

# StatE0

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## CDSE in the European Statistical System

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# Mandate – Action plan – IT infrastructure



February 2022  
Governance  
framework

European Statistical  
System Committee



Governance



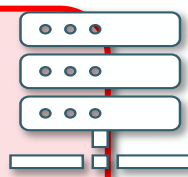
Skills



Methodology



Applications



IT Infrastructure



- Bring the code to the data
- Bring your own data
- Interoperability
- Federated service
- Shared resources
- Data sovereignty
- EU-wide processing – then validated by MS
- Shared resources



# Use Case – AIML4OS

- Users were onboarded in CREODIAS production environment during Summer 2025.
- After an experimentation period, heaviest usage was observed from January 2026 onward.
- By the end of the project in Summer 2026, CREODIAS will have been used for producing:

**Land Cover maps for more than 114,250 km<sup>2</sup>**

**Bring your own ortho-imagery, Model from FR**

- AT (*entire country, 83,900 km<sup>2</sup>*)
- DK01 (*Hovedstaden, 2,500 km<sup>2</sup>*)
- ITH3 (*Veneto, 18,350 km<sup>2</sup>*)
- PL (*one NUTS2 region, not decided yet*)

**Crop type maps for regions of 19,600 km<sup>2</sup>**

**Using Sentinel-1 data, Improved PL model**

- IE06 (*Eastern and Midland, 14,500 km<sup>2</sup>*)
- NL41 (*North Brabant, 5,100 km<sup>2</sup>*)

**In GUS infrastructure with Original PL model:**

- AT12 (*Lower Austria, 19,200 km<sup>2</sup>*)
- PT1D (*Oeste e Vale do Tejo, 9,200 km<sup>2</sup>*)

- Estimated processing cost: € 50,000, kindly provided by DEFIS as part of onboarding



# Use Case – Turkstat

In **Jupyterlab** experimentation environment, as a **Copernicus Service user**,

For the **entire country of Turkiye at NUTS2** aggregation level, the following statistics were produced:

## **Official regional statistics, Land Consumption to Population Ratio (SDG 11.3.1)**

- Using raw Sentinel-2 data obtained through openEO, ML classification to calculate urban extent
- Urban extent validated using Global Human Settlement Layer, through Google Earth Engine.
- Whole process fully automated in CDSE Jupyterlab.
- Processing completed in approximately 9 days.

## **Experimental regional statistics, Fallow Land area**

- Using a pre-produced Land Cover map (CLC+)
- Processing completed in approximately 1 day

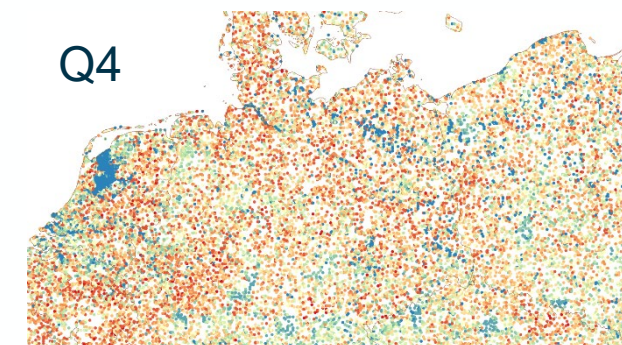
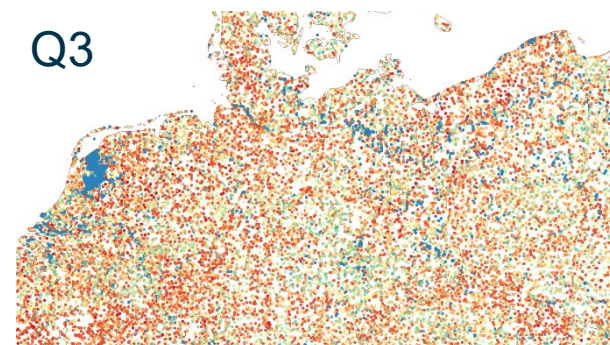
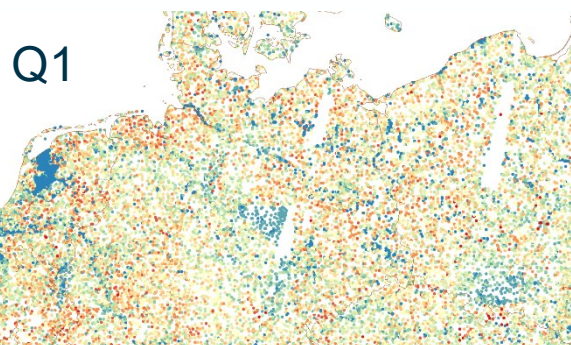
# Use Case – In-house project (LUCAS)

Double blind photointerpretation of Ortho Imagery and Copernicus VHR 2024 dataset for 1million points [1]



CDSE was used for extraction of NDVI per point for 4 quarters (Q1,...,Q4) to investigate ML predictions [2] as auxiliary information

[2]



# Onboarding to CDSE for NSIs / ONA

How to become a Copernicus Services User?

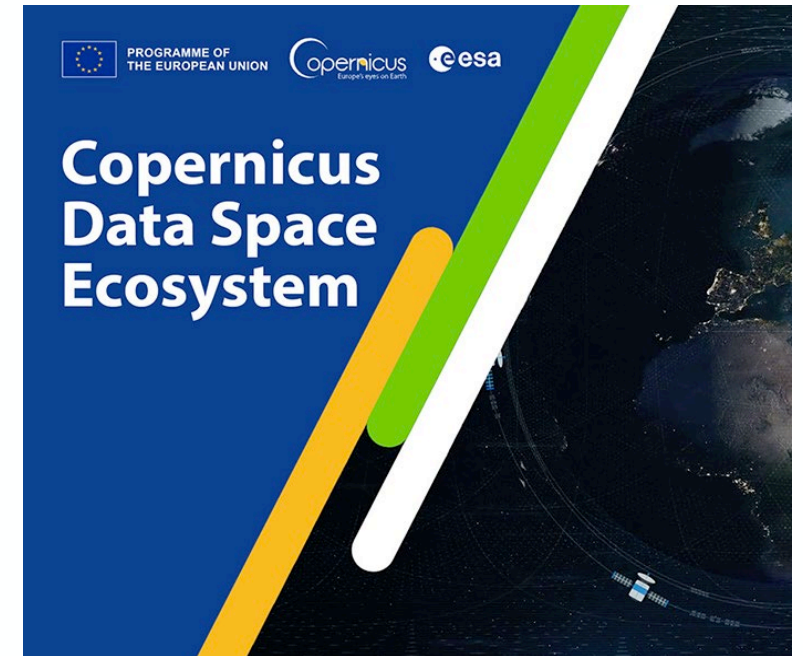
[Copernicus Services User | Copernicus Data Space Ecosystem](#)

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[More information](#)



[How to register to access Copernicus Contributing Missions data | Copernicus Data Space Ecosystem](#)

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# Thank you!

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