EODC
News and Activities

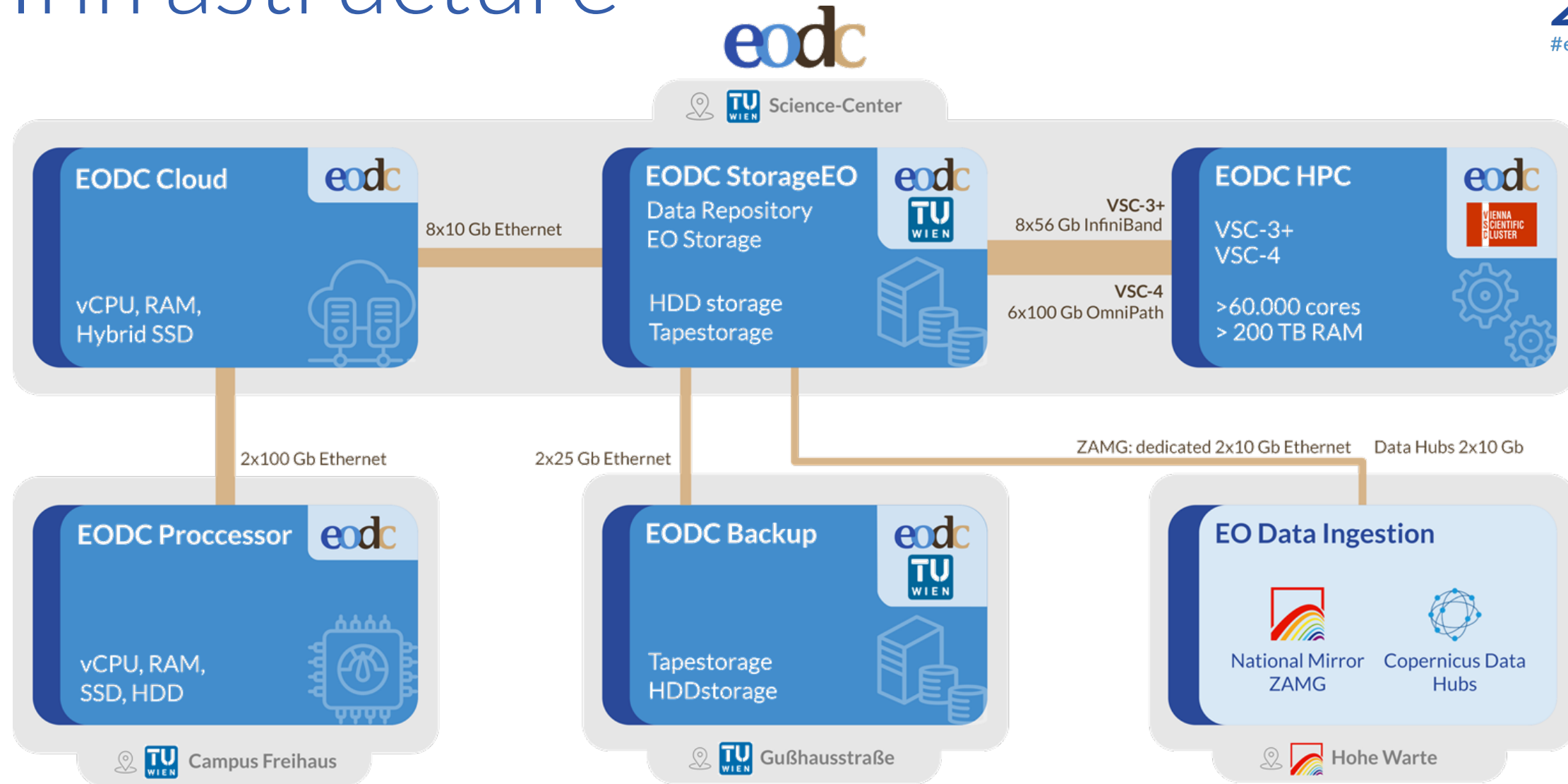Christian Briese & the EODC Team

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EODC Mission

EODC offers **EO-tailored IT infrastructure and EO data and tools** for the scientific, public and private sector within **a collaborative space** where expertise can be shared and a trustful sustainable community can grow.

Our **expertise** is built upon

- Peta-byte scale **EO Data Repository** hosting actual, near-real-time as well as historic Copernicus Sentinel data
- IT services based on the **EODC Cloud and High Performance Computing** infrastructure
- State-of-the art EO data and EO focused **Toolbox environments**
- A **Cooperation network** connecting experts from the scientific, public and private sector.

IT Infrastructure

EO data

- Strong focus on timeliness
- Additional data sets
  - On request
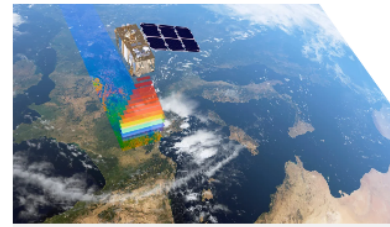 - Historic missions
- ARD offer upcoming

Sentinel-1

Sentinel-1 is an imaging radar mission providing continuous all-weather, day-and-night imagery at C-band. It provides high reliability, improved revisit time, geographical coverage and rapid data dissemination to support operational applications in the priority areas of marine monitoring, land monitoring and emergency services.

Our repository includes:

- Sentinel-1A+B L1C GRD HR IW & EW

Learn more ›

Sentinel-2

Sentinel-2 is a wide-swath, high-resolution, multi-spectral imaging mission, with a constellation of two polar-orbiting satellites with a 5-days revisiting time. The mission supports Copernicus Land Monitoring studies, including the monitoring of vegetation, soil and water cover, as well as observation of inland waterways and coastal areas.

Our repository includes:
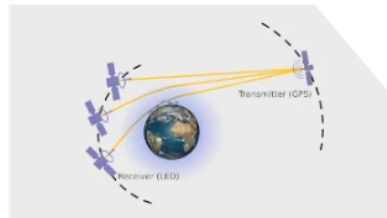
- Sentinel-2A+B L1C

Learn more ›

Sentinel-3

Sentinel-3 is a multi-instrument mission to measure sea-surface topography, sea and land surface temperature, ocean and land colour. It provides ocean measurement capability with consistent quality, high availability, accuracy and reliability, developed to support GMES ocean, land, atmospheric, emergency, security and cryospheric applications.

Our repository includes:

- Sentinel-3 L1C OLCI EFR & ERR

Learn more ›

Wegener Center GNSS Radio Occultation Record

The Wegener Center GNSS radio occultation record, OPSv5.6, provides globally distributed upper-air satellite data of high quality from multiple Radio Occultation satellite missions, usable for climate and other high-accuracy applications.

Learn more ›

Data discovery tools

To help you find the data you are looking for, we provide an OGC CSW interface, as well as our Earth Observation Meta Data Explorer (eomEX), a simple web-application providing a GUI and an API.

Learn more ›

Anything missing?

We are driven by our partners and we listen to our customers. Let us know if you have any special requests for EO data.

Tell us what you need and we will do our best to provide the data you requested.

Request data ▤

Partner network

PRINCIPAL COOPERATION PARTNERS

ASSOCIATE COOPERATION PARTNERS

Federation activities

- WEkEO

- EOSC

- openEO platform

&
Service offering via
ESA Network of
Resources

EODC: Copernicus

- Continuation of existing Services
  - Copernicus Global Land (C-GLOPS)

    https://land.copernicus.eu/global

  - Copernicus Climate Change Service (C3S), Lot 4: Land hydrology and cryosphere

    https://climate.copernicus.eu/

- New: Global Flood Monitoring service

EODC: H2020

- Global Gravity-based Groundwater Product (G3P)

https://www.g3p.eu

- Copernicus – eoSC AnaLytics Engine (C-SCALE)

C-SCALE WILL PUBLISH THE FOLLOWING SERVICES IN THE EOSC PORTAL:

Access
Access to a large C-SCALE EO data archive.

Integration
C-SCALE compute services integrated with the EO Data archive.

Analytic tools
Set of analytics platforms and tools that can be deployed on top of the C-SCALE EO data archive and compute services.

https://c-scale.eu/

EUROPEAN OPEN SCIENCE CLOUD

European Commission

EODC: ESA (selected)

- openEO platform

https://openeo.org/platform/

openEO Platform

A Federated Open Earth Observation Platform

ESA UNCLASSIFIED - For ESA Official Use Only

+ THE EUROPEAN SPACE AGENCY

- Data Hub Relay: ESA Missions

ESA EO Missions Data Hub Relay

Data Hub Relay operated by EODC

Access

https://datahub.eodc.eu/
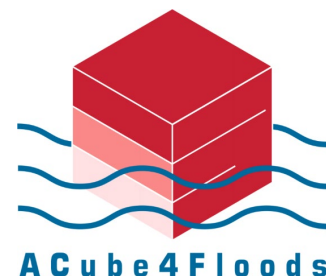
FFG: ASAP, Infrastructure

- ACube4Floods

- DWC-Radar

- LandSTATSeo

- FAIR2earth

Next Steps

- Infrastructure expansion
  - Storage
  - GPU
  - VSC-5
- Data
  - Widening the data offering
- Services
  - Global Flood Monitoring
  - openEO platform service
  - Sentinel-1 data cube service
- Federation with further future EO infrastructure networks

Acknowledgements

- EC
  - Copernicus
    - ECMWF: Copernicus Climate Change Service C3S 312b Lot4
    - JRC: Framework contract 939866 "Automated, Global, Satellite-based Flood Monitoring Product for the Copernicus Emergency Management Service"
    - JRC: Framework contract 941115 "Copernicus Global Land" CGLOPS 1
  - H2020
    - Global Gravity-based Groundwater Product (G3P), Grant Agreement No.: 870353
    - Copernicus – eoSC AnaLytics Engine (C-SCALE), Grant Agreement No.: 101017529
- ESA
  - openEO platform
  - DHR ESA Missions
  - ESA Climate Change Initiative: CCI+ soil moisture
  - DTE Hydrology
  - DryPan
- Austria
  - BMK/FFG: ACube4Floods, AI4SAR, DWC-Radar, FAIR2earth, LandSTATSeo
  - BMBWF: Kooperationsprojekt GEOCLIM Data Infrastructure Austria

Thank you for your attention.

Contact: info@eodc.eu