EODC :: News and Activities

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eodc

EODC Forum 2022

June 15th, 2022
Vienna, Austria

EODC Mission

EODC … where people interested in earth observation meet

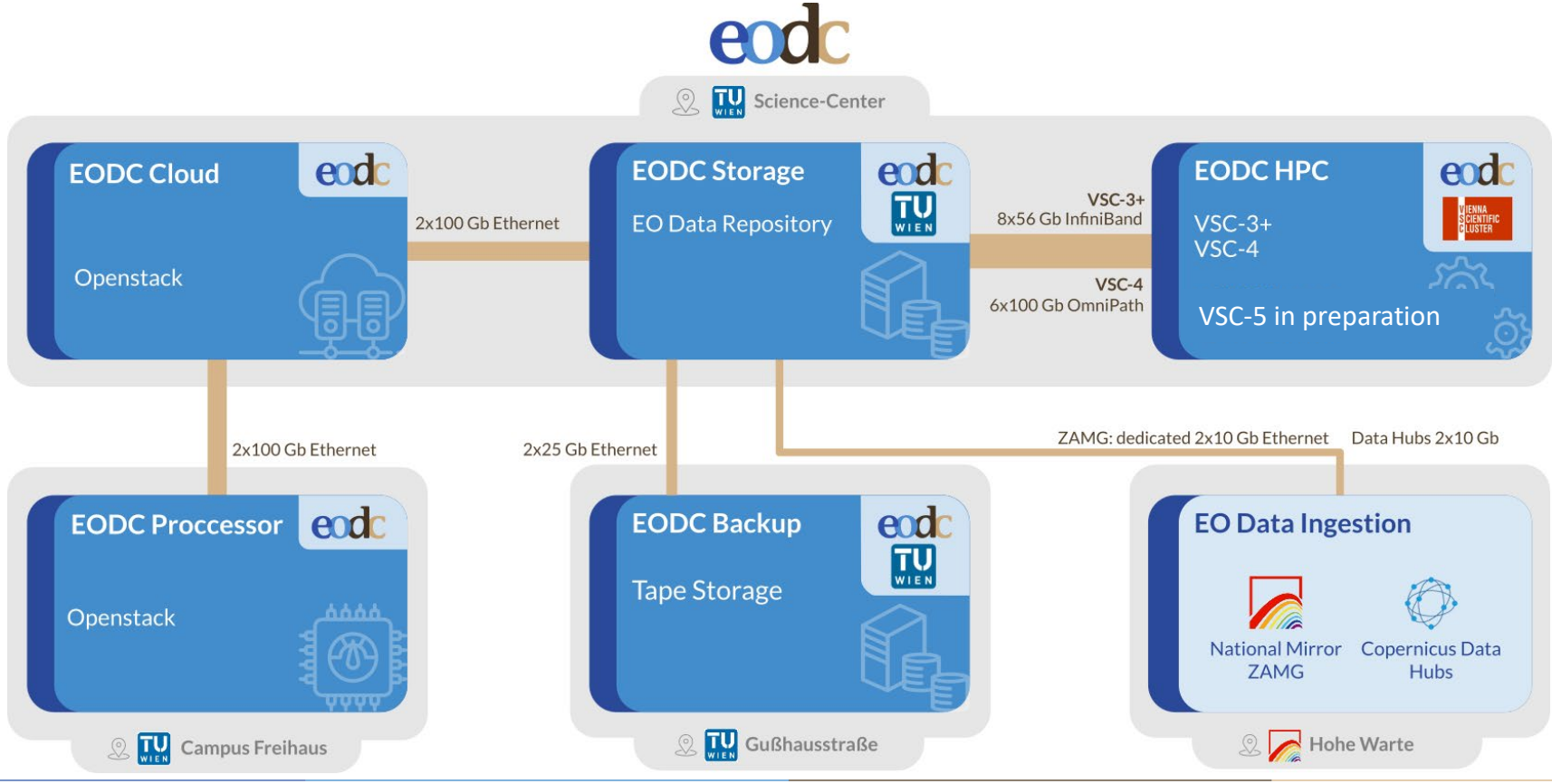
We advance our clients with

- IT services tailored to earth observation (EO) applications
- within a collaborative space where expertise can be shared, and
- a trustful sustainable community can grow to create benefits for society.

EODC as a strong partner operates an IT infrastructure for mission-critical and science-friendly needs by providing a variety of compute options in combination with a purpose-built storage system.

We serve scientific, public and private organisations.

IT infrastructure



EO data

- Strong focus on timeliness
- Additional data sets
  - ERA-5 data
  - Historic missions available
  - On request
- ARD offer
  - Global S1 backscatter data available
  - Further offers in preparation

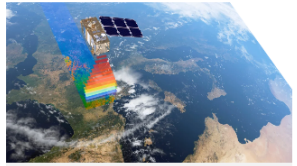
Sentinel-1

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 ›



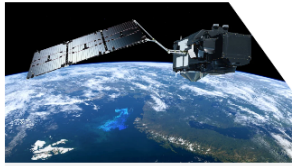
Sentinel-2

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 ›



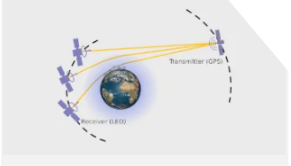
Sentinel-3

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

Federation activities

- openEO platform

https://openeo.cloud/

- EOSC: C-SCALE

C-SCALE

https://c-scale.eu/

EUROPEAN OPEN SCIENCE CLOUD

- WEkEO

WEkEO by COPERNICUS

https://www.wekeo.eu/

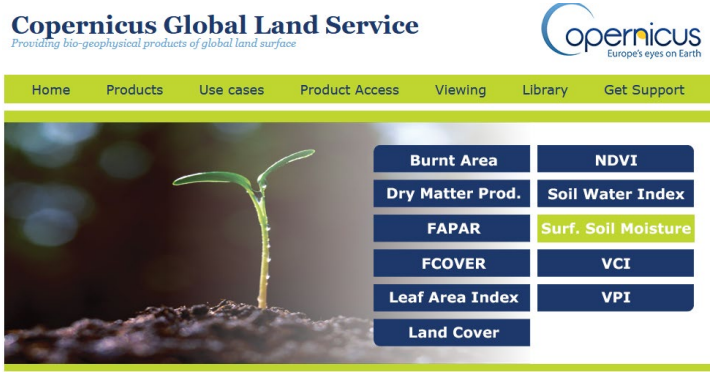
Service offering via ESA Network of Resources

NoR

https://nor-discover.cloudeo.group/

EODC: Copernicus

- Copernicus Global Land (C-GLOPS)



https://land.copernicus.eu/global

- Copernicus Climate Change Service (C3S2), Lot 4: Land hydrology and cryosphere

- Global Flood Monitoring service

https://www.globalfloods.eu/technical-information/glofas-gfm/

EODC: Horizon

- Copernicus – eoSC AnaLytics Engine (C-SCALE)
  (Lead: EODC)
  https://c-scale.eu/

- Global Gravity-based Groundwater Product (G3P)
  (Lead: GFZ)
  https://www.g3p.eu/

- Upcoming:
  An interdisciplinary Digital Twin Engine for science: interTwin
  (Lead: EGI)

C-SCALE

Analytic tools

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

Access

Access to a large C-SCALE EO data archive.

Integration

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

G3P

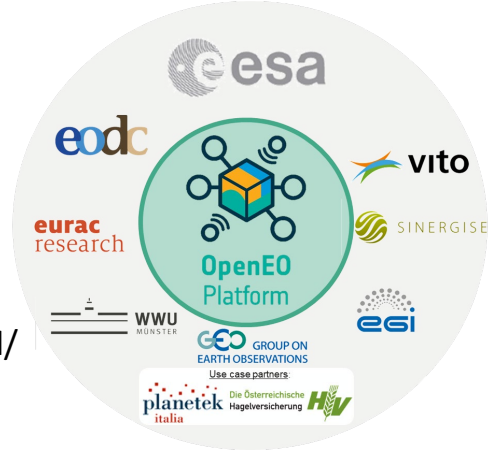
EUROPEAN OPEN SCIENCE CLOUD

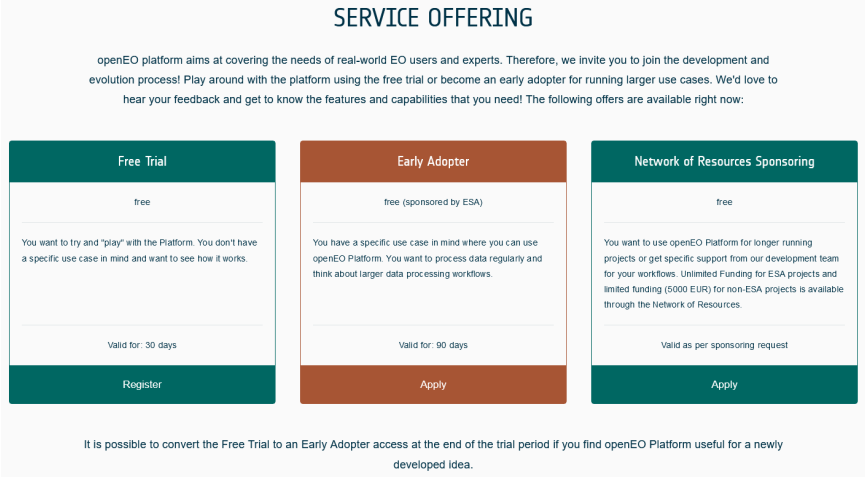
European Commission

EODC: ESA

- openEO Platform

https://openeo.cloud/

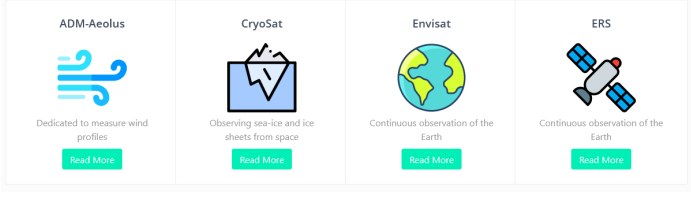




- CCI+ SM

https://esa-soilmoisture-cci.org/

- Upcoming: Austrian Data Hub Rely: EODC (Lead) with ZAMG



https://datahub.eodc.eu/

EODC: National Funding

- FAIR2earth (Lead: EODC)

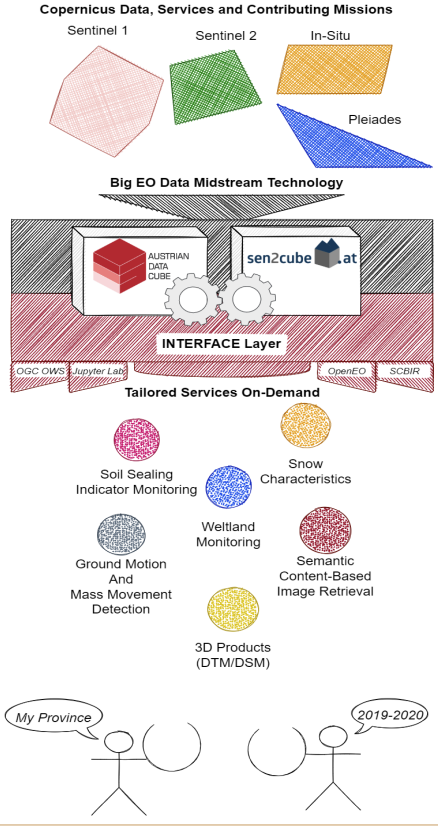
  Infrastructure funding

- AI4SAR (Lead: EODC)

- Upcoming: Interface (Lead: EODC):
  INformaTion accEss seRvice For Austrian CopErnicus and contributing missions data

- Upcoming: ROSSIHNI (Lead: TU Wien)

  Remote Sensing and Social Interest for Humanitarian Insights



Acknowledgements

- EC Copernicus
  - ECMWF: Copernicus Climate Change Service C3S2 312a 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
- EC Horizon
  - Global Gravity-based Groundwater Product (G3P), Grant Agreement No.: 870353
  - Copernicus – eoSC AnaLytics Engine (C-SCALE), Grant Agreement No.: 101017529
  - interTwin , Grant Agreement No.: 101058386
- ESA
  - openEO platform
  - ESA Climate Change Initiative: CCI+ soil moisture
  - Data Hub Relay: ESA Missions
- Austria
  - BMK/FFG: AI4SAR, FAIR2earth, Interface, ROSSIHNI
  - BMB WF : Kooperationsprojekt GEOCLIM Data Infrastructure Austria