



Land Monitoring

# Enhancing the user uptake of LCLU information derived from integration of Copernicus services and national databases (InCoNaDa)

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InCoNaDa consortium



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# InCoNaDa Rationale



## Challenges and needs:

- To integrate the LCLU data available in various databases to meet the needs of the national and European regulations.
- To assure the semantic consistency by harmonizing the data from different sources.
- There is limited knowledge on how useful are the Copernicus services and products for decision makers, reporting obligations, natural resources monitoring at the local, regional, national levels.
- There is a need for applied research linked to ongoing national programs to examine the fitness for use and demonstrate the benefits as well as the limitations of the CLMS data in this context.



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## InCoNaDa - aims



- InCoNaDa aims to improve the user uptake of Land Cover / Land Use (LCLU) information derived from the integration of Copernicus Land Monitoring Service (CLMS) and national databases.



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## InCoNaDa - objectives



- To develop land cover and land change maps based on a time series of Sentinel-2 data using machine learning approaches;
- To verify the EAGLE concept based on interlinking LC and LU information and other landscape characteristics (CH) provided by CLMS and available at the country level;
- To design and develop web-based application enabling to query the LCLU database, generate outputs and statistics adjusted to the user needs;
- To examine the usefulness of CLMS products for:
  - urban and spatial planning,
  - agricultural management and environmental monitoring,
  - reporting GHG emissions and removals from LULUCF.



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# InCoNaDa consortium

- Instytut of Geodesy and Cartography (IGiK) (project promotor)
- Norwegian Institute of Bioeconomy Research (NIBIO)
- Institute of Environmental Protection - National Research Institute (IOS) (National Centre for Emissions Management (KOBiZE))
- Łódź University of Technology (LUoT) – Institute of Architecture and Urban Planning
- Eversis Sp. z o.o.

Duration of the project 1.10.2020 – 30.09.2023

funded by the Norway Grants via the National Centre for Research and Development, programme 'Applied Research', the POLNOR 2019 Call.



IOŚ-PIB



Lodz University of Technology

EVERSIS

European Environment Agency



European  
Commission



Europe's eyes on Earth



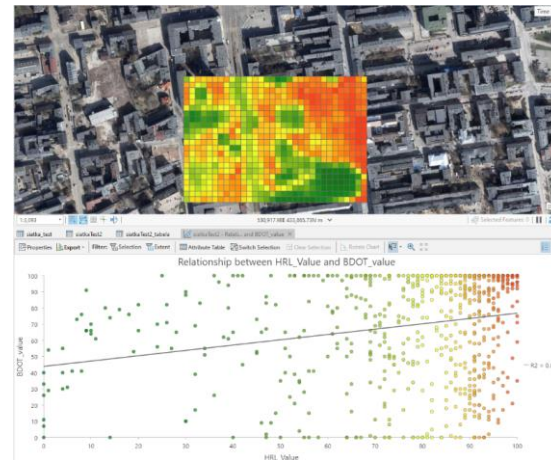


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# InCoNaDa first milestones



- Report on the geospatial Land Cover, Land Use, and Land Use and Land Cover Change (LULCC) information needs for urban and spatial planning in Poland and Norway
- Investigation the potential of CLMS for assessment of biologically active surfaces



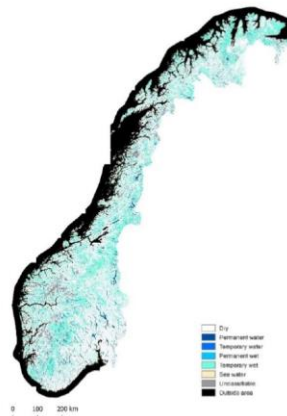
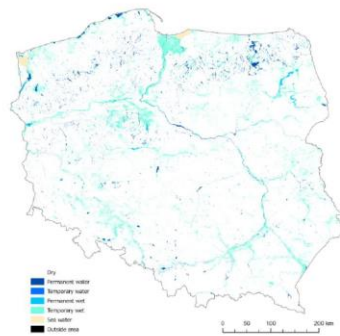
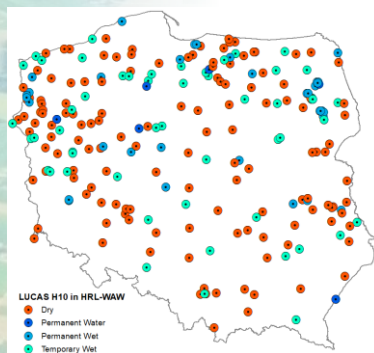


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# InCoNaDa first milestones



- Report on the potential and accuracy of HRL-WAW for assessment of agricultural landscapes and Ecological Focus Areas.
- Report on the content and accuracy of Copernicus HRL-WAW for biodiversity assessment and the accurate delineation of wetland ecosystems.



- AR18x18 square with WAW permanent wetness
- AR18x18 square with wetland
- AR18x18 square

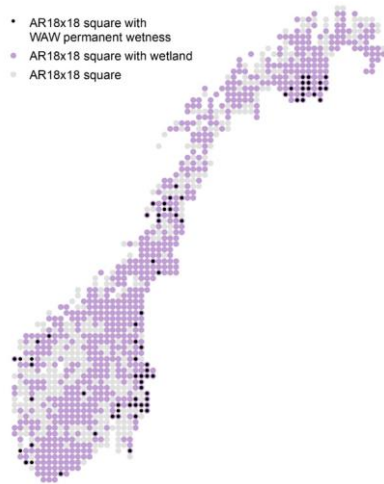


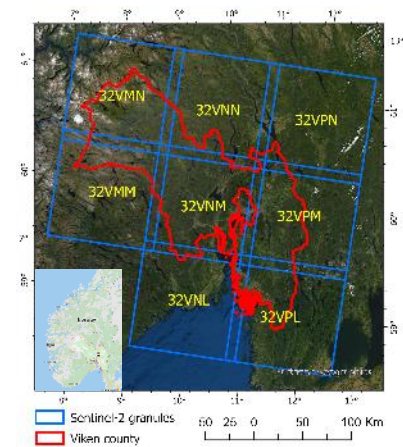
Figure 1: Overview of the HRL-WAW data for Poland (left) and Norway (right).



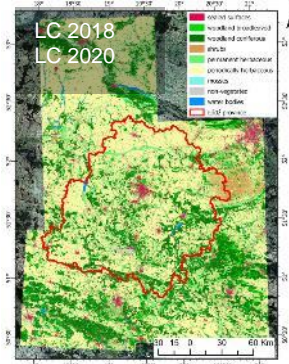
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# InCoNaDa first milestones

- Report on the EU and national regulations related to reporting obligations in the context of land cover, land use and changes
- Land cover classification based on a time series of Sentinel-2 data using machine learning approaches



Poland – Łódź province







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# InCoNaDa events



To learn more about the first outcomes of InCoNaDa we invite you to join us at the 1<sup>st</sup> InCoNaDa seminar on **6 December 2021 at 9:00 – 13:00 via Ms Teams** more details and the link to the event will be provided shortly

Follow the project on:

<https://www.inconada.eu/>

<https://www.facebook.com/In-Co-Na-Da-105074051946150/>

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