

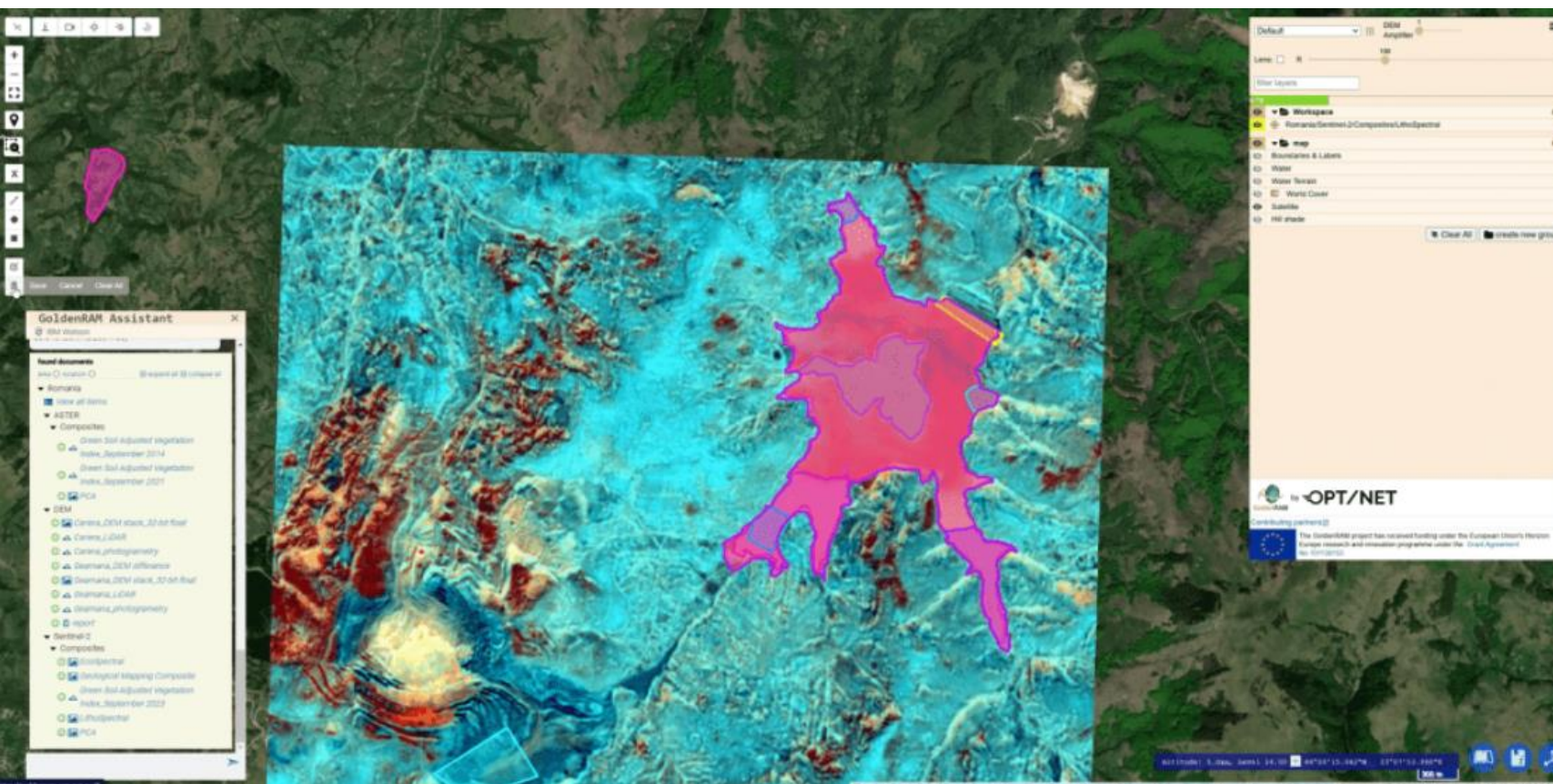
# GoldenRAM

EO Platform Supporting Critical Raw Materials Industry in Europe



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Technical Research Centre of Finland



# GoldenRAM

The project will develop an Earth Observation Platform (G-RAM platform) for mining-related applications, and provide easy exchange of accurate information on Raw Materials in the European Union and partnering resource-rich countries.

Horizon Europe (HORIZON)

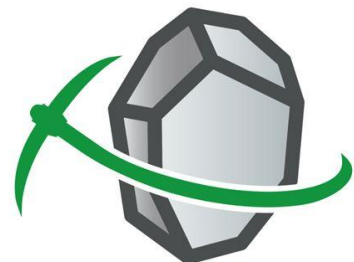
1.1.2024 – 31.12.2026

6 660 647,74 €

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<https://goldenram-project.eu/golden-pond-rehabilitation-how-romaltyn-project-results-support-goldenrams-vision/>

Optional: QR code



**GoldenRAM**



In-situ ground moisture team of Maarit Middleton, Oleg Antropov and Alireza Hamedianfar installed IoT soil moisture sensors for validating drone SAR measurements.

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TRL level

7

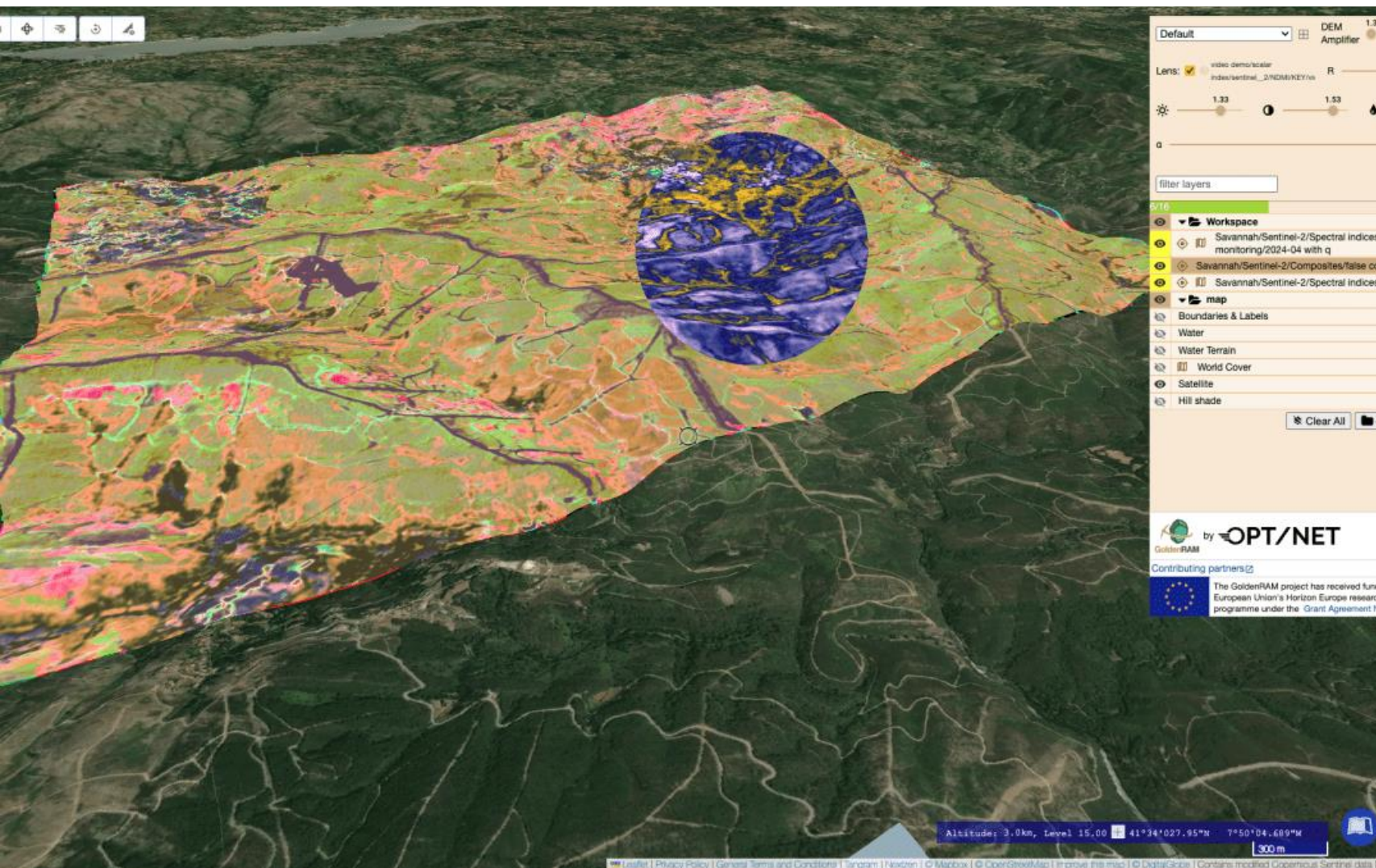
Pilot/demonstration sites

- Sokli, Finland
- Kevitsa, Finland
- Aitik, Sweden
- Abrud, Romania
- Ukrainian Shield, Ukraine
- Barroso, Portugal

Major industrial/research partners

Boliden, Cupru Min, Sokli, Savannah, VTT Technical Research Centre of Finland Ltd, Geological Survey of Finland GTK, Federal Institute for Geosciences and Natural Resources BRG, State research and development enterprise state information geological fund of Ukraine (GIUA)





The GoldenRAM platform is designed to transform the way industries interact with geospatial intelligence. Through innovative features and AI-driven tools, it makes navigating complex datasets intuitive, actionable, and more effective than ever before. Here's an overview of its key assets and how they empower users across industries.

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What are your project targets, results?

The GoldenRAM project is developing an Earth Observation Platform which deploys the latest advances in IT, Cloud and AI technologies. The platform is designed to facilitate the exchange of accurate information on Raw Materials in Europe and partner countries to support mining companies, stakeholders in the mining industry, and the general public. It will utilize AI and Natural Language Processing alongside advanced AI “knowledge packs” to streamline complex computational workflows. A variety of important use cases including Exploration & Prospecting, Production, Operations & Safety, Environment, and Reporting & Exploitation, will be demonstrated.



An extensive **drone imaging and field data collection campaign** took place at the **Kevitsa Mine** in **Sodankylä**, Finland, during 19 – 23 August 2024. The campaign aimed to support the development of remote sensing data-based services, such as surface ground moisture retrieval in vicinity of the tailings storage facility, water level and volume mapping within the tailings pond, and water quality assessment in the nearby lake Saiveljärvi.

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What we are looking for at PDAC?

Discussions with stakeholders.  
Finding synergies with other projects.  
Seeing the technological developments in the mining sector.

What we can offer at PDAC?

Information about the benefits of the G-RAM platform in mining. Videos showing the platform in use.  
Information about the Field trials, and preliminary results. A5 flyer with basic information.

OPTIONAL

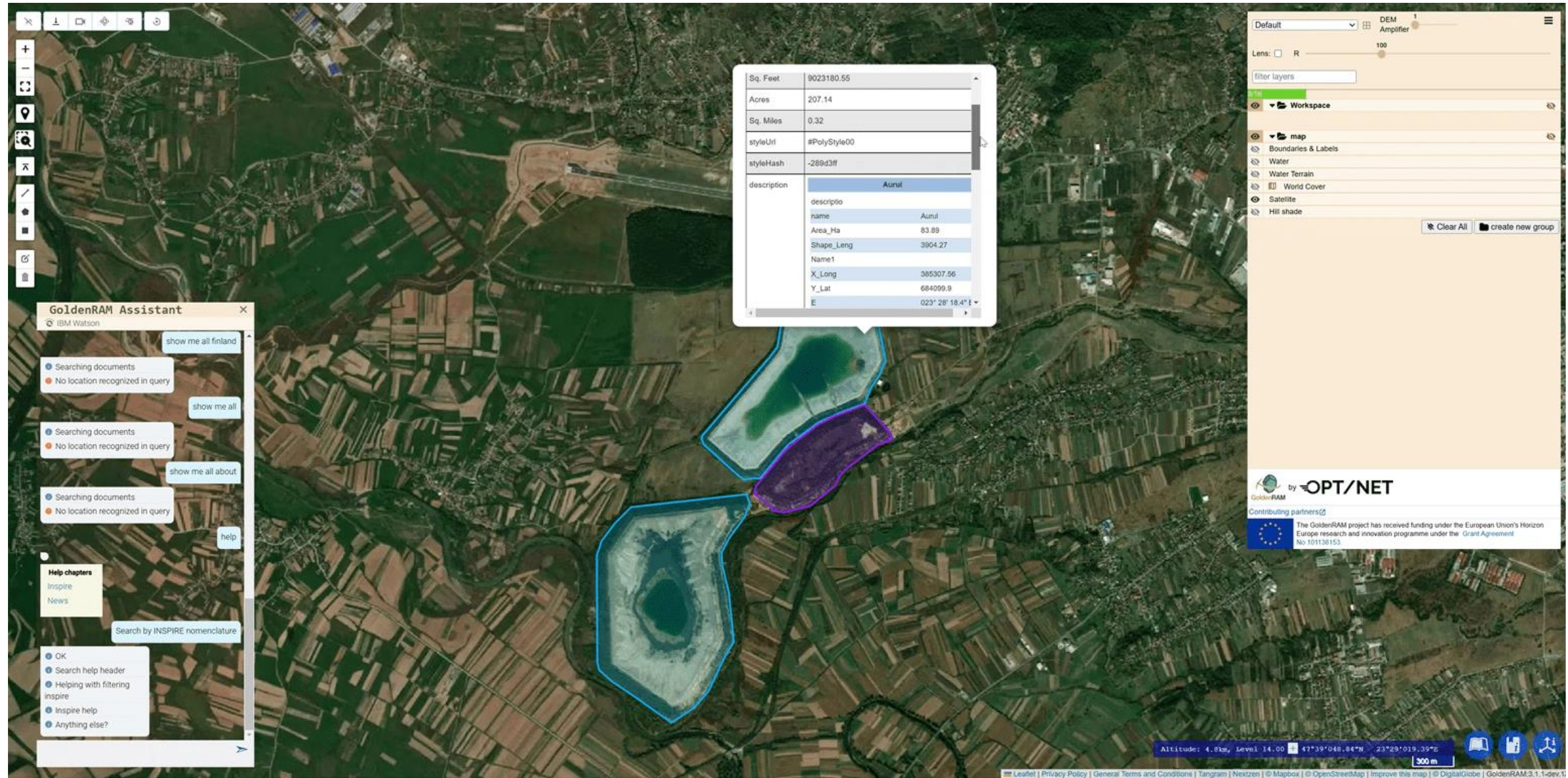


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Experts from GTK in collaboration with VTT conducted environmental fieldwork in August 24-28 at Sokli and nearby lakes and ponds in the frame of the GoldenRAM project. This entailed measuring water quality and collecting water samples.

OPTIONAL



Optional: QR code

Highlighted metadata of the Aurul tailing pond in the GoldenRAM platform based on Sentinel-2 multispectral optical acquisition (source: <https://goldenram.opt-net.eu/>).