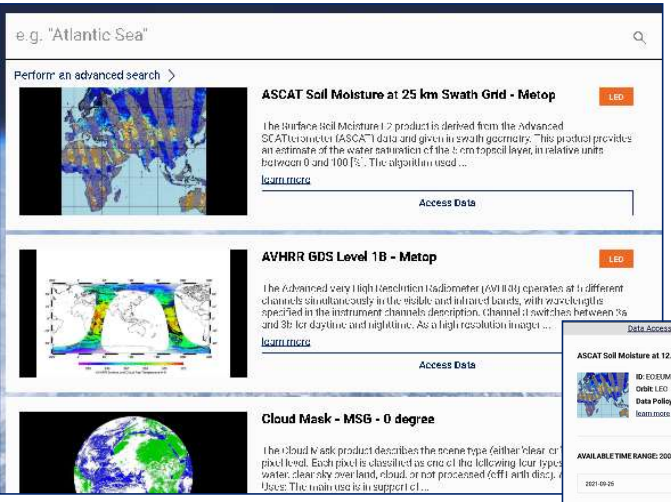
Data Store

The **EUMETSAT Data Store** provides users with a download and linked data tailoring service for online data; providing access through an online web user interface and via a suite of APIs.

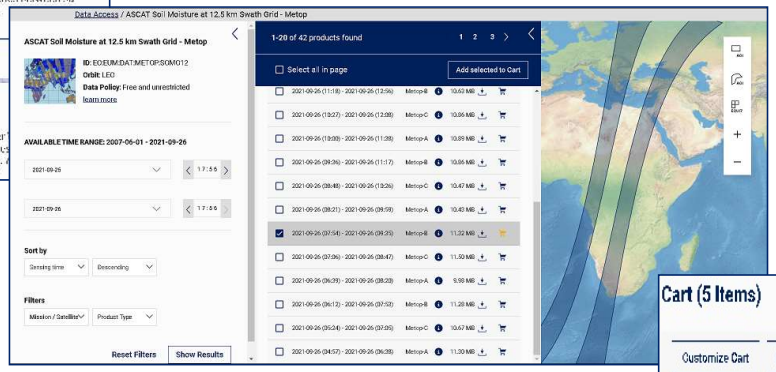


Service available at: https://data.eumetsat.int

Data Store WebUI



Browse the catalogue of NRT, historic and CDR collections



Search data in a collection matching your date&time and ROI selection

Download the files

OR

Customize data by Data Tailor

EUMDAC – Data Access Client

It provides simple access to the EUMETSAT data from a variety of satellite missions.

- It is available as a python library and also as a stand-alone executable for Windows and Linux

Python library example

Filter products of selected collection by time and area:

```
# Add vertices for polygon, wrapping back to the start point.
geometry = [[-1.0, -1.0],[4.0, -4.0],[8.0, -2.0],[9.0, 2.0],[6.0, 4.0],[1.0, 5.0],[-1.0, -1.0]]

# Set sensing start and end time
start = datetime.datetime(2021, 11, 10, 8, 0)
end = datetime.datetime(2021, 11, 10, 9, 0)

# Retrieve datasets that match our filter
products = selected_collection.search(
    geo='POLYGON(({}))'.format(','.join(["{} {}".format(*coord) for coord in geometry])),
    dtstart=start,
    dtend=end)

print(f'Found Datasets: {len(products)} datasets for the given time range')

for product in products:
    print(str(product))
```

Download all products from search:

```
for product in products:
    with product.open() as fsrc, \
            open(fsrc.name, mode='wb') as fdst:
        shutil.copyfileobj(fsrc, fdst)
        print(f'Download of product {product} finished.')
print('All downloads are finished.')
```

EUMDAC – Data Access Client

For stand-alone executable, there is no need to install anything. Just download the single executable file and start to search and download satellite data!
(https://gitlab.eumetsat.int/eumetlab/data-services/eumdac)

If you just want to download one specific product, you just can use the product ID to start the download.

```
$ eumdac download -c EO:EUM:DAT:MSG:MSG15-RSS -p MSG3-SEVI-MSG15-0100-NA-20211109084418.639000000Z-NA
```

But sometimes, we want to download multiple products. Therefore, we save all products from the previous search with the `> products.txt` argument in a text file:

```
$ eumdac search -c EO:EUM:DAT:MSG:MSG15-RSS --geometry 'POLYGON ((10.09 56.09, 10.34 56.09, 10.34 56.19, 10.09 56.19, 10.09 56.09))' > products.txt
```

Now, we can import the text file and download all products from it:

```
eumdac download -c EO:EUM:DAT:MSG:MSG15-RSS -p @products.txt
```

Thank you!

Questions are welcome.