

The logo for OPT/NET features a stylized 'O' with three horizontal lines extending from its left side, followed by the text 'PT/NET' in a bold, sans-serif font. The background of the slide is a light gray with a complex, abstract pattern of white lines and dots, resembling a data network or a starry sky.

OPT/NET

Launch Mission Critical AI

Navigate oceans of data, uncover valuable insights,
and make intelligent decisions in real-time

www.opt-net.eu

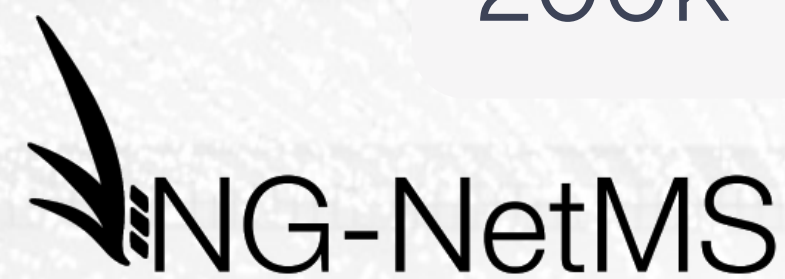
OPT/NET AN INTRO

Launch Mission Critical AI



Consulting

Served as a trusted expert, called upon to “solve the unsolvable”



200k+ 

Developed Tool

NG-NetMS: open source network discovery/management tool

2008



Integrated AI

Infused ESA tech and collaborated with UvA to develop AI modules

2013



OptOSS AI

Incorporated OPT/NET B.V. to bring the AI monitoring products to market

2018

10+ years of active product development

OPT/NET AN INTRO

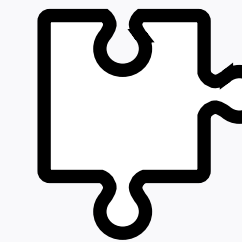
Launch Mission Critical AI

OPT/NET builds comprehensive AI solutions based on decades of hardcore critical industry experience.

Hallmarks of our approach:



No Model Training



Real Time



Detect Unknowns



IT - Network Monitoring

Event correlation, analysis, anomaly detection and root causes analysis for IT Infrastructure



Maritime Monitoring

Integrating satellite imagery and Automatic Identification System data to autonomously detect dark vessels



Emergency Management

Help emergency and disaster response teams work quicker, smarter and more effectively with AI and EOD



Smart Agriculture

Combine analysis of massive amounts of Geospatial data with in-situ data to provide holistic overview of crops



Mineral Explor. & Mining

Multi-source EOD platform to improve mine safety, environmental footprint and overall profitability.

OPT/NET AN INTRO

Launch Mission Critical AI



IT - Network Monitoring

Event correlation, analysis, anomaly detection and root causes analysis for IT Infrastructure



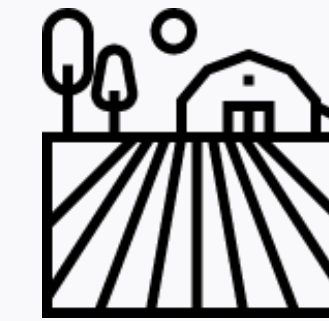
Maritime Monitoring

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Help emergency and disaster response teams work quicker, smarter and more effectively with AI and EOD



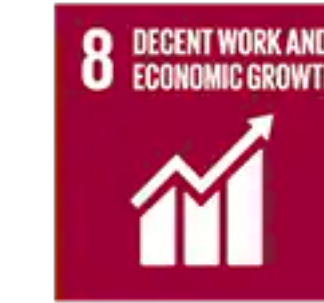
Smart Agriculture

Combine analysis of massive amounts of Geospatial data with in-situ data to provide holistic overview of crops



Mineral Explor. & Mining

Multi-source EOD platform to improve mine safety, environmental footprint and overall profitability.



OPT/NET GOLDENEYE

Launch Mission Critical AI



Mineral Explor. & Mining

Multi-source EOD platform to improve mine safety, environmental footprint and overall profitability.



GOLDENEYE

GOLDENEYE offers a multi-source Earth Observation Data (EOD) platform to **improve mine safety, environmental footprint and overall profitability.**



Delivers a toolkit for mines to **MONITOR:**

- Open Pit mine slope stability
- Mine waste pile stability
- Mine tailings bond stability
- Underground mine activity

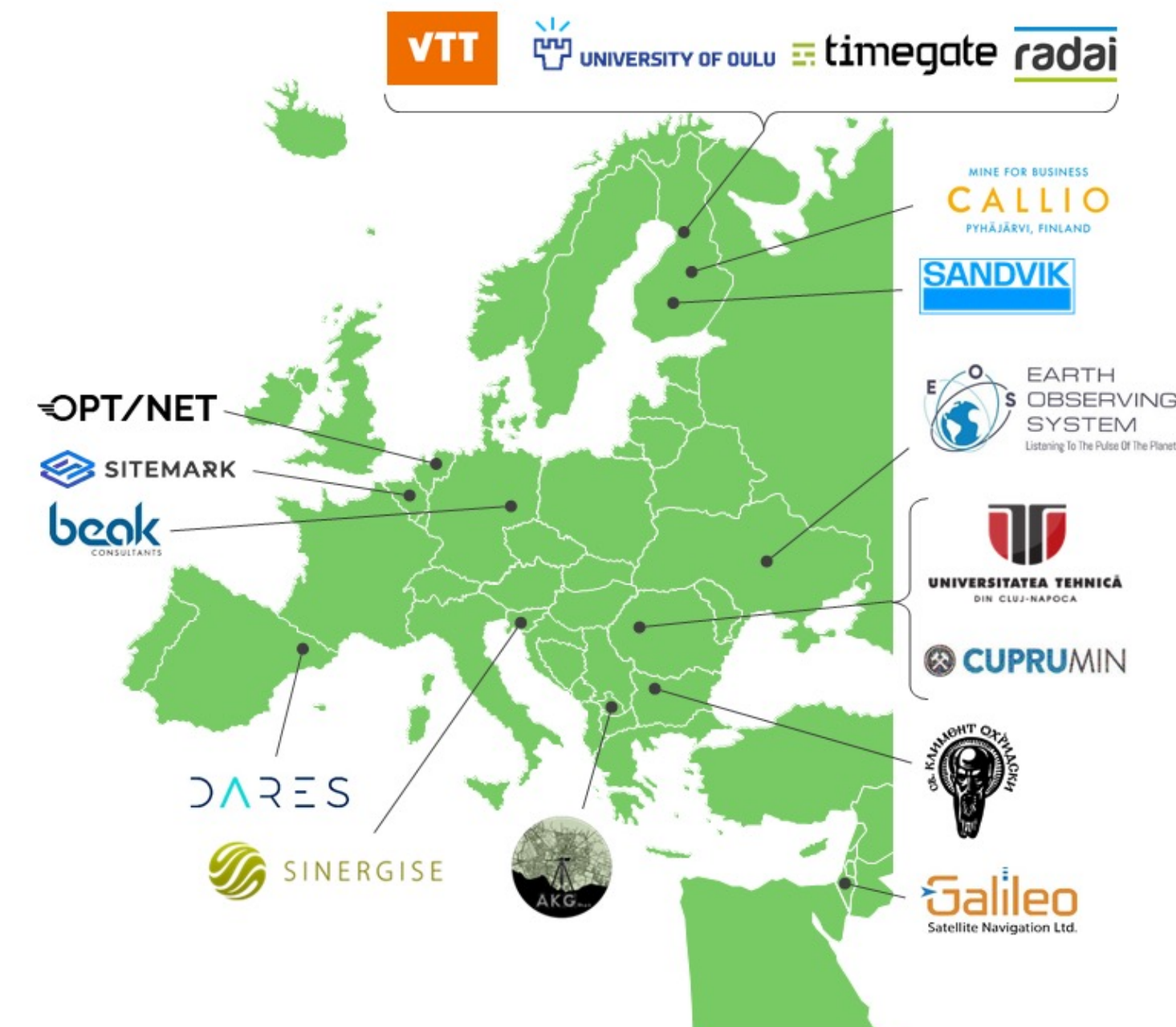


Delivers a toolkit for mines to **IMPROVE:**

- Mineralogical mapping of mine site ground surfaces
- Min. analysis of drill cores for exploration & ore processing
- Min. analysis of underground mine shafts

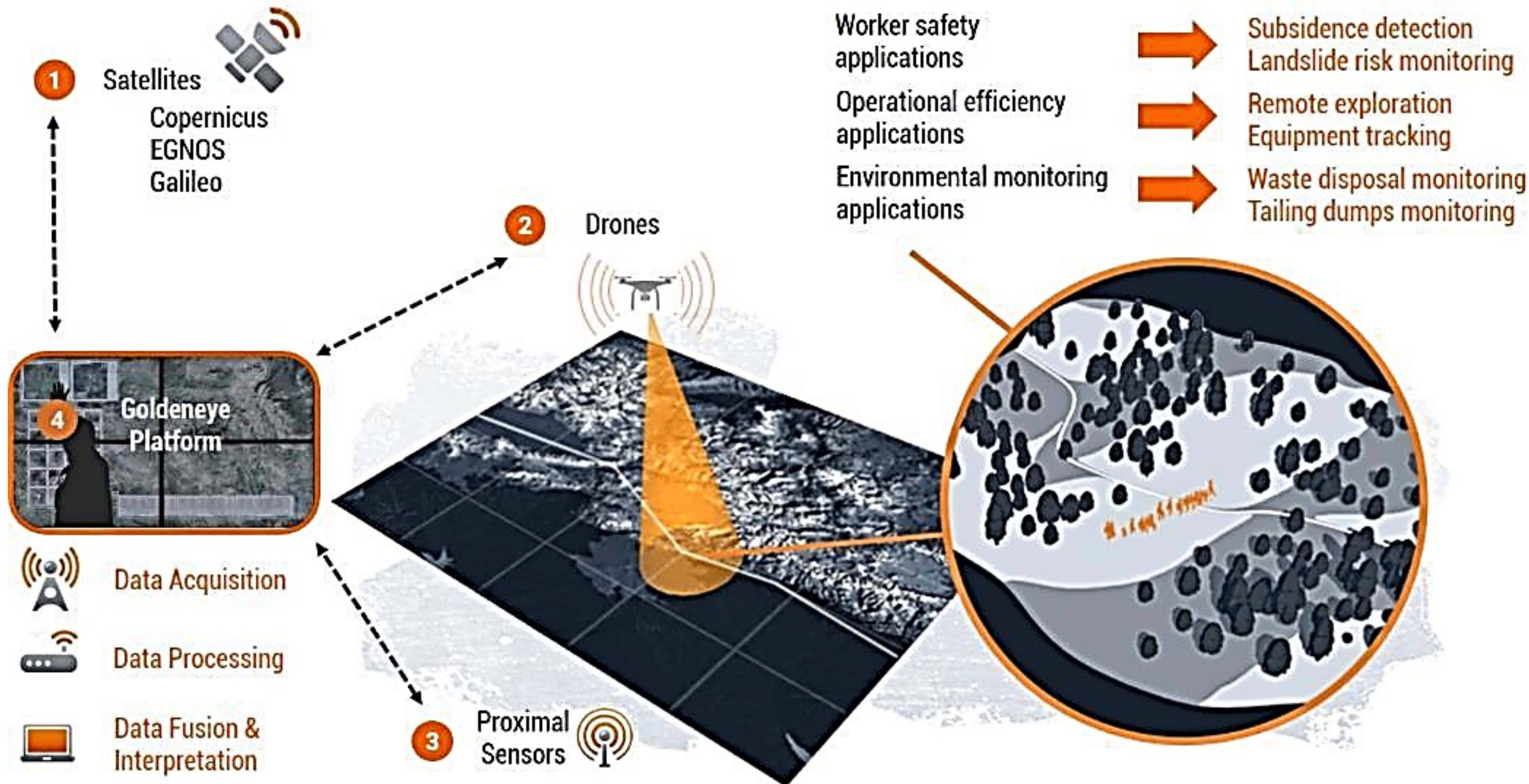


This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement No. 869398.



OPT/NET GOLDENEYE

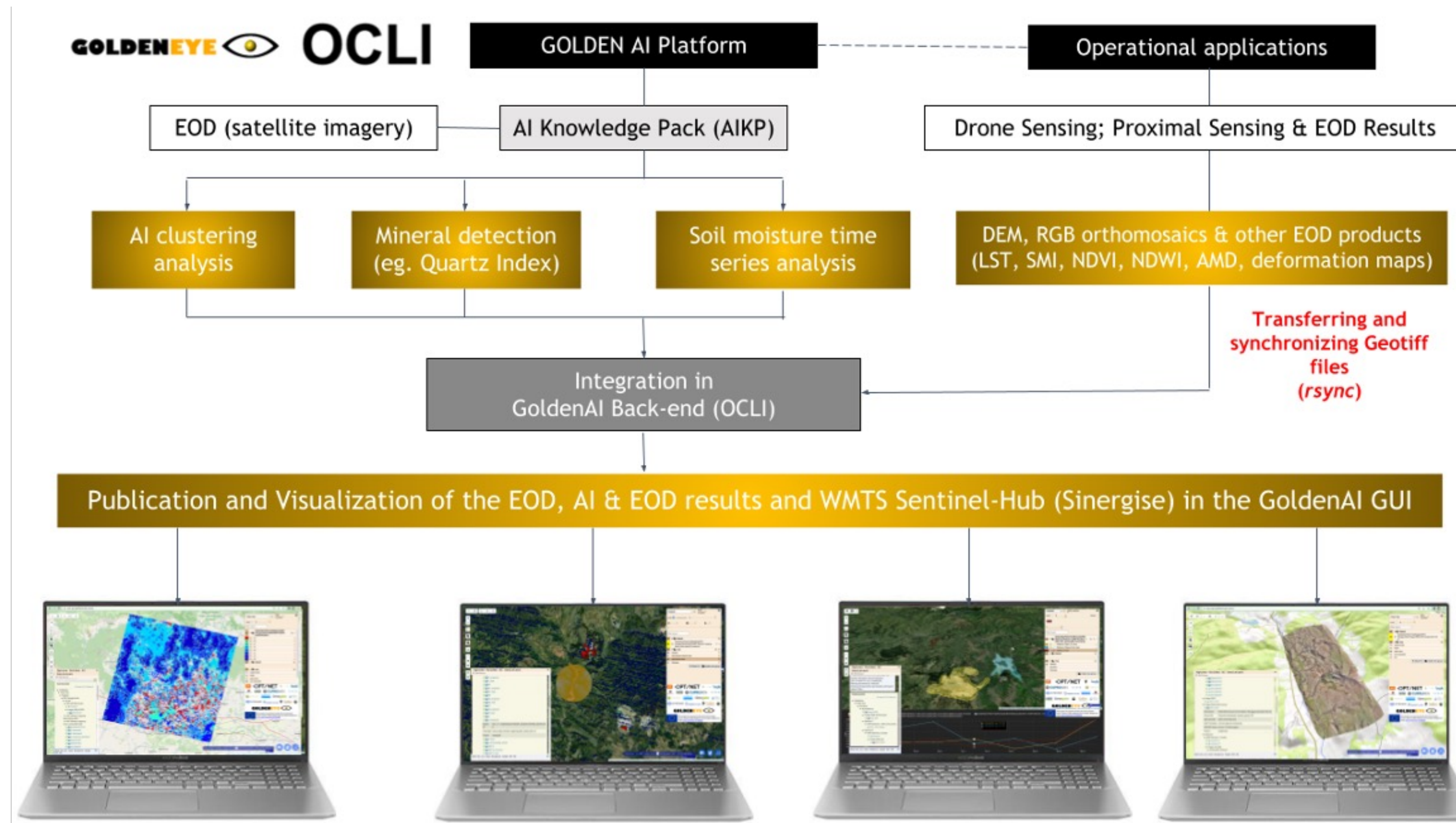
Launch Mission Critical AI



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IMPACT FINLAND

Launch Mission Critical AI



Acid Mine Drainage Analysis:

- Contaminated drinking water, disrupts growth and reproduction of aquatic plants and animals, corroding effects
- Iron concentrations between < 1 & 1800 mg/L
- 95% of the sampling data iron concentrations < 35 mg/L



Environmental Monitoring:

- Land Surface Temperature (LST): Thermal satellite imagery (Digital Numbers, DN) are converted into spectral energy brightness (Spectral Radiance)
- Vegetation Monitoring (NDVI): NDVI is calculated as Band ratio: $(\text{NIR} - \text{Red}) / (\text{NIR} + \text{Red})$



IMPACT FINLAND

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Acid Mine Drainage Analysis

Land Surface Temperature (LST)

Vegetation Monitoring (NDVI)

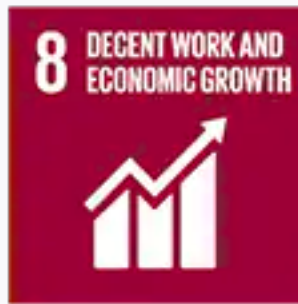
IMPACT ROMANIA

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Open Pit Extraction:

- Extraction of the copper ore
- The exact location of Cu deposits has not been found so far due to expensive drillings (Exploration stage)



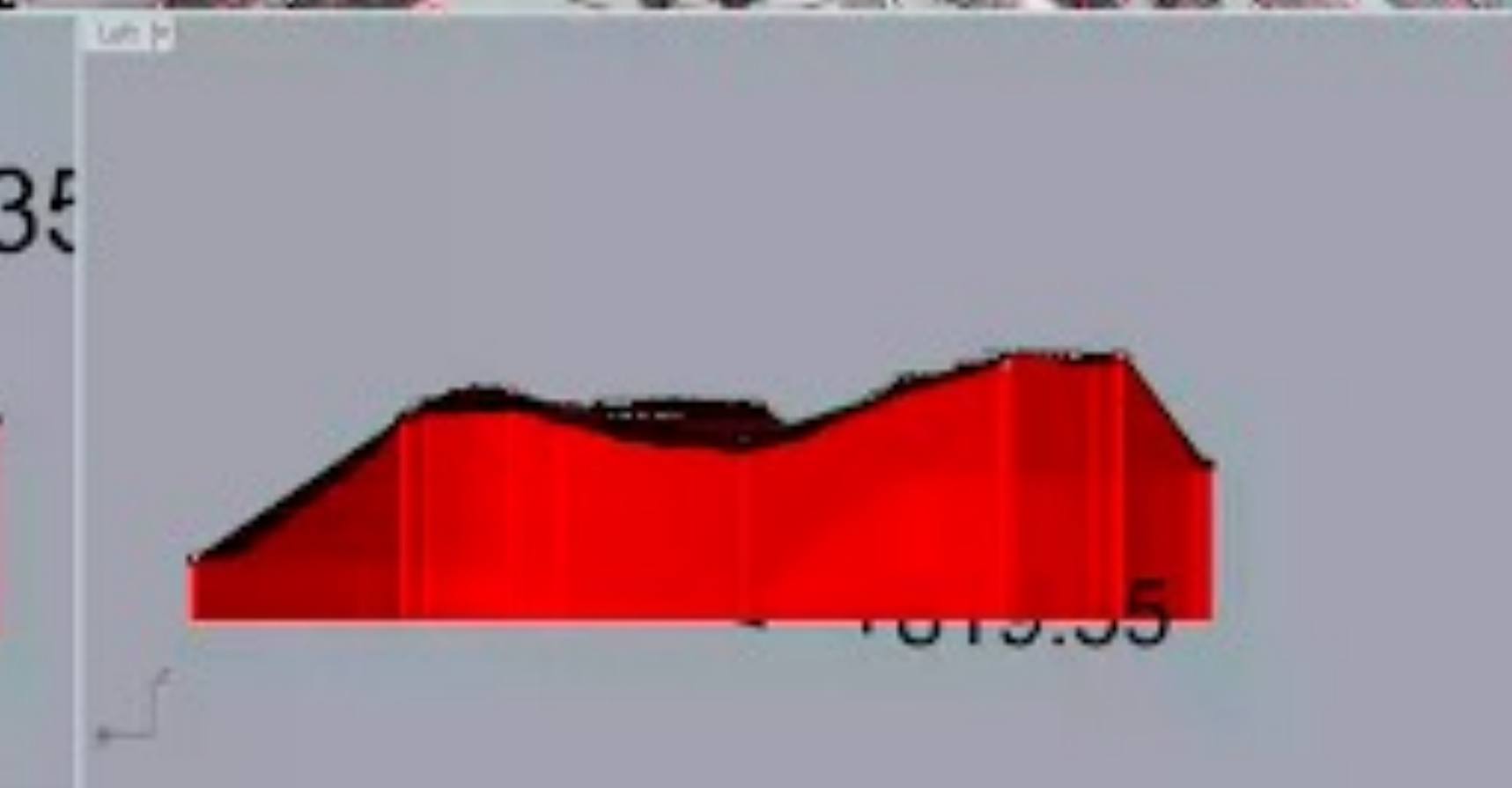
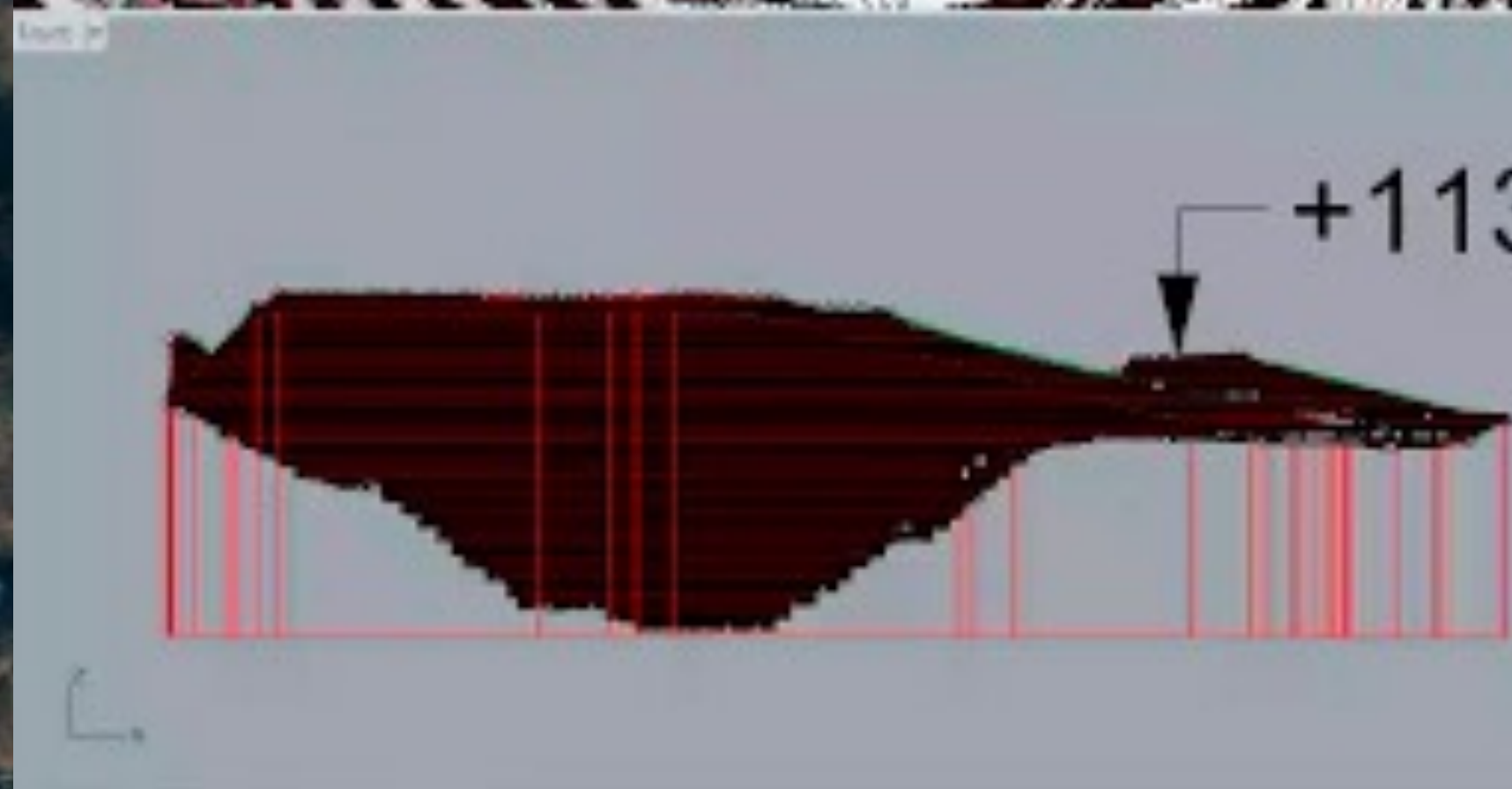
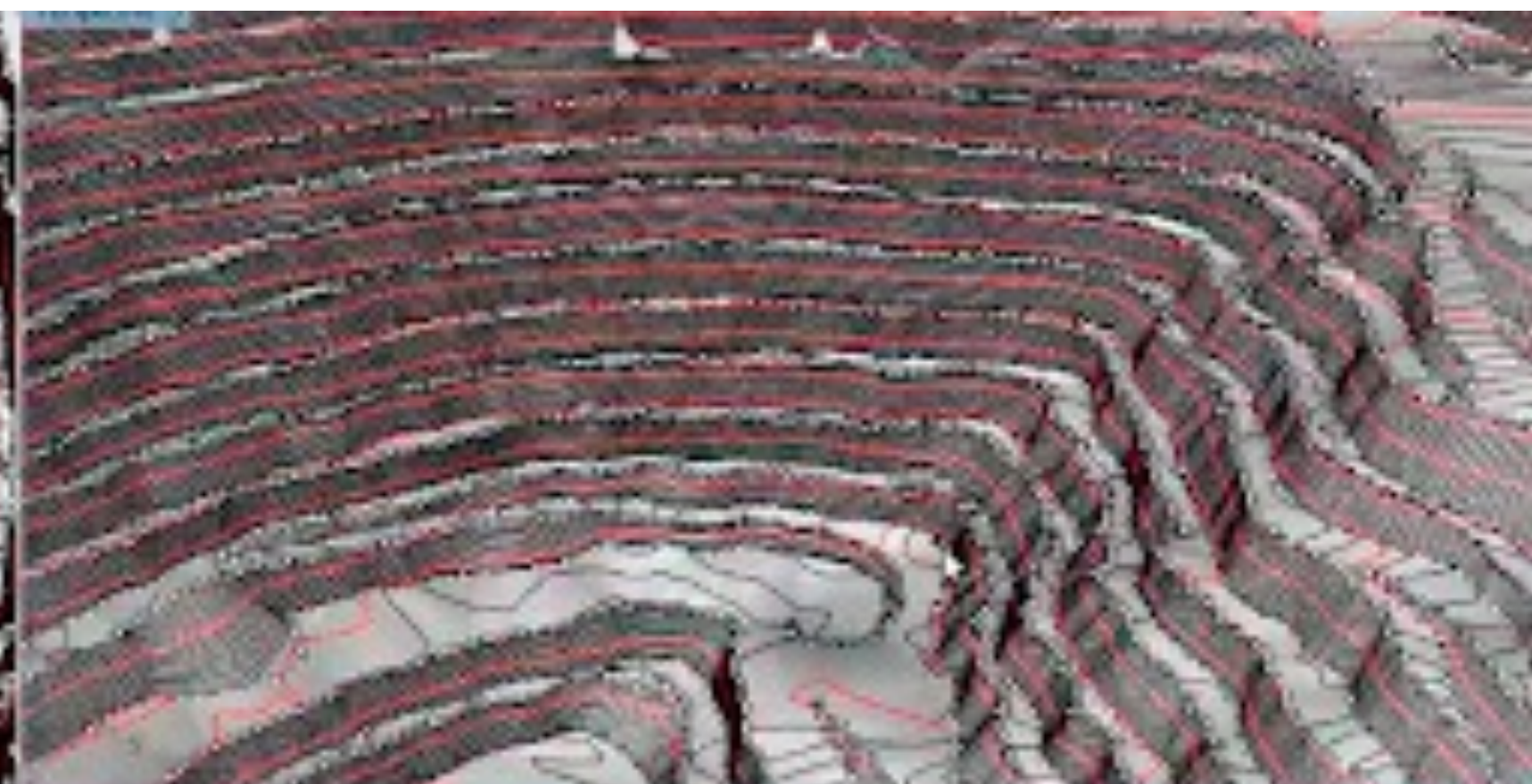
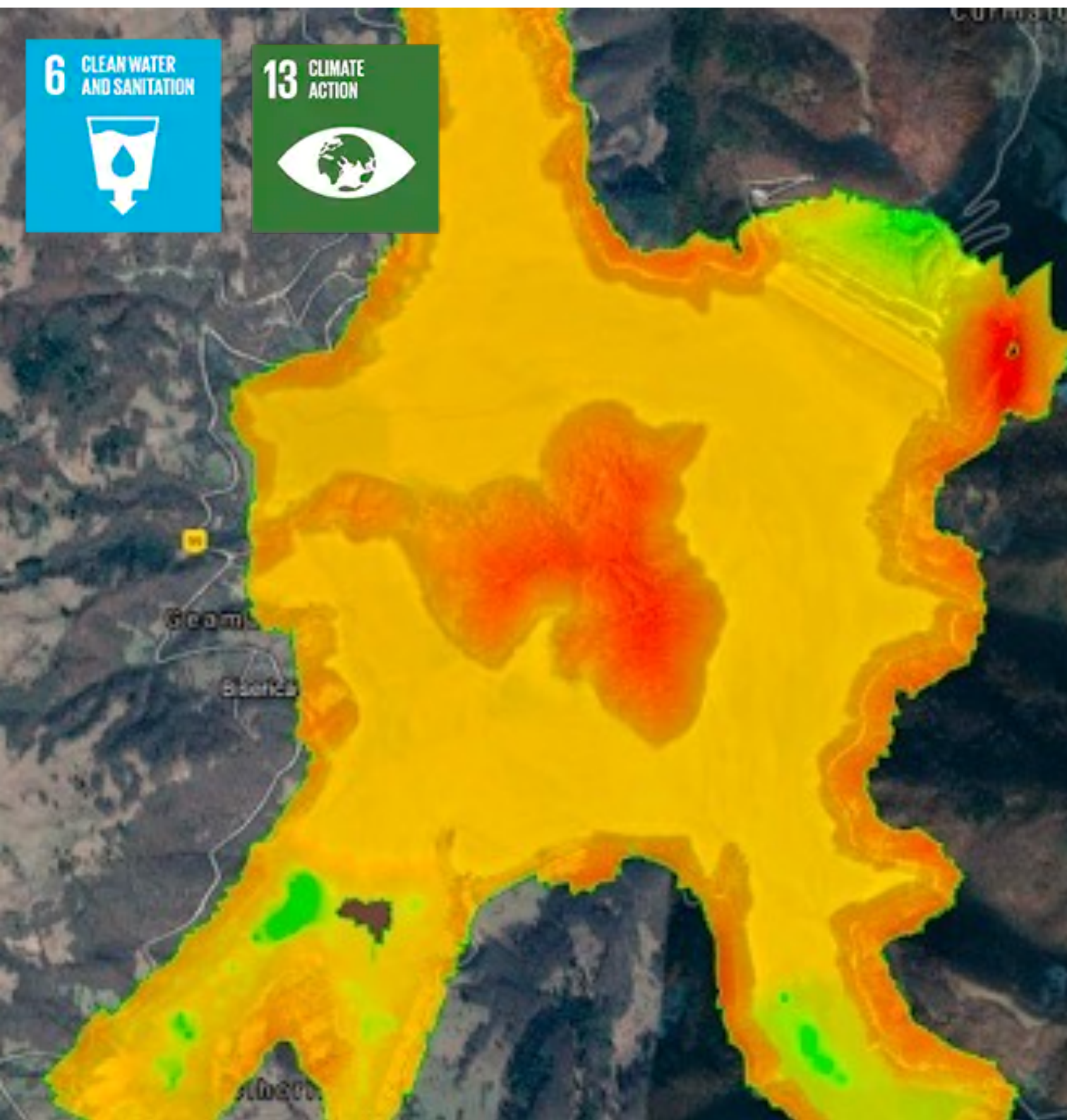
Manage environmental risks:

- Acid Mine Drainage
- Prediction of landslides using InSAR-Based Analysis of Surface Deformation
- Create buffer zones close to the pit and tracking environmental indicators within these zones Reduce blasting required prior to drilling operations,



IMPACT ROMANIA

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Acid Mine Drainage Analysis

Slope Stability Modelling (3D)



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Seva Matselyukh
CCO/CFO – OPT/NET
seva@opt-net.eu