

EARTH OBSERVATION INNOVATION LABORATORIES – EOIL

Empowering Kenyan innovators to solve local challenges through satellite data

Earth Observation Innovation Labs (EOIL) are designed to democratise access to satellite data for sustainable development. These physical and virtual spaces provide the trusted digital infrastructure and open-source toolboxes necessary for rapid prototyping and market transfer of geospatial applications tailored to local challenges. By fostering collaborations between researchers, students, civil society and industry experts, the initiative bolsters Kenya's digital sovereignty and catalyses innovation in high-impact sectors – including agriculture, climate resilience, and urban planning – while directly strengthening national data governance capacities.

EARTH OBSERVATION INNOVATION LABORATORIES

Observe. Innovate.Transform.

Kenya Space Agency intends to establish National Centres of Excellence for Space Technology with EOIL conceptualised in 2024, under the EU-funded *Data Governance in Africa Initiative*. As of April 2026, EOIL has been implemented in two universities; Taita Taveta University and University of Nairobi.

Objectives

1. **Establish and operationalise the EOIL as national hubs translating research and innovation into product and services**
2. **Promote uptake, use, and application of the EOIL for improved decision-making and sustainable development**
3. **Catalyse the innovation ecosystem through the incubation of EO-based solutions and products**
4. **Deliver continuous technical capacity building through Centres of Excellence**
5. **Provide technical support to all stakeholders (academia, government, civil society and private sector)**

Country
Kenya

Project Duration
November 2024 to December 2026

Institutional Partner
Kenya Space Agency (KSA)

Hosts
Taita Taveta University (TTU)
University of Nairobi (UoN)

Implementing Partner
Expertise France

Commissioning Partners
European Union
French Ministry of Foreign Affairs

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WHAT THE EOIL OFFER

- Access to EO data, computing capacities, open-source & AI tools
- Functionalities for dataset integration
- Learning & training activities
- Ideation, prototyping, and open work sessions for individuals and teams
- Networking and meeting space for developers, entrepreneurs, students, and enthusiasts
- Stakeholder forums
- Technical support services

TECHNICAL FUNCTIONALITIES

The EOIL infrastructure provides a comprehensive environment designed to simplify the management and processing of complex satellite data.

- Automated data management
- Integrated computing environments for algorithm development and testing
- High-performance infrastructure with a scalable architecture for intensive processing tasks
- Heterogeneous data handling
- Administration and monitoring tools

KEY FACTS

- **Core Focus:** Earth Observation (EO) using open-source tools and global geospatial resources
- **Target Users:** Academia, government institutions, civil society, international organisations and private sector
- **Hosts:** Selected Kenyan national public universities (or associated entities) following selection process and on-site assessment
- **Support**: Backbone resources (virtual platform, server capacities, data access & processing tools); additional governance and ideation support
- **Timeline:** Pilot deployment phase Q3/2024-Q4/2026
- **Scale Goal:** 2,000+ annual users; ,500+ trained; 50+ incubated EO-based innovations by 2028

How to Get Involved

Universities/Entities: Apply via future calls or partner with the selected hosts

Stakeholders: Attend trainings, hackathons, ideation sessions, or submit EO-based project ideas

Startups/MSMEs: Apply via calls or join incubation/acceleration programmes

All: Follow KSA channels for announcements and open calls

Contact & More Information

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