



# eodc forum 2024

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Translating data into knowledge



# eodc forum 2024 INTERFACE Project

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Tailored Copernicus Services for public entities

Benjamin Schumacher & the INTERFACE team



# I N T E R F A C E



PARIS  
LODRON  
UNIVERSITY  
SALZBURG



spatial services

WHERE GEOINFORMATION MEETS TECHNOLOGY



GeoSphere  
Austria



TECHNISCHE  
UNIVERSITÄT  
WIEN



JOANNEUM  
RESEARCH



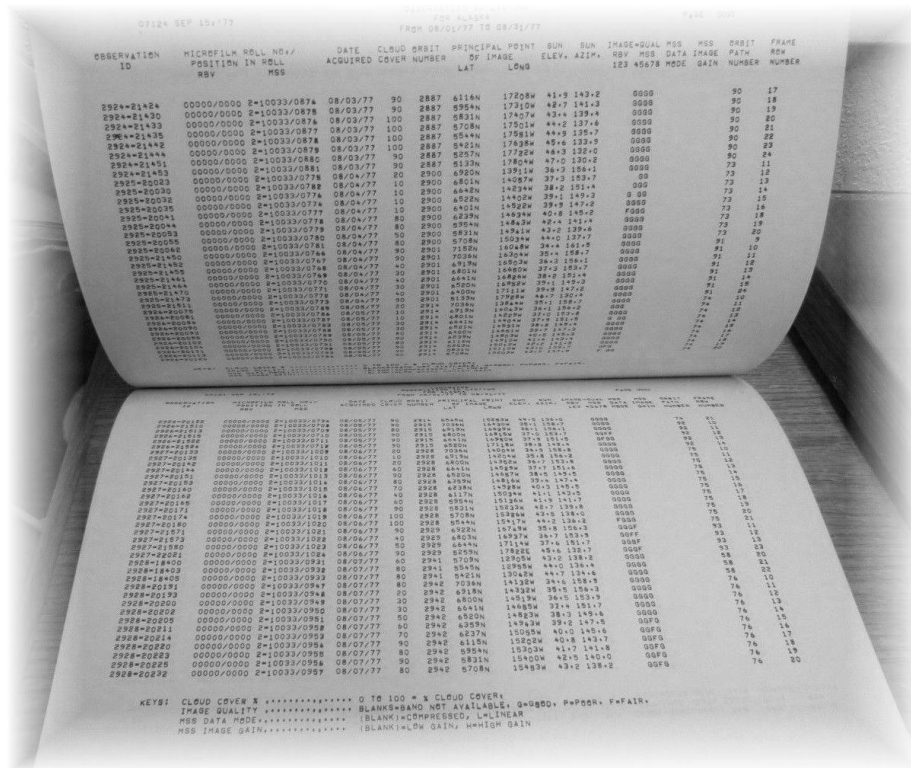


## Associated Partners

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- Bundesministerium für Landwirtschaft, Regionen und Tourismus Österreich
- Land Burgenland Österreich
- Land Kärnten Österreich
- Land Steiermark Österreich
- Land Tirol Österreich
- Umweltbundesamt Österreich

# Access to Earth Observation Data?



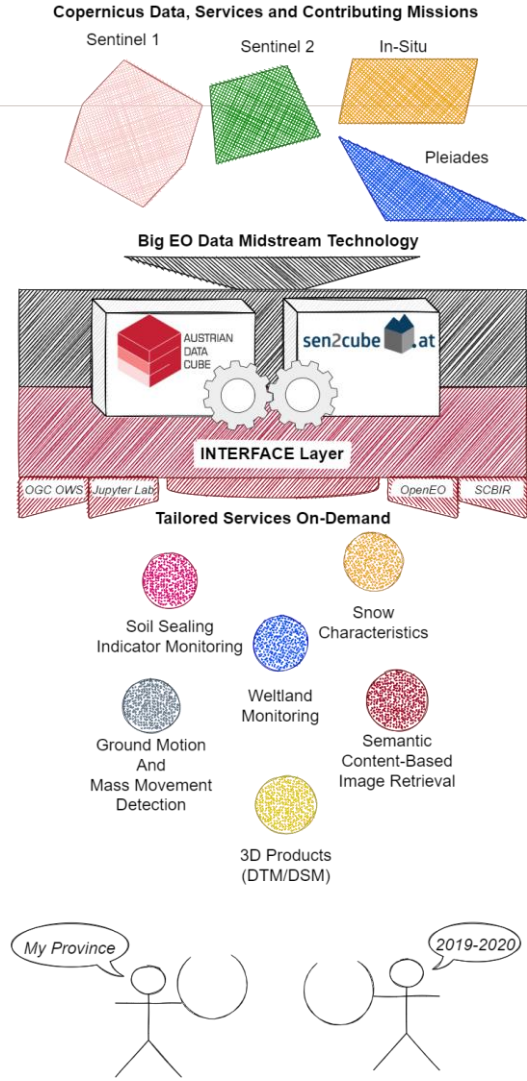
**25.000 Sentinel-2 images  
40 TB data**

## Ordering Landsat images 1977

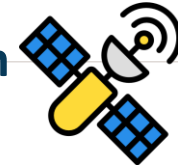


## INTERFACE

- Create and publish Earth observation data and services for Austria
- Several tailored services are developed



**Earth Observation Data**



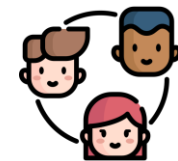
**Interface layer with different access options**



**Tailored services**



**Users**



# Tailored Services




Soil Sealing  
Indicator Monitoring



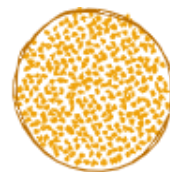
Ground Motion  
And  
Mass Movement  
Detection




We tland  
Monitoring



3D Products  
(DTM/DSM)



Snow  
Characteristics



Semantic  
Content-Based  
Image Retrieval



## EODC Data Catalogue

Datenquelle Teilen Sprache: Deutsch

Erkunden Suche

### Beschreibung

A STAC-compliant API to query for metadata within the EODC Data Catalogue.

### Zusätzliche Ressourcen

- OpenAPI service description
- OpenAPI service documentation

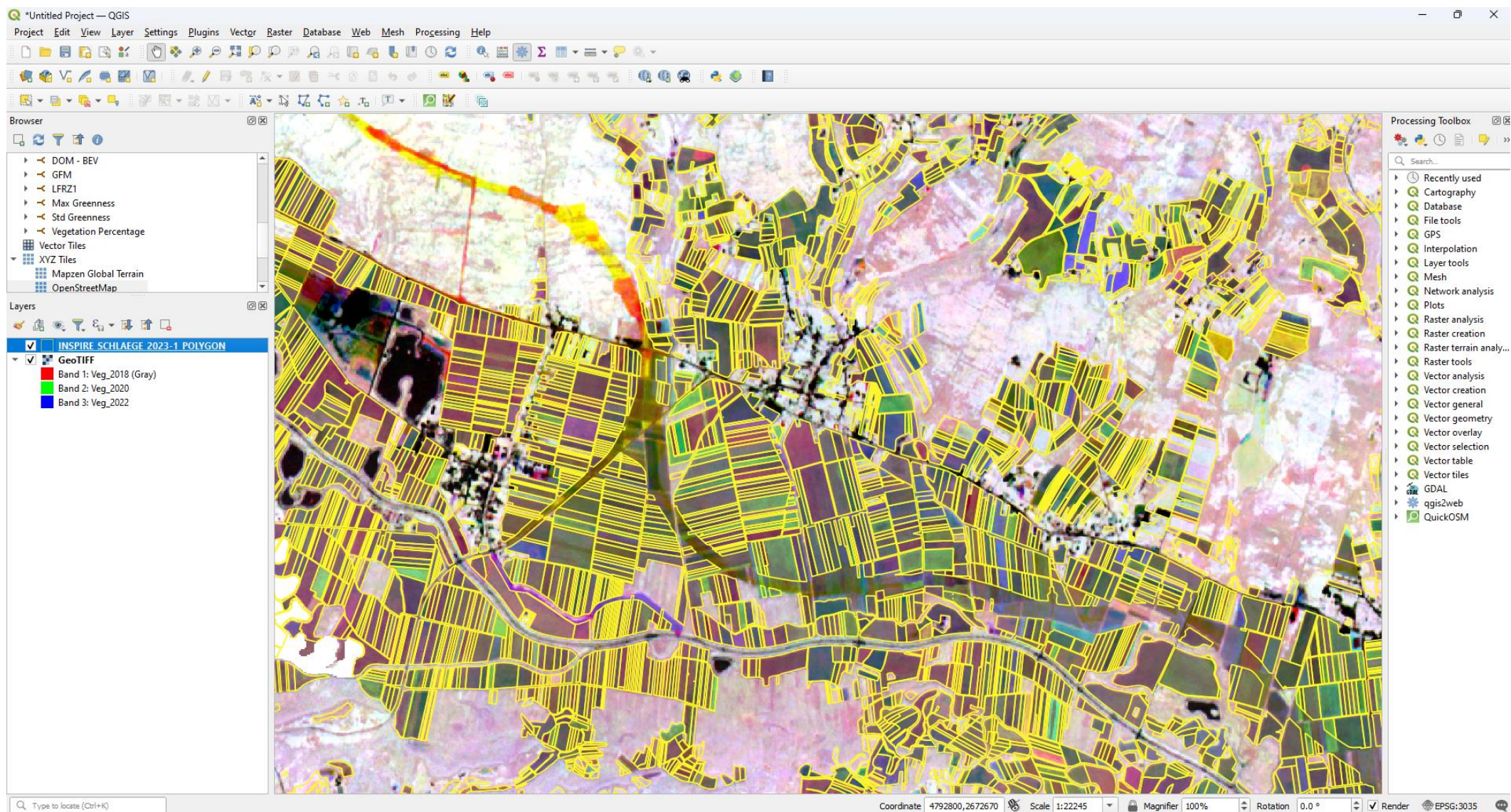
Kataloge 28 Kacheln Liste Aufsteigend Absteigend

Kataloge anhand des Titels filtern

<p><b>A4SAR Despeckled Sentinel-1 Sigma0 (20m)</b></p> <p>Sentinel-1 Despeckled Sigma Nought (SIG0) are produced using A4SAR workflow developed within A4SAR...</p> <p>1.10.2014, 00:00:00 UTC bis jetzt</p>	<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Osttirol</b></p> <p>Orthofotos des Flugblockes Osttirol</p> <p>2.9.2021, 00:00:00 UTC - 24.9.2021, 00:00:00 UTC</p>	<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Zell am See</b></p> <p>Orthofotos des Flugblockes Zell am See</p> <p>12.9.2022, 00:00:00 UTC</p>	<p><b>Monthly Composite of Fraction of Vegetation Cover</b></p> <p>Monthly composite of fraction of vegetation cover. Produced by BOKU, warehoused at EODC.</p> <p>1.1.2017, 00:00:00 UTC - 31.12.2022, 00:00:00 UTC</p>	<p><b>Sentinel-1 SLC</b></p> <p>Level-1 Single Look Complex (SLC) products are images in the slant range by azimuth imaging plane, in...</p> <p>10.10.2014, 00:00:00 UTC bis jetzt</p>	<p><b>SENTINEL1 Harmonic Parameters</b></p> <p>The Harmonic model describes the typical seasonal Sentinel-1 backscatter variation on a 20 m pixel...</p> <p>1.1.2019, 00:00:00 UTC - 31.12.2021, 00:00:00 UTC</p>
<p><b>Austria Ground Motion</b></p> <p>Austria Ground Motion Data</p> <p>1.1.2016, 00:00:00 UTC - 1.1.2022, 00:00:00 UTC</p>	<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Tamsweg</b></p> <p>Orthofotos des Flugblockes Tamsweg</p> <p>2.9.2021, 00:00:00 UTC - 23.9.2021, 00:00:00 UTC</p>	<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Zeltweg</b></p> <p>Orthofotos des Flugblockes Zeltweg</p> <p>23.9.2022, 00:00:00 UTC - 7.10.2022, 00:00:00 UTC</p>	<p><b>Multi-Layer Copernicus Sentinel-2 GRI in L1C</b></p> <p>Multi-Layer Copernicus Sentinel-2 GRI in Level-1C</p> <p>6.7.2015, 10:57:26 UTC - 6.9.2018, 08:25:59 UTC</p>	<p><b>Sentinel-2 L1C Coverage Maps</b></p> <p>Global archive of Sentinel-2 Coverage-Maps processed at EODC.</p> <p>4.7.2015, 00:00:00 UTC bis jetzt</p>	<p><b>SENTINEL1 Mean PLIA</b></p> <p>The projected local incidence angle (PLIA) is the angle between the surface normal and the looking...</p> <p>1.1.2020, 00:00:00 UTC - 31.12.2020, 00:00:00 UTC</p>
<p><b>Austrian High Resolution DEM</b></p> <p>Austrian High Resolution DEM is generated from Airborne Laser Scanning data with a grid of 10m x...</p> <p>1.1.2018, 00:00:00 UTC bis jetzt</p>	<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Villach</b></p> <p>Orthofotos des Flugblockes Villach</p> <p>18.6.2022, 00:00:00 UTC - 13.9.2022, 00:00:00 UTC</p>	<p><b>Drought Vulnerability</b></p> <p>The map shows the average frequency of long-lasting droughts in Austria at a spatial resolution of...</p> <p>1.1.2003, 00:00:00 UTC - 31.12.2018, 00:00:00 UTC</p>	<p><b>Sentinel-1 Alps WetSnow</b></p> <p>Sentinel-1 Wet Snow Data for Alps Region</p> <p>1.3.2021, 00:00:00 UTC - 1.8.2021, 00:00:00 UTC</p>	<p><b>Sentinel-2 MSI Products: Level-1C data</b></p> <p>SENTINEL-2 is a wide-swath, high-resolution, multi-spectral imaging mission, supporting Copernicus Lan...</p> <p>4.7.2015, 00:00:00 UTC bis jetzt</p>	<p><b>SENTINEL1 Sigma Nought (SIG0) Backscatter in 20 meter resolution</b></p> <p>Sentinel-1 Sigma Nought (SIG0) Products are radiometric calibrated and georeferenced backscatter data...</p> <p>1.10.2014, 00:00:00 UTC bis jetzt</p>
<p><b>Copernicus Digital Elevation Model (DEM)</b></p> <p>The Copernicus DEM is a Digital Surface Model (DSM) that represents the surface of the Earth including...</p> <p>1.1.2011, 00:00:00 UTC - 1.1.2016, 00:00:00 UTC</p>	<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Wolfsberg</b></p> <p>Orthofotos des Flugblockes Wolfsberg</p> <p>13.7.2022, 00:00:00 UTC - 21.7.2022, 00:00:00 UTC</p>	<p><b>Global Flood Monitoring</b></p> <p>The Global Flood Monitoring (GFM) product is a new component of the EU's Copernicus Emergency...</p> <p>1.1.2015, 00:00:00 UTC bis jetzt</p>	<p><b>Sentinel-1 Alps WetSnow</b></p> <p>Sentinel-1 Wet Snow Data for Alps Region</p> <p>1.3.2021, 00:00:00 UTC - 1.8.2021, 00:00:00 UTC</p>	<p><b>Sentinel-2 MSI Products: Level-2A data</b></p> <p>SENTINEL-2 is a wide-swath, high-resolution, multi-spectral imaging mission, supporting Copernicus Lan...</p> <p>4.7.2015, 00:00:00 UTC bis jetzt</p>	<p><b>Vegetation Change Austria</b></p> <p>This layer indicates vegetation change (persistence, increase, decrease, absence etc) within three...</p> <p>1.1.2018, 00:00:00 UTC - 31.12.2022, 00:00:00 UTC</p>
<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Klagenfurt</b></p> <p>Orthofotos des Flugblockes Klagenfurt</p> <p>19.5.2022, 00:00:00 UTC - 20.6.2022, 00:00:00 UTC</p>	<p><b>Intra-field Crop Growth Potential</b></p> <p>The map shows the medium-term (4 years: 2017-2020) intra-field crop growth potential and its spatial...</p> <p>1.1.2017, 00:00:00 UTC - 31.12.2020, 00:00:00 UTC</p>	<p><b>Sentinel-1 SAR L1 GRD</b></p> <p>Sentinel-1 Level-1 Ground Range Detected (GRD) products consist of focused SAR data that ha...</p> <p>3.10.2014, 00:00:00 UTC bis jetzt</p>	<p><b>Sentinel-1 GRD Coverage Maps</b></p> <p>Global archive of Sentinel-1 Coverage-Maps processed at EODC.</p> <p>3.10.2014, 00:00:00 UTC bis jetzt</p>	<p><b>Sentinel-2 MSI Products: Level-2A data</b></p> <p>SENTINEL-2 is a wide-swath, high-resolution, multi-spectral imaging mission, supporting Copernicus Lan...</p> <p>4.7.2015, 00:00:00 UTC bis jetzt</p>	<p><b>Vegetation Change Austria</b></p> <p>This layer indicates vegetation change (persistence, increase, decrease, absence etc) within three...</p> <p>1.1.2018, 00:00:00 UTC - 31.12.2022, 00:00:00 UTC</p>
<p><b>Digital Orthophotos (DOP) Austria - Land Kärnten: Orthofotos Flugblock Klagenfurt</b></p> <p>Orthofotos des Flugblockes Klagenfurt</p> <p>19.5.2022, 00:00:00 UTC - 20.6.2022, 00:00:00 UTC</p>	<p><b>Intra-field Crop Growth Potential</b></p> <p>The map shows the medium-term (4 years: 2017-2020) intra-field crop growth potential and its spatial...</p> <p>1.1.2017, 00:00:00 UTC - 31.12.2020, 00:00:00 UTC</p>	<p><b>Sentinel-1 SAR L1 GRD</b></p> <p>Sentinel-1 Level-1 Ground Range Detected (GRD) products consist of focused SAR data that ha...</p> <p>3.10.2014, 00:00:00 UTC bis jetzt</p>	<p><b>Sentinel-1 GRD Coverage Maps</b></p> <p>Global archive of Sentinel-1 Coverage-Maps processed at EODC.</p> <p>3.10.2014, 00:00:00 UTC bis jetzt</p>	<p><b>Sentinel-3 Products: SRAL Level-2 data</b></p> <p>Sentinel-3 is an European Earth Observation satellite mission developed to support Copernicus...</p> <p>23.2.2016, 00:00:00 UTC bis jetzt</p>	<p><b>Vegetation Change Austria</b></p> <p>This layer indicates vegetation change (persistence, increase, decrease, absence etc) within three...</p> <p>1.1.2018, 00:00:00 UTC - 31.12.2022, 00:00:00 UTC</p>



# Service usage in GIS workflows



## First feedback from the community

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- Services are online, consumption and use requires more effort
- Organizational, technical and structural hurdles within public entities
- Requirement for political action and initiatives
  - Creating demand and political frameworks for using Copernicus Data
  - Action for austrian-wide standards
  - Shared efforts between states: products and services consumption
  - Shared user space for public entities



## Documentation + Usage

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Website:

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

EODC Example Repository:

<https://github.com/eodcgmbh/eodc-examples>



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into knowledge

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