European Weather Cloud

The European Weather Cloud is the cloud-based collaboration platform for meteorological application development and operations in Europe enabling the digital transformation of the European Meteorological Infrastructure (EMI).
The EMI comprises ECMWF, EUMETSAT, and the National Meteorological Services of their Member States.

" a community cloud "

ECMWF **EUMETSAT**

Key benefits for the user

- Community for sharing and collaboration
- Data access
- Computing and storage
- Tools and services
- Training and support
- Flexible

Working on data in the cloud enables new types of capabilities including running software close to the data, rather than downloading vast amounts of data locally and needing a local infrastructure in support.

The aim is to rationalise the usage of data access infrastructure and related developments, and foster new forms of data-driven collaboration across the EMI and users of meteorological data.

An allocation of the cloud resources is assigned to each ECMWF and EUMETSAT Member and Co-operating States countries.
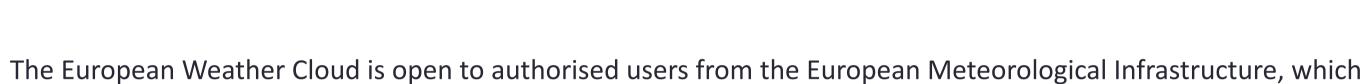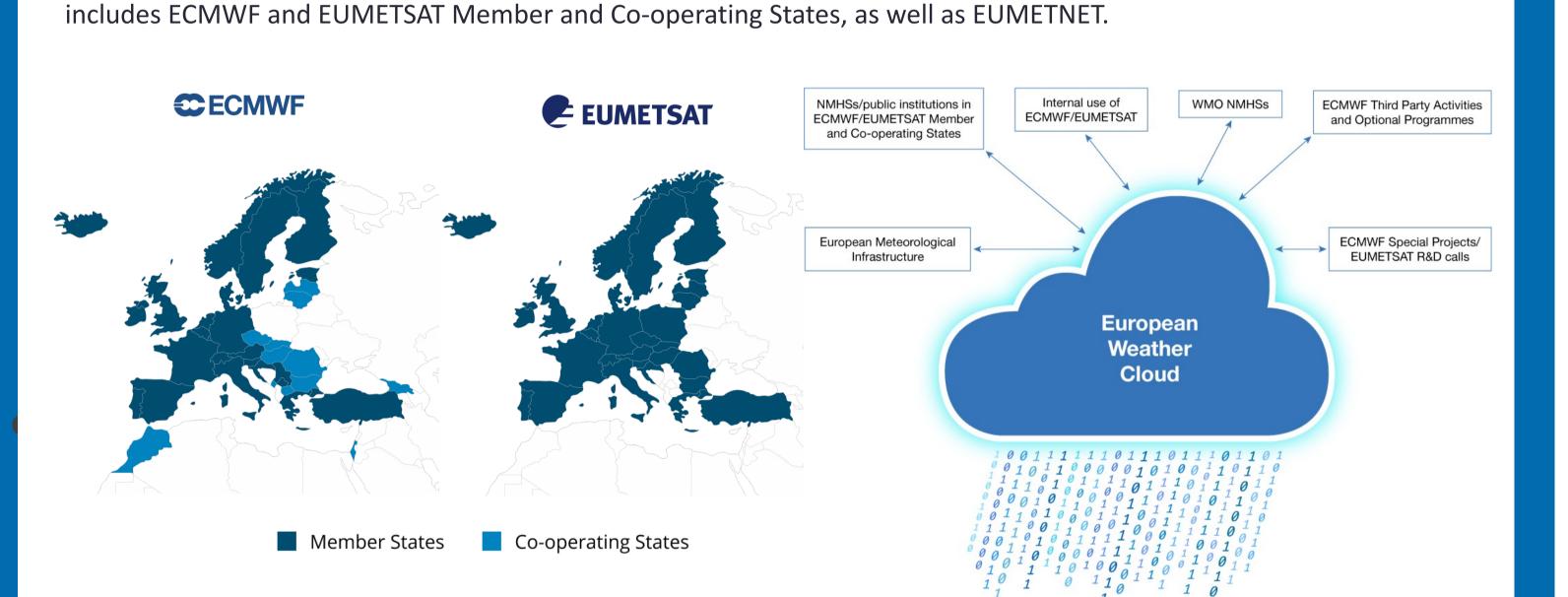

Cloud service structure

The service consists of **cloud computing resources** provided by ECMWF and EUMETSAT and controlled by a cloud management platform. Users are given an account (tenancy) and can deploy and manage their virtual resources and application environments to both cloud infrastructures (EUMETSAT and ECMWF).

Virtual Environments	Resources Management	Support & Collaboration
Isolated cloud tenancy	Blueprints and Instance types	Support Portal
Virtual Machines	Automation tools	Knowledge Base Documentation
Block and Object Storage	Monitoring and Reporting	Discussion Platform
Virtual Networking	Metering and Accounting Service	

Who can access

The European Weather Cloud is open to authorised users from the European Meteorological Infrastructure, which includes ECMWF and EUMETSAT Member and Co-operating States, as well as EUMETNET.

ECMWF   **EUMETSAT**

NMHSs/public institutions in ECMWF/EUMETSAT Member and Co-operating States
Internal use of ECMWF/EUMETSAT
WMO NMHSs
ECMWF Third Party Activities and Optional Programmes
European Meteorological Infrastructure
ECMWF Special Projects/ EUMETSAT R&D calls

European Weather Cloud

- Member States
- Co-operating States

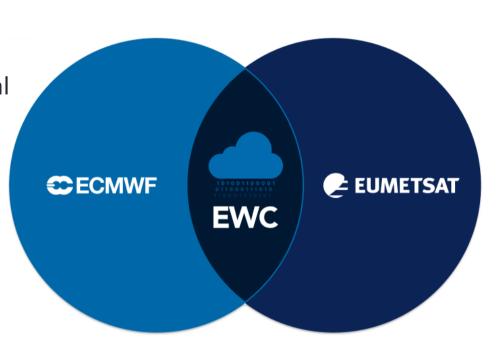## Data

A combined set of retrieval and dissemination services.

Meteorological Archival and Retrieval System (MARS)
ECMWF Petabytes-scale data archive providing APIs for data discovery and retrieval

ECMWF Production Data Store (ECPDS)
Data dissemination service for customised data delivery

Copernicus Climate and Atmospheric Data Stores (CDS/ADS)
Copernicus Climate Change (C3S) and Atmospheric Monitoring (CAMS) services data

EUMETSAT Data Store & Data Tailor
Access to all EUMETSAT meteorological, climate and ocean data through a suite of APIs, and incorporating data tailoring capability
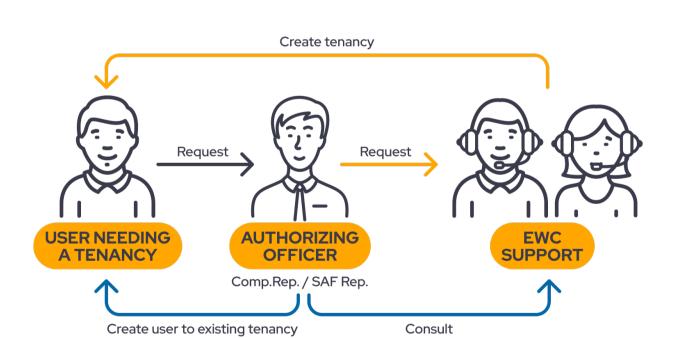
EUMETCast Terrestrial
Near-real time data delivery via terrestrial network

ECMWF **EWC** **EUMETSAT**

How to get access to EWC

Access can be requested by getting in touch with the corresponding Computing Representative in your Member or Co-operating State or reach out via the EWC Support Portal.

Create tenancy
Request — USER NEEDING A TENANCY — AUTHORIZING OFFICER — Request — EWC SUPPORT
Comp.Rep. / SAF Rep.
Create user to existing tenancy
Consult

Create tenancy or user
USER NEEDING A TENANCY — Request — EWC SUPPORT — Consult — AUTHORIZING OFFICER
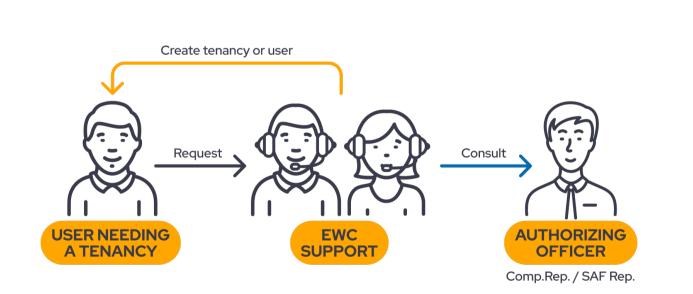Comp.Rep. / SAF Rep.

Tenancy will be created to either ECMWF or EUMETSAT side based on the primary use case
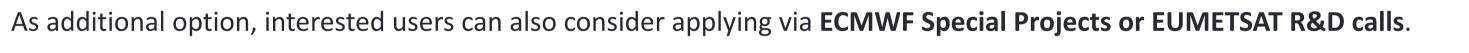- Tenancy can have resources at both sides
- Member States can have tenancies at both sides

Users may be directly in contact with EWC support in which case support will consult authorizing officer or forward the request

Find your Computing Representative

Contact the EWC Support

Research Opportunities

As additional option, interested users can also consider applying via **ECMWF Special Projects or EUMETSAT R&D calls**.

ECMWF Special Projects can also include EWC resources in their application, closes each year on 30 June

- The scope includes experiments or investigations of a scientific or technical nature, undertaken by one or more Member States, likely to be of interest to the general scientific community
- "Late requests" are possible after the deadline

1st Jan Applications open — 30th June Deadline — Late requests

Annual EUMETSAT Research & Development call closes each year on 30 June

- Objectives on improving, development and using products in applications and using the cloud infrastructure
- Fast-track projects available anytime of the year for small projects

1st Jan Applications open — 30th June Deadline
Fast track

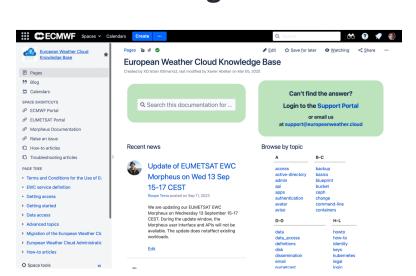Apply via ECMWF Special Projects

Apply via EUMETSAT R&D call

Contacts and references

Website

https://europeanweather.cloud

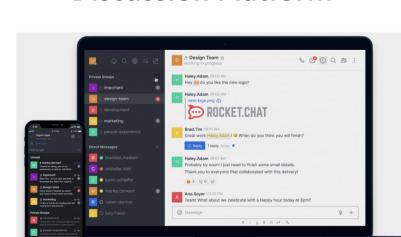**Knowledge Base**

https://confluence.ecmwf.int/display/EWCLOUDKB/

Support Portal

https://support.europeanweather.cloud

Discussion Platform

https://chat.europeanweather.cloud

EUROPEAN WEATHER CLOUD

ECMWF

EUMETSAT