OSCARS
Open Science Clusters' Action for Research & Society

Funded Project

FAIR-EO: FAIR, Open and AI-Ready Earth Observation Resources

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Implemented by

Bias Variance Labs

Jožef Stefan Institute

Funded by the European Union

CHALLENGE ADDRESSED

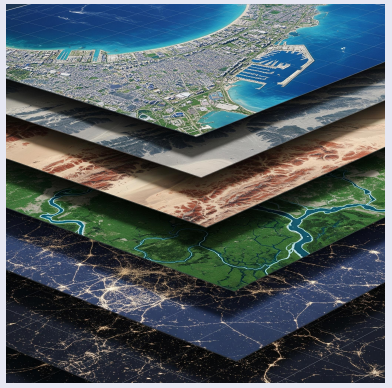
- Bridging the gap between **artificial intelligence (AI)** and **Earth observation (EO)** communities
- Lack of standardized, FAIR (Findable, Accessible, Interoperable, Reusable) and AI-ready EO resources
- Enhancing data discovery, preparation, and analysis for EO applications
- Improving access to AI models, interoperability of EO resources, and reproducibility of experiments

AI4EOhub: A comprehensive repository for FAIR and AI-ready EO resources

AI4EOExplorer

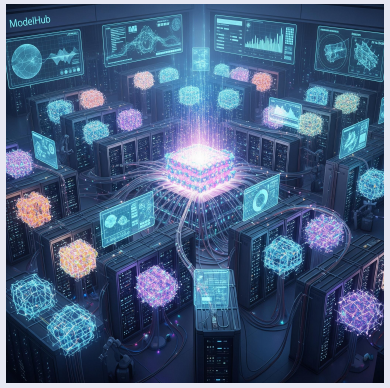
User-friendly web interface for accessing and interacting with AI4EO resources.

DataHub



Preprocessed and annotated EO datasets for tasks like segmentation and change detection.

ModelHub



Pre-trained AI models for specific downstream tasks with documentation.

PipelinesHub

Ready-to-deploy data analysis pipelines built on datasets and AI methods.

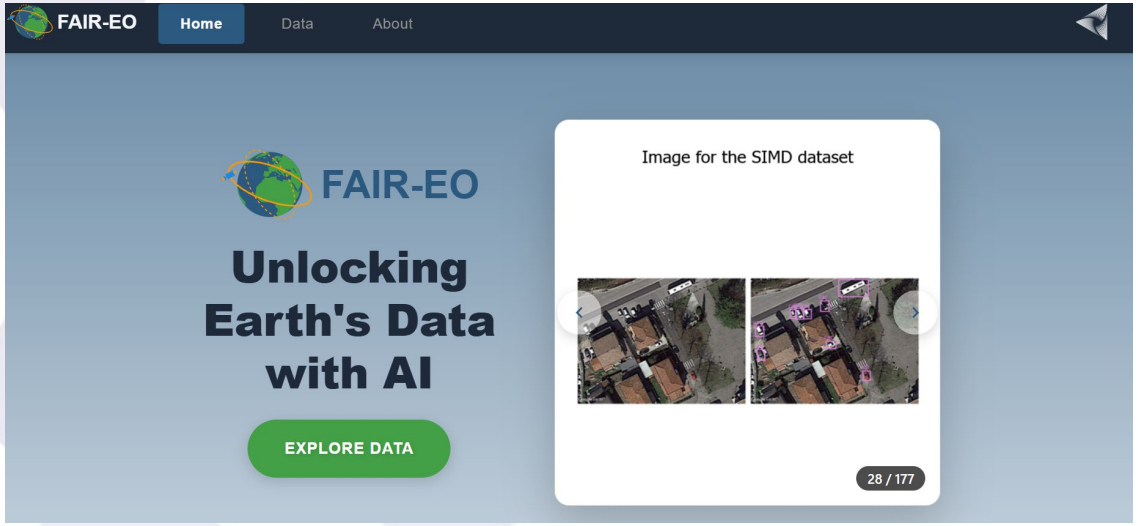
ResultsHub

Performance metrics and results from various AI models on EO datasets.

RESULTS

- A fully operational **AI4EOhub platform** hosting:
  - Over 200 AI-ready EO datasets
  - More than 50 AI models
  - Reproducible experiments (Jupyter notebooks)
  - Comprehensive benchmarking results
- **Openly accessible** under permissive licenses (e.g., Creative Commons, Apache 2.0, MIT)
- Deposition of results in **trusted repositories** and alignment with **EOSC standards**

Example: DataHub



DataHub is accessible here:

TEAM

Partners:

Bias Variance Labs

https://www.bvlabs.ai/

Jožef Stefan Institute

https://ijs.si/

Project duration:

1 JAN 2025 – 31 DEC 2026

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