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Upskilling Public Sector Environmental Professionals: AI-Powered Training for Operational Use of Earth Observation Across Diverse Sectors

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The increasing availability of Earth Observation (EO) data presents immense opportunities to modernize monitoring and reporting activities across public and government agencies in the environmental sector. Despite this potential, integration of EO into the workflows of municipal, regional and national administrations remains limited—constrained by a lack of time, varying technical proficiency, and fragmented access to suitable training materials. The EO4Nature project tackles this challenge by developing an intuitive online platform that tailored to environmental professionals working in public institutions. It leverages a suite of 18 interoperable EO products, enabling users to analyze environmental conditions in a sector-specific and task-oriented manner.This platform offers tailored applications and is supported by an innovative schooling concept.

The project aims to develop a flexible and personalized schooling approach that uses large language models (LLMs) and AI-driven interfaces to deliver interactive microlearning. Rather than relying on static modules, training is dynamically adapted to user expertise and specific use cases, supporting professionals in fulfilling their monitoring and reporting obligations with confidence.

Through co-design processes—including collaborative workshops, targeted surveys, and iterative testing—we ensure the training materials align with real-world workflows and institutional needs. This approach not only accelerates the uptake of EO tools but also empowers users to combine and customize services for integrated environmental insights.

EO4Nature demonstrates how modern AI-powered education can bridge the skills gap and mainstream the operational use of EO in the public environmental sector.

Primary authors: BEAMISH, Alison (GFZ Helmholtz Centre for Geoscience); MICHAEL, Förster (LUP GmbH); Ms DURSTEWITZ, Luca (GFZ Helmholtz Centre for Geoscience); ECKARDT, Robert (ignite education GmbH)

Presenter: BEAMISH, Alison (GFZ Helmholtz Centre for Geoscience)

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