

A decorative graphic in the top left corner consisting of a white circle with two lines extending from it, set against a blue background.

EUMETSAT Data platforms (EUMETView, Data Store)

EUMETSAT Data Services
1-3 July 2025, Casablanca

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EUMETSAT



Agenda

www.eumetsat.int



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



Overview of Data Services Portfolio

www.eumetsat.int



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



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PULL SERVICES



- 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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- Possible to create and save maps using the WebUI
- Integrated with user services via the API
- **Features near-real time and historical data products**



Yet, EUMETView...

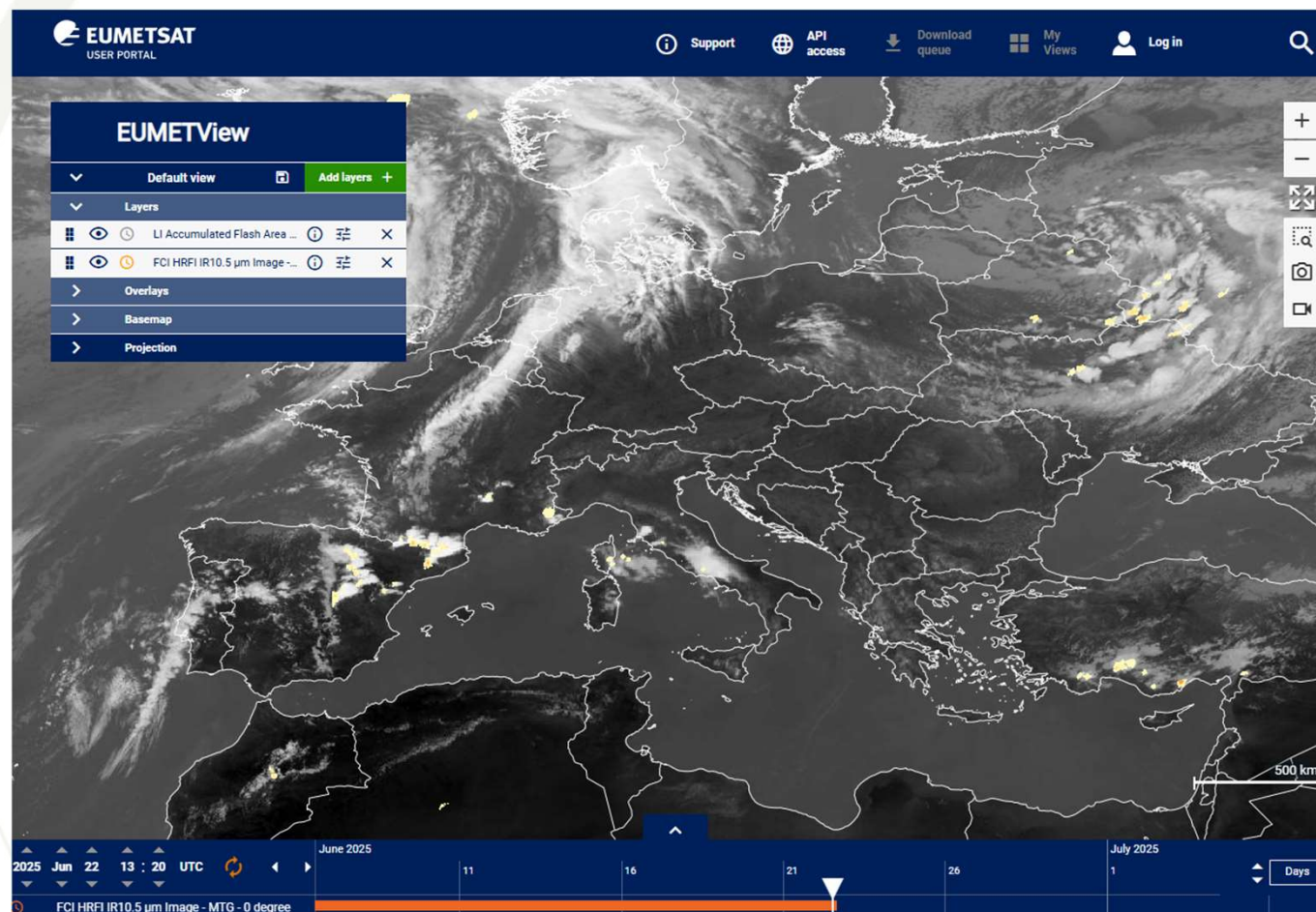
- Does not include all data
- Archive is limited in time
- For extensive data needs, downloading images one by one from EUMETView quickly becomes impractical.



EUMETView WebUI

[www.eumetsat.int](https://view.eumetsat.int/)

<https://view.eumetsat.int/>



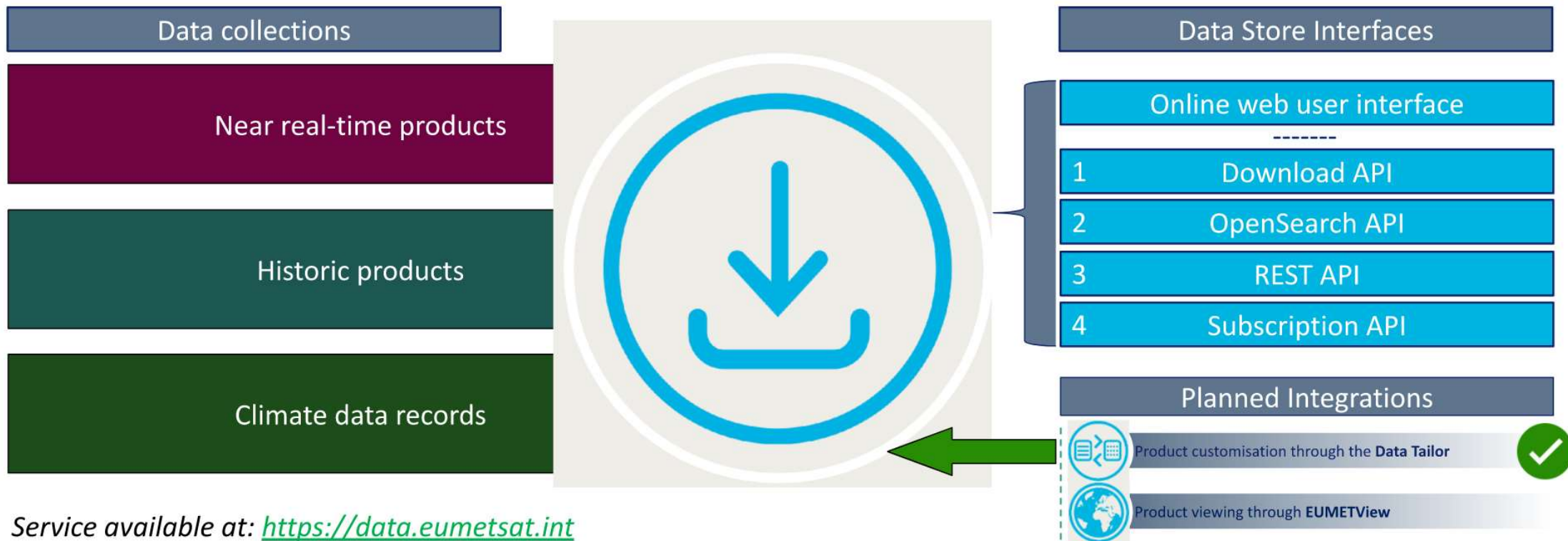
<https://user.eumetsat.int/resources/user-guides/eumet-view-user-guide>



Data Store

www.eumetsat.int

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.





Data Store WebUI

www.eumetsat.int

e.g. "Atlantic Sea"

Perform an advanced search >

ASCAT Soil Moisture at 25 km Swath Grid - Metop LED

The Surface Soil Moisture L2 product is derived from the Advanced SCATterometer (ASCAT) data and given in swath geometry. This product provides an estimate of the water saturation of the 1 cm topsoil layer, in relative units between 0 and 100%. The algorithm used ...

[Learn more](#)

[Access Data](#)

AVHRR GDS Level 1B - Metop LED

The Advanced Very High Resolution Radiometer (AVHRR) operates at 11 different channels simultaneously in the visible and infrared bands, with wavelengths specified in the instrument channels description. Channel 1 switches between 7a and 7b for daytime and nighttime. As a high resolution image ...

[Learn more](#)

[Access Data](#)

Cloud Mask - MSG - 0 degree

The Cloud Mask product describes the scene type (either 'clear' or 'cloud' level). Each pixel is classified as one of the following four types: water, clear sky over land, cloud, or not processed (efft and disc). Use: The main use is in support of ...

*Browse the catalogue of
NRT, historic and CDR
collections*

Data Access / ASCAT Soil Moisture at 12.5 km Swath Grid - Metop

1-20 of 42 products found

☐ Select all in page [Add selected to Cart](#)

☐	2021-09-26 (11:58) - 2021-09-26 (12:56)	Metop-C	10.63 MB	Download
☐	2021-09-26 (13:07) - 2021-09-26 (13:28)	Metop-C	10.66 MB	Download
☐	2021-09-26 (13:38) - 2021-09-26 (13:58)	Metop-C	10.69 MB	Download
☐	2021-09-26 (14:09) - 2021-09-26 (14:29)	Metop-C	10.66 MB	Download
☐	2021-09-26 (14:40) - 2021-09-26 (15:00)	Metop-C	10.67 MB	Download
☐	2021-09-26 (15:11) - 2021-09-26 (15:31)	Metop-C	10.63 MB	Download
☒	2021-09-26 (15:41) - 2021-09-26 (16:01)	Metop-C	11.32 MB	Download
☐	2021-09-26 (16:12) - 2021-09-26 (16:32)	Metop-C	11.30 MB	Download
☐	2021-09-26 (16:43) - 2021-09-26 (17:03)	Metop-C	11.30 MB	Download
☐	2021-09-26 (17:14) - 2021-09-26 (17:34)	Metop-C	9.96 MB	Download
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☐	2021-09-26 (18:16) - 2021-09-26 (18:36)	Metop-C	10.67 MB	Download
☐	2021-09-26 (18:47) - 2021-09-26 (19:07)	Metop-C	11.30 MB	Download

AVAILABLE TIME RANGE: 2007-06-01 - 2021-09-26

2021-09-25 [Go](#)

2021-09-26 [Go](#)

Sort by:

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

Cart (5 Items) [Return to Map view](#)

[Customize Cart](#) [Download Cart](#) [Remove Selected](#) [Clear Cart](#)

☐	Product Name	Satellite	Collection ID	Sensing Start (UTC)	Sensing Stop (UTC)	Download	Remove
☐	ASCA_SMR_02_M01_20...	Metop-H	1010N3561N1_0P383MC12	2021-09-26 16:18	2021-09-26 17:56	Download	X
☐	ASCA_SMR_02_M03_20...	Metop-C	1010N3561N1_0P383MC12	2021-09-26 13:48	2021-09-26 15:29	Download	X
☐	ASCA_SMR_02_M02_20...	Metop-C	1010N3561N1_0P383MC12	2021-09-26 13:21	2021-09-26 14:59	Download	X
☐	ASCA_SMR_02_M01_20...	Metop-H	1010N3561N1_0P383MC12	2021-09-26 14:36	2021-09-26 16:17	Download	X
☐	ASCA_SMR_02_M03_20...	Metop-C	1010N3561N1_0P383MC12	2021-09-26 15:30	2021-09-26 17:06	Download	X

*Customize
data by Data
Tailor*

*Download
the files
OR*

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:

```
1  # Add vertices for polygon, wrapping back to the start point.
2  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]]
3
4  # Set sensing start and end time
5  start = datetime.datetime(2021, 11, 10, 8, 0)
6  end = datetime.datetime(2021, 11, 10, 9, 0)
7
8  # Retrieve datasets that match our filter
9  products = selected_collection.search(
10     geo='POLYGON({{}})'.format(','.join(["{} {}".format(*coord) for coord in geometry])),
11     dtstart=start,
12     dtend=end)
13
14  print(f'Found Datasets: {len(products)} datasets for the given time range')
15
16  for product in products:
17     print(str(product))
```

Download all products from search:

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


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.

```
1 $ 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:

```
1 $ 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:

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



Thank you!

Questions are welcome.