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esa EOPF SENTINEL ZARR SAMPLES



November EOPF Zarr Updates

Service update:

🚀 **xarray-eopf v0.2.3 is here!**

We are pleased to announce the release of xarray-eopf v0.2.3! 🎉
Update via conda/mamba or pip to take advantage of the latest capabilities.

✨ **What's new?**

🛰️ **Sentinel-3 SLSTR Level-1 RBT analysis mode**
Unify RBT data from grids a, b, f, and i into a single regular grid, supporting both nadir and oblique viewing geometries for more streamlined analysis workflows.

🌄 **Built-in terrain correction for SLSTR**
SLSTR datasets now automatically utilize the internal elevation band provided

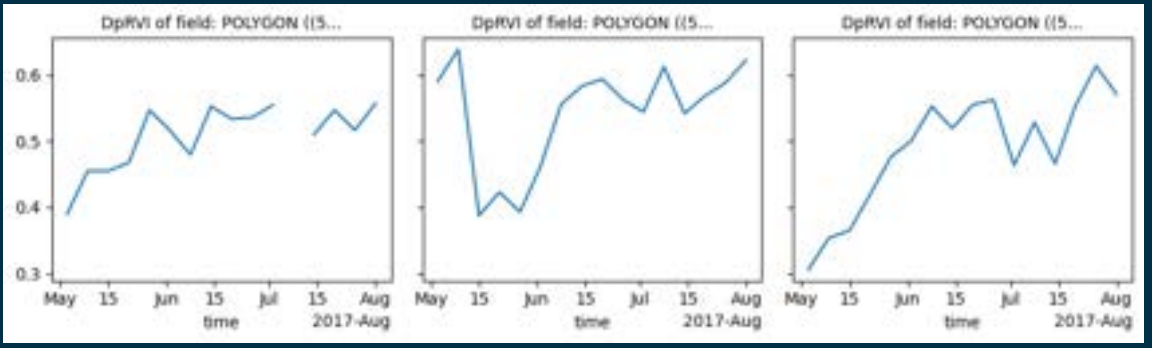
in the products, delivering improved spatial fidelity and topographic consistency.

🔗 **Useful links**

GitHub: https://github.com/EOPF-Sample-Service/xarray-eopf
PyPI: https://pypi.org/project/xarray-eopf/
Anaconda: https://anaconda.org/conda-forge/xarray-eopf
Documentation: https://eopf-sample-service.github.io/xarray-eopf/guide/#sentinel-3
Example notebook: https://github.com/EOPF-Sample-Service/xarray-eopf/blob/main/examples/open-sen3.ipynb

🚀 **Latest notebooks:**

- Radar Vegetation Index: https://eopf-sample-service.github.io/eopf-sample-notebooks/radar-vegetation-index/
  Featuring several nice processing steps useful for other Sentinel-1 workflows like:
  - Efficient spatial slicing in radar coordinates
  - Geocoding of a time series to correctly evaluate points along time
  - Fixed sigma0 calibration
  - Using XVEC to aggregate data over distributed polygons/fields



- Sentinel-2 Crop Type Classification https://eopf-sample-service.github.io/eopf-sample-notebooks/sentinel-2-crop-type-classification-rul…
  Featuring an end-to-end workflow to perform rule-based crop-type classification such as maize, barley, sugar beet, potato, and soy.

Each notebook is available online for you to explore and experiment with, a great way to deepen your understanding of EOPF's cloud-native Earth Observation workflows.

🚀 **Webinars**

We've now reached the 9th session in our webinar series on adopting the new EOPF Zarr data format. Each edition builds on previous insights, providing practical guidance and expert perspectives tailored to diverse user needs. Explore the resources from the latest webinar.

Yuvraj Adagale from EURAC Research Publishes New GDAL Plugin Overview

Yuvraj Adagale from **EURAC Research,** a consortium member, has published a Medium article introducing a new high-performance GDAL plugin designed for **Copernicus EOPF Zarr** datasets.

The piece highlights how a wrapper around GDAL's native Zarr driver enables smarter CRS detection, automatic subdataset discovery, native geolocation support for swath data, efficient metadata caching, and robust path parsing for both local and cloud-hosted files.

Read the article

Webinar #10: EOPF Zarr Update: Sentinel Zarr Samples, Toolkit & Explorer

Discover the EOPF Sentinel Zarr Samples, Toolkit, and Explorer Services

Join us for a 45-minute webinar presenting the latest updates from the Sentinel Zarr Samples Service, the EOPF Toolkit, and the EOPF Explorer.

To help users better understand these services, we are inviting representatives from the **Toolkit and Explorer teams** to provide additional context and demonstrate recent developments.

During this session, participants will:

- Hear introductory presentations from the Sentinel Zarr Samples, Toolkit, and Explorer teams
- Learn how the three services support different stages of working with EOPF Zarr data
- Gain a clearer overview of the tools and resources available across the programme
- Take part in a live Q&A with representatives from all three teams

🎤 **Speakers TBA**
📍 **Online**
📅 **Date:** 11 December 2025, **14:00 CET**

Register

Join the EOPF Zarr Community Notebook Competition Co-Working Sessions



Hosted by thriveGEO, in collaboration with Development Seed and Sparkgeo, the **EOPF Zarr Community Notebook Competition** invites Earth observation practitioners, developers, researchers, and students to showcase what's possible with cloud-native, analysis-ready Sentinel data. Participants create and submit a Jupyter Notebook that uses the EOPF Zarr Sample Service and its plugins, demonstrating innovative workflows, analysis methods, and real-world applications.

To help participants refine their ideas and move confidently toward submission, thriveGEO is hosting two open co-working sessions, supported by experts from Development Seed and Sparkgeo.

These sessions are designed for hands-on support: bring your notebook, your questions, or even just your concept, and get guidance in real time.

Co-Working Session #1
Tuesday, 25 November 2025
10:00–11:00 UTC+1 (Google Meet)
Register here

Co-Working Session #2
Thursday, 4 December 2025
16:00–17:00 UTC+1 (Google Meet)
Register here

Why join?

- Get direct support from cloud-native EO experts
- Ask technical questions and troubleshoot your notebook
- Learn best practices for Zarr-based workflows

- Strengthen your competition submission
- Connect with other developers and explorers in the community

Whether you're polishing your final notebook or just starting to explore the tools, these sessions are open to all!

Community Support Platform

To support users of the new data formats, we have launched a dedicated **Community Support Forum,** a space to ask **questions**, share **knowledge**, and **collaborate**. Whether you are looking for help, exchanging tips, or uploading community notebooks, the platform is here to grow a strong network of users.

Community Support Platform

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