# EUMETSAT
# Data Access & Services


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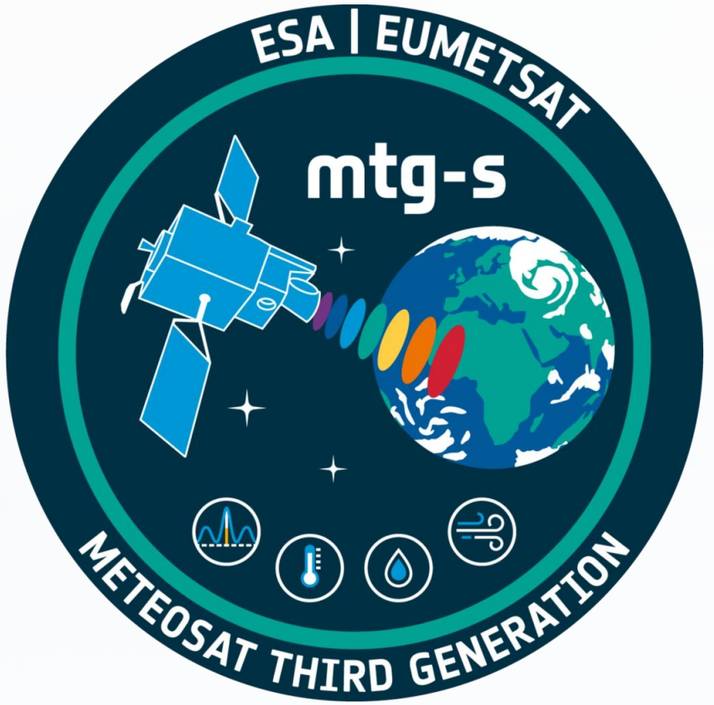
# EUMETSAT at a Glance 2025

- New MTG-S1 sounder launched on 1st July 2025
- MTG-I1 (Meteosat-12) are now fully operational and under EUMETSAT control, significantly enhancing observation capabilities.



# Types of Satellite Data

## Real-Time

EUMETCast broadcast delivers data with ultra-low latency, typically less than 5 minutes, ideal for immediate operational use.

## Near-Real-Time

Available via the EUMETView and Data Store and with latency typically under 1 hour, suitable for quick analysis and reporting.

## Historical Archive

Over 40 years of satellite data for climate research and trend analysis. Accessible via the Data Store.

## Climate Data Records

Long-term, validated datasets for climate monitoring and change detection. Access through Data Store.

# Key Data Access Services

## EUMETCast

Satellite-based global delivery of real-time meteorological data. You can also find detailed guides and terrestrial extensions on the portal.

## Data Store

REST API (**Representational State Transfer Application Programming Interface**) + graphical interface for near-real-time and historical data access. Includes beginner and advanced user guides.

## EUMETView

A live Web Map Service for interactive satellite imagery (updates ~every 15 min). Access layers and GIS integration guidance available.

## WEkEO DIAS

The Copernicus and EUMETSAT Data and Information Access Service, providing hub for Earth observation data.

# Data Customisation Workflow

### 1. Search & Order

Utilize the Data Store API or GUI to efficiently search and order the required satellite data products.

### 2. Tailor Products

Employ Data Tailor for on-demand processing, including spatial/temporal subsetting, reprojection, and reformatting.

### 3. Automate Pipelines

Integrate custom workflows using Python and Jupyter notebooks for seamless, reproducible data processing.

# Developer & Training Resources

## EUMDAC (EUMETSAT Data Access Client)

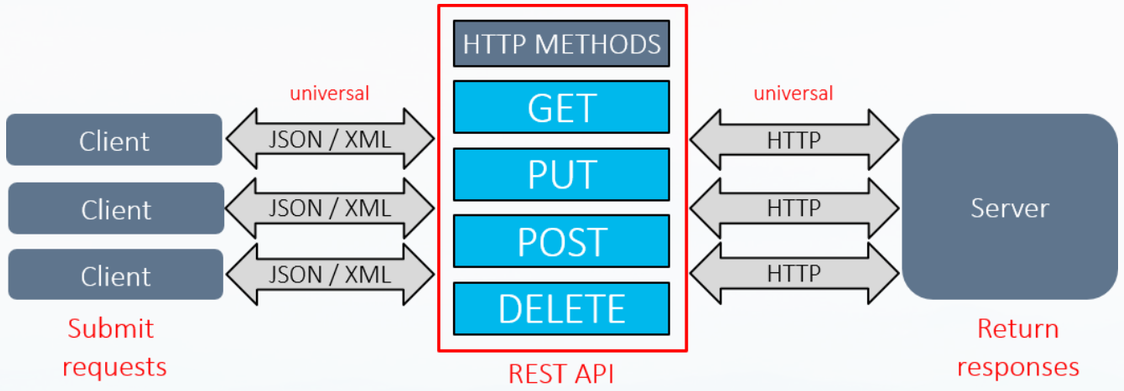
A free, open-source Python library and command-line tool for seamless access to EUMETSAT data services, including the Data Store and Data Tailor.

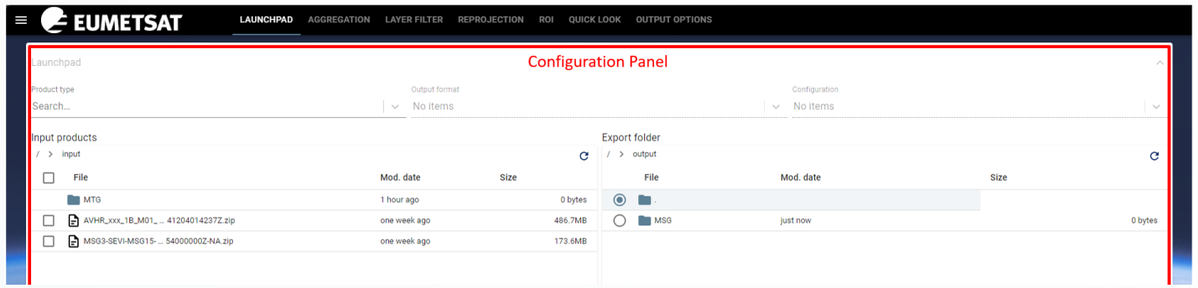
It supports searching, downloading, and customizing satellite products across multiple missions.

## EUMETLab on GitLab

Explore and download ready-to-run Jupyter notebooks and Python scripts that demonstrate practical applications for EUMETSAT services—such as Data Store, Data Tailor, and EUMETView. Perfect for hands-on learning and code examples.

# API Documentation




## Data Store REST / OpenSearch / Download APIs

Full technical documentation with endpoints, parameters, and code samples for searching, browsing, and downloading satellite data.

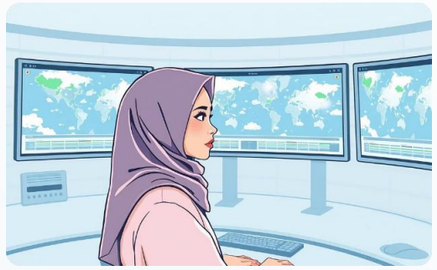
## EUMETView / Data Tailor (Web Service API)

Describes OGC-compliant services (WMS, WCS, WFS) and the Data Tailor interface for requesting tailored satellite imagery output.

# Use Case Scenarios

## Ahmed (Researcher)

Efficiently downloads a 30-year Sea Surface Temperature (SST) archive via the Data Store for long-term climate variability studies.



## Arwa (Analyst)

Utilizes near-real-time (NRT) imagery in EUMETView for immediate visual analysis and integration into daily weather reports.

## Jamal (Farmer)

Receives tailored EUMETCast alerts, enabling timely action to protect crops from adverse weather conditions.

# Recent Upgrades (2024-25)

EUMETSAT consistently enhances its services to provide users with more flexible and powerful data access.

- **Data Tailor v3.2:** Now supports on-the-fly reprojection and Cloud Optimized GeoTIFF (COG) output for enhanced data handling.
- **MTG Products:** Meteosat Third Generation (MTG) products, including FCI, LI, are now fully integrated and available via the Data Store.
- **EUMETView Enhancements:** Introduces a new Lightning Imager (LI) layer and faster refresh rates for more timely visualisations.
- **Expanded JupyterLab:** The EUMETLab environment now features an expanded suite of tools and resources for advanced data analysis and scripting.
- **Data Centre:** Transition from the data centre to the Data Store.

# Guides & Helpful Links

Access detailed documentation and user guides to maximize your use of EUMETSAT data and services:

- **EUMETCast User Guide:** https://user.eumetsat.int/resources/user-guides/eumetcast-user-guide
- **Data Store Guide:** https://user.eumetsat.int/resources/user-guides/data-store-detailed-guide
- **Data Tailor Guide:** https://www.eumetsat.int/data-tailor
- **EUMETView Guide:** https://user.eumetsat.int/resources/user-guides/eumet-view-user-guide
- **MTG Data Access Guide:** https://www.eumetsat.int/mtg-data-access

# Conclusion

EUMETSAT's enhanced satellite fleet and continuously evolving data services equip users with timely, high-quality information crucial for informed decision-making across various sectors, from meteorology to environmental monitoring.

**Start exploring today via the Data Store and EUMETView!**