



EODC :: News and Activities

Christian Briese & the EODC Team
christian.briese@eodc.eu

eodc

**EODC Forum
2022**

June 15th, 2022
Vienna, Austria

EODC Mission

EODC ... where people interested in earth observation meet

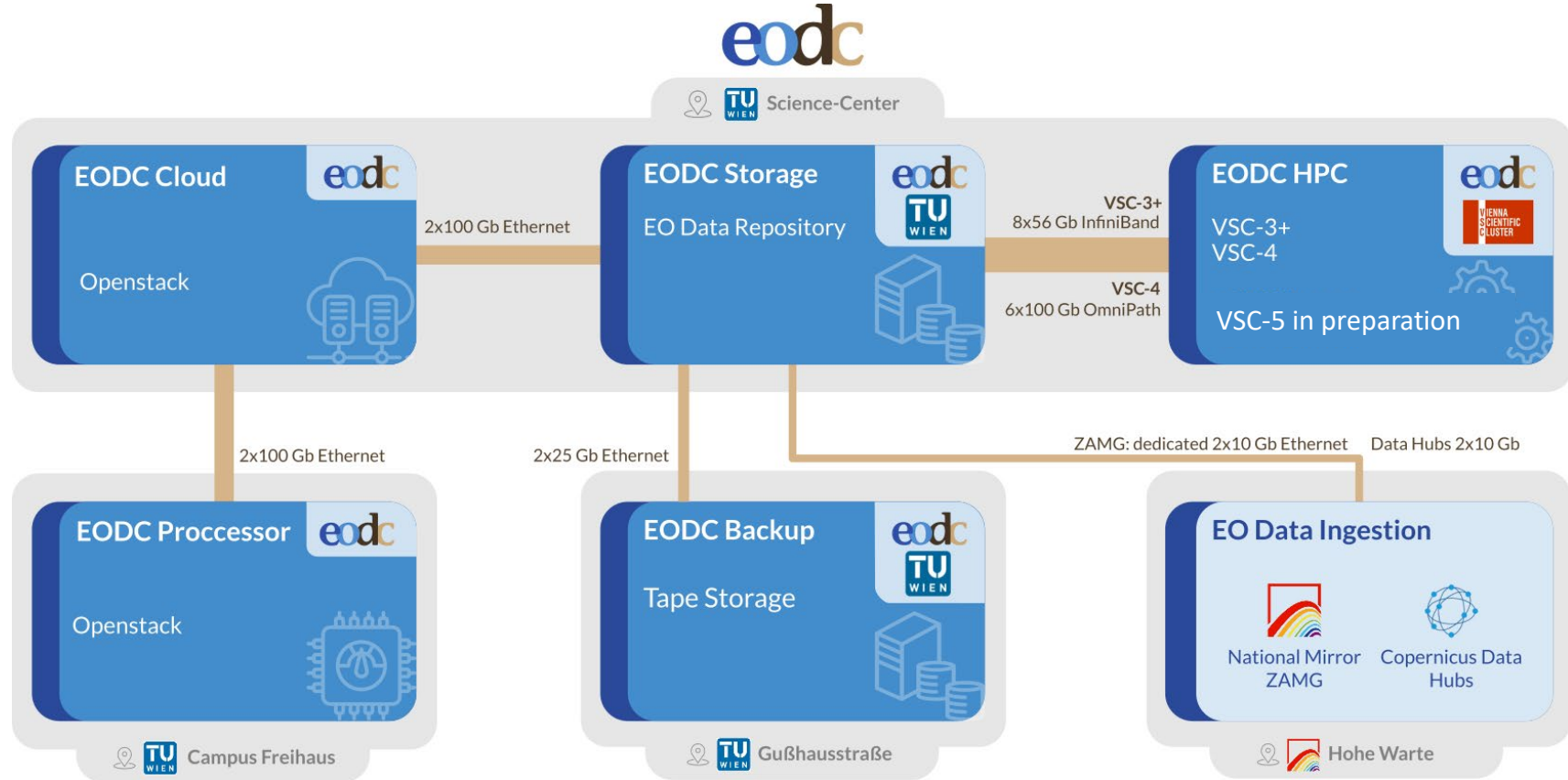
We advance our clients with

- **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



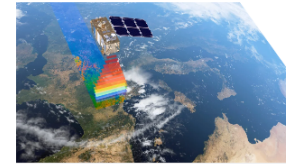
Sentinel-1

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 >](#)



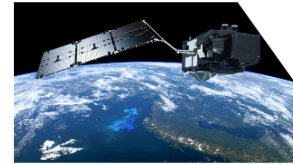
Sentinel-2

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 >](#)



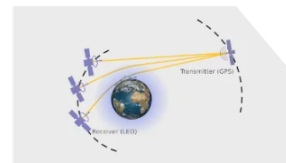
Sentinel-3

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/>

- WEKEO



<https://www.wekeo.eu/>



**EUROPEAN OPEN
SCIENCE CLOUD**

Service offering via ESA Network of Resources



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

EODC: Copernicus



- Copernicus Global Land (C-GLOPS)

Copernicus Global Land Service
Providing bio-geophysical products of global land surface

Copernicus
Europe's eyes on Earth

Home Products Use cases Product Access Viewing Library Get Support

Burnt Area	NDVI
Dry Matter Prod.	Soil Water Index
FAPAR	Surf. Soil Moisture
FCOVER	VCI
Leaf Area Index	VPI
Land Cover	

<https://land.copernicus.eu/global>

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



C3S2 Land Hydrology & Cryosphere

<https://climate.copernicus.eu/>

Climate Change

- 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)



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



Access to a large C-SCALE EO data archive.



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



EODC: ESA

- openEO Platform

<https://openeo.cloud/>



- CCI+ SM



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

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

<p>ADM-Aeolus</p> <p>Dedicated to measure wind profiles</p> Read More	<p>CryoSat</p> <p>Observing sea-ice and ice sheets from space</p> Read More	<p>Envisat</p> <p>Continuous observation of the Earth</p> Read More	<p>ERS</p> <p>Continuous observation of the Earth</p> Read More
---	---	---	---

<https://datahub.eodc.eu/>

SERVICE OFFERING

openEO platform aims at covering the needs of real-world EO users and experts. Therefore, we invite you to join the development and evolution process! Play around with the platform using the free trial or become an early adopter for running larger use cases. We'd love to hear your feedback and get to know the features and capabilities that you need! The following offers are available right now:

Free Trial	Early Adopter	Network of Resources Sponsoring
free	free (sponsored by ESA)	free
You want to try and "play" with the Platform. You don't have a specific use case in mind and want to see how it works.	You have a specific use case in mind where you can use openEO Platform. You want to process data regularly and think about larger data processing workflows.	You want to use openEO Platform for longer running projects or get specific support from our development team for your workflows. Unlimited Funding for ESA projects and limited funding (5000 EUR) for non-ESA projects is available through the Network of Resources.
Valid for: 30 days	Valid for: 90 days	Valid as per sponsoring request
Register	Apply	Apply

It is possible to convert the Free Trial to an Early Adopter access at the end of the trial period if you find openEO Platform useful for a newly developed idea.



EODC: National Funding

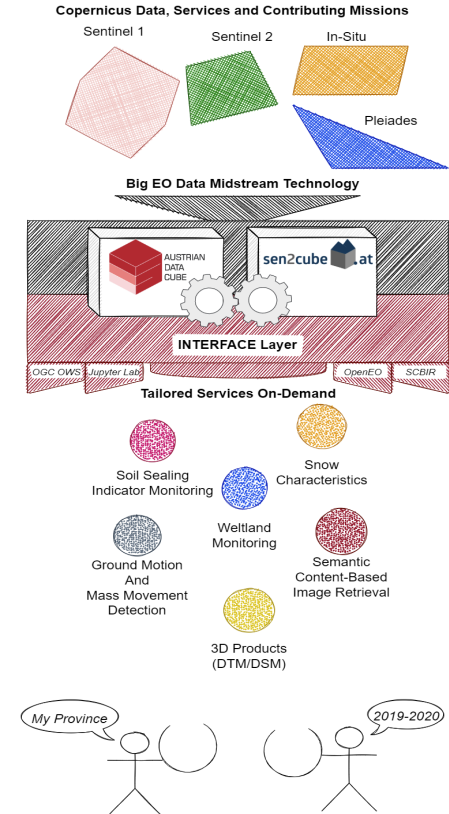
- FAIR2earth (Lead: EODC)
Infrastructure funding



- 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

eodc