PERIVALLON TOOL CARDS

The PERIVALLON project aims to deliver an improved intelligence picture of organised environmental crime and develop tools for **detection**, **prevention**, and **impact assessment**. It uses geospatial intelligence, remote sensing, online monitoring, and predictive analytics to enhance investigation processes and methodologies.

These cards present **13 tools**, each a result of the development and validation efforts within the PERIVALLON project.

TOOL 1A — Geospatial intelligence detection tool suite – waste and land pollutants

Exploitation Type: A mix of scientific & commercial

Partner in Charge: POLITECNICO MILANO 1863

Description

A software module that implements advanced artificial intelligence and computer vision algorithms to detect solid waste on land. The module receives as input satellite images over a target territory and outputs geographic locations of potentially illegal dumping sites. These sites can be visualized on a map along with the list of detected materials.

At a glance

AI-driven satellite imagery analysis tool for detection and mapping of potentially illegal solid waste activities.

Who is this tool developed for?

- Public Administrations
- International security agencies
- Environmental agencies
- Law Enforcement Agencies (LEAs)
- Border guards
- Insurance companies estimating industrial risk

Use Case

Large territory scanning for potentially illegal dumping site detection and monitoring in support of environmental crime contrast and prevention.

Benefits & Added Value

- Up to 30% time saving to identify and evaluate a dumping site.
- Improved monitoring capacity for LEAs and environmental agencies.
- Site survey prioritization based on detected materials in a candidate landfill.

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