THE LANDSENSE ENGAGEMENT PLATFORM

Connecting citizens with earth observation data to promote environmental monitoring

Inian Moorthy, Linda See, Matej Batič, Andreas Matheus, Grega Milčinski, Steffen Fritz

The ESA Earth Observation Φ-week
EO Open Science and FutureEO
Nov 12 – 16  |  ESA ESRIN  |  Frascati, Italy

@LandSense
LandSense.eu
Motivation

Uncovering the potential of citizen science and earth observation to improve the way we see, map and understand the world

Improving the quality of Earth Observation-based Land Use & Land Cover (LULC) maps/products

Demonstrate the value of satellite data to citizens while promoting environmental stewardship
Participatory process

EO-based mapping has a conventional top-down approach

It is possible to involve citizens and interested experts to crowdsourcethe needed information using a more participatory approach

At the intersection of EO and CS domains, we can engage people in various tasks (i.e. ground-based observations and online interactive mapping)
Connecting citizens with satellite imagery to transform environmental decision making

September 2016 → August 2020

LandSense.eu
LandSense Technologies are deployed across various themes to illustrate the potential of Citizen Observatories to tackle environmental challenges.

**LandSense Themes**

- **Urban Landscape Dynamics**: Austria, France, Germany, Netherlands
- **Agricultural Land Use**: Serbia
- **Forest & Habitat Monitoring**: Spain, Indonesia
LandSense Engagement Platform

A service platform that contributes to the transfer, assessment, valuation, uptake and exploitation of LULC data and related results.

The platform employs a federated approach will promote the awareness, outreach, uptake and ultimately the science of citizen science.
Participate as a citizen scientist

Ground-based observations

Urban green space monitoring in Vienna & Amsterdam

Biodiversity threat monitoring in Spain
1. Participate as a citizen scientist

Online interactive mapping

Validation of OSM LandUse Map via a series of mapathons across Europe
Register your app & exploit LandSense Services
LandSense Federation

Single-Sign-On with LandSense partners, Google, Facebook, Academic Federations via eduGAIN

2500+ Organizations Worldwide
LandSense Authorization Server

GDPR compliant broker for authentication statements

- Authenticated Login (No personal data) → Promotes anonymous contribution
- Cryptoname Login (No personal data) → Promotes anonymous contribution but allows aggregation
- Login (includes personal data) i.e username, email address → Promotes GDPR-compliant identified contribution
LandSense Citizen Observatory

Call to Action!

- Join our series of public campaigns to be launched in 2019
- Connect with us and integrate your application or service

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