The LandSense Innovation Challenge
Data-driven solutions for environmental monitoring

CHALLENGE

The LandSense Innovation Challenge facilitates collaboration and innovation among stakeholders within the value chain related to land mapping and citizen science. It targets individuals, web-entrepreneurs, start-ups and SMEs to present innovative IT solutions addressing one of the three LandSense domains: **Urban Landscape Dynamics**, **Agricultural Land Use**, and **Forest & Habitat Monitoring**. The challenge focuses on exploiting data streams coming from the LandSense Citizen Observatory, which consist of a diverse set of data including land cover change detection, threats to natural habitats, greenspace monitoring, etc., to design novel LULC solutions targeted at the citizen science community.
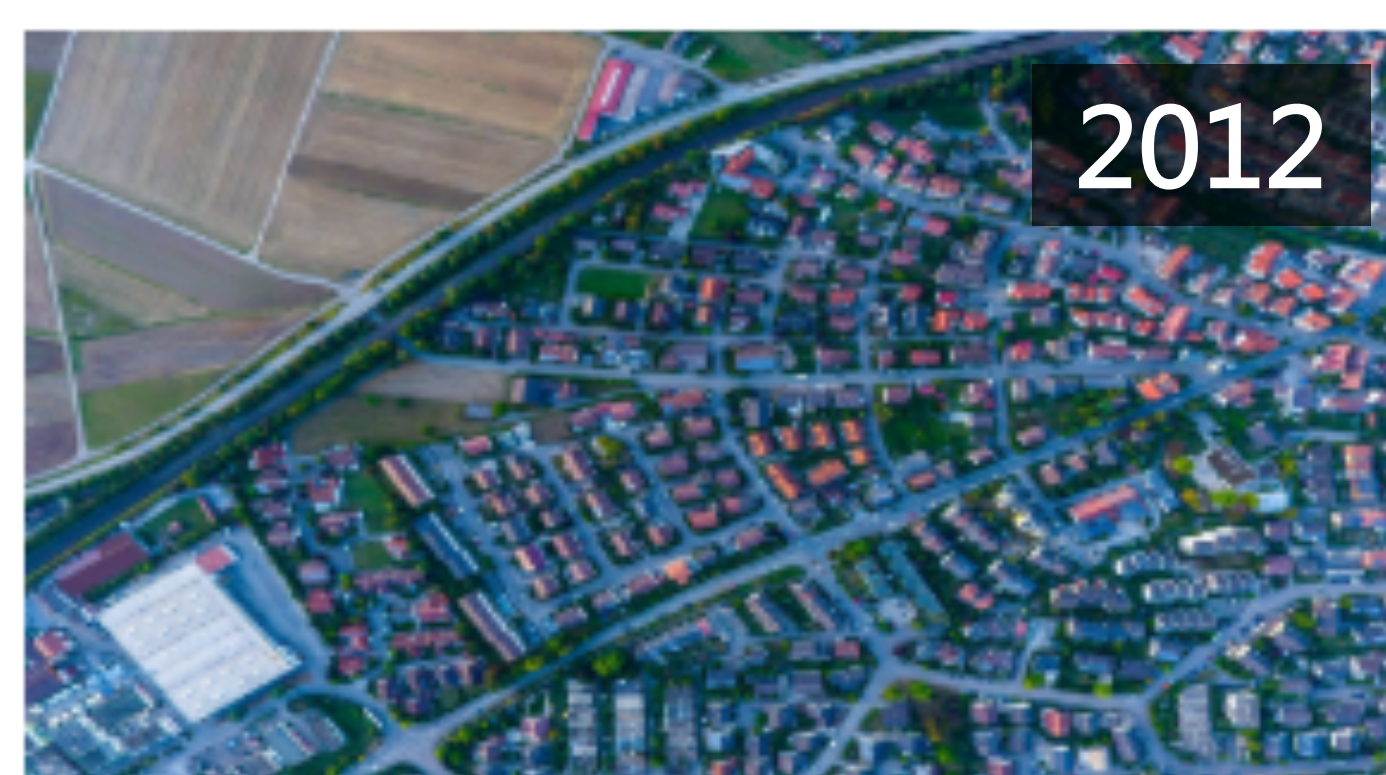
DATASETS

2018
Amsterdam – Rembrandt Park

2018-2019
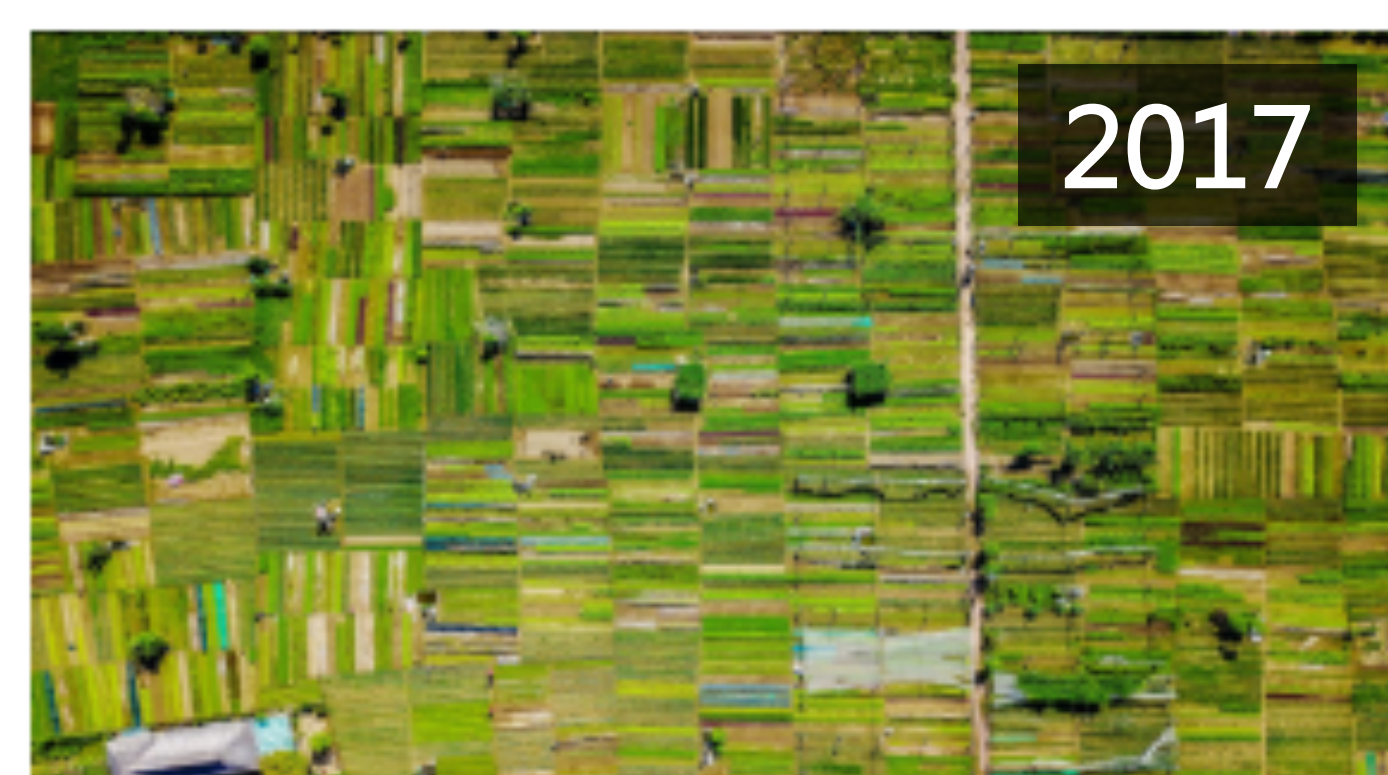Toulouse – LULC dynamics

2019
Vienna – City Oases

2018
Vojvodina – Agricultural Land Use

2012
Global LULC Reference Data

2017
Global Field Size Distribution

LandSense
A Citizen Observatory and Innovation Marketplace for Land Use and Land Cover Monitoring

https://landsense.eu/Challenge

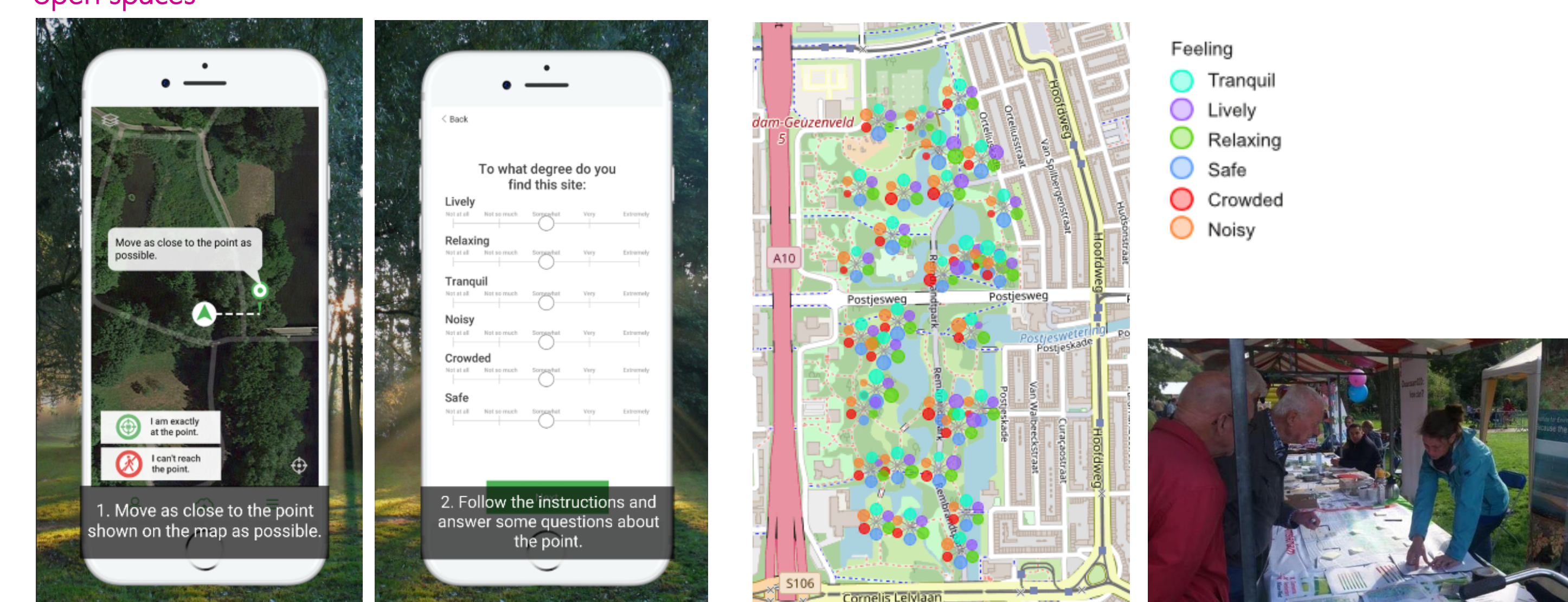https://zenodo.org/communities/landsense/

MOTIVATION

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

> Transforming the conventional top-down approach to EO-based monitoring

> Leveraging citizen science and crowdsourcing methods we can more actively engage people in environmental monitoring & stewardship

Amsterdam Rembrandt Park
Promoting sustainable urban development with citizen insights on the perceptions of green and open spaces

125+ participants

375+ observations

Feeling
- Tranquil
- Lively
- Relaxing
- Safe
- Crowded
- Noisy
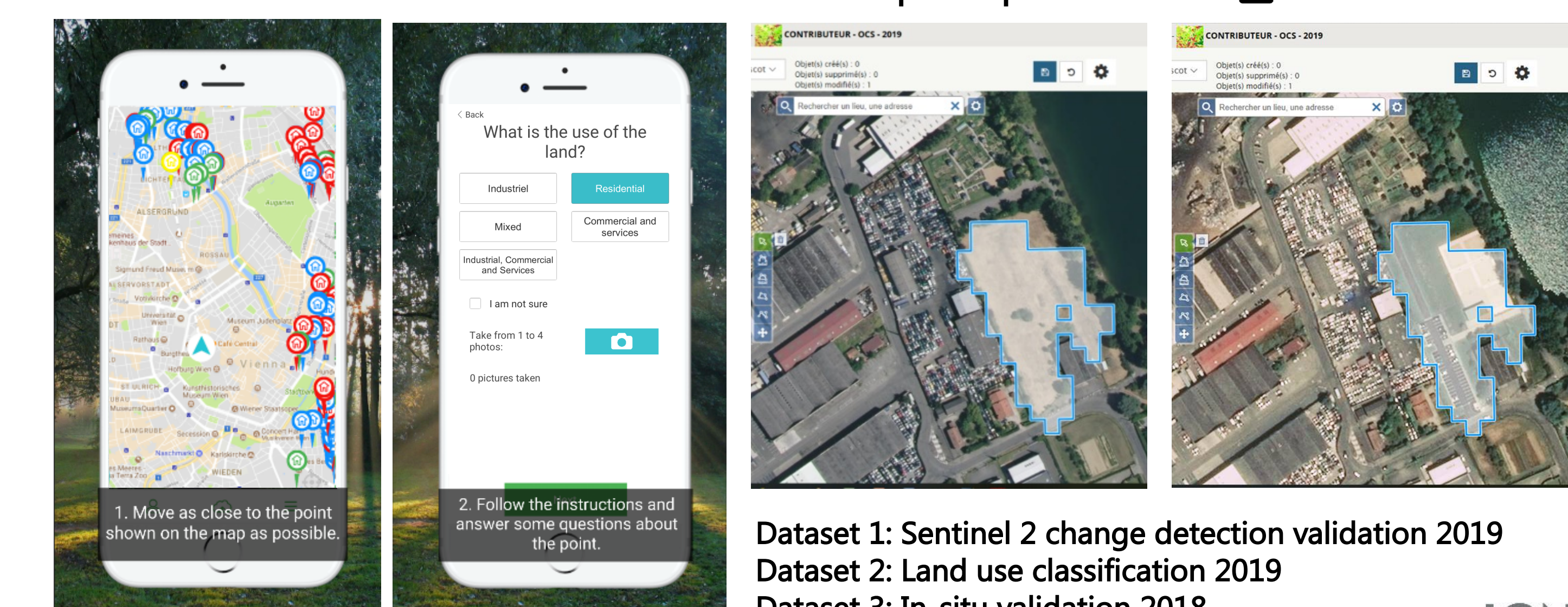
VU University Amsterdam | City of Amsterdam

Toulouse – LULC Dynamics
Integrating expert contributions using crowdsourcing approaches into LULC authoritative databases

130+ participants

7500+ observations

Dataset 1: Sentinel 2 change detection validation 2019
Dataset 2: Land use classification 2019
Dataset 3: In-situ validation 2018

PAYSAGES | IGN

LandSense

17 Partner Institutions

9 Countries

Duration:
September, 2016 - December, 2020

Coordinator:
International Institute for Applied Systems Analysis

Website:
www.landsense.eu

Contact:
info@landsense.eu

FINALS – September 11, 2020

1st prize
- Grand prize of 2,000 EUR
- 1-year subscription to Sentinel Hub Enterprise, worth 5,000 EUR, provided by SINERGISE

2nd prize
- Prize of 1,000 EUR

3rd prize
- Prize of 500 EUR

INOSENS | SINERGISE | ECSA European Citizen Science Association | GeoVille | IIASA

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