



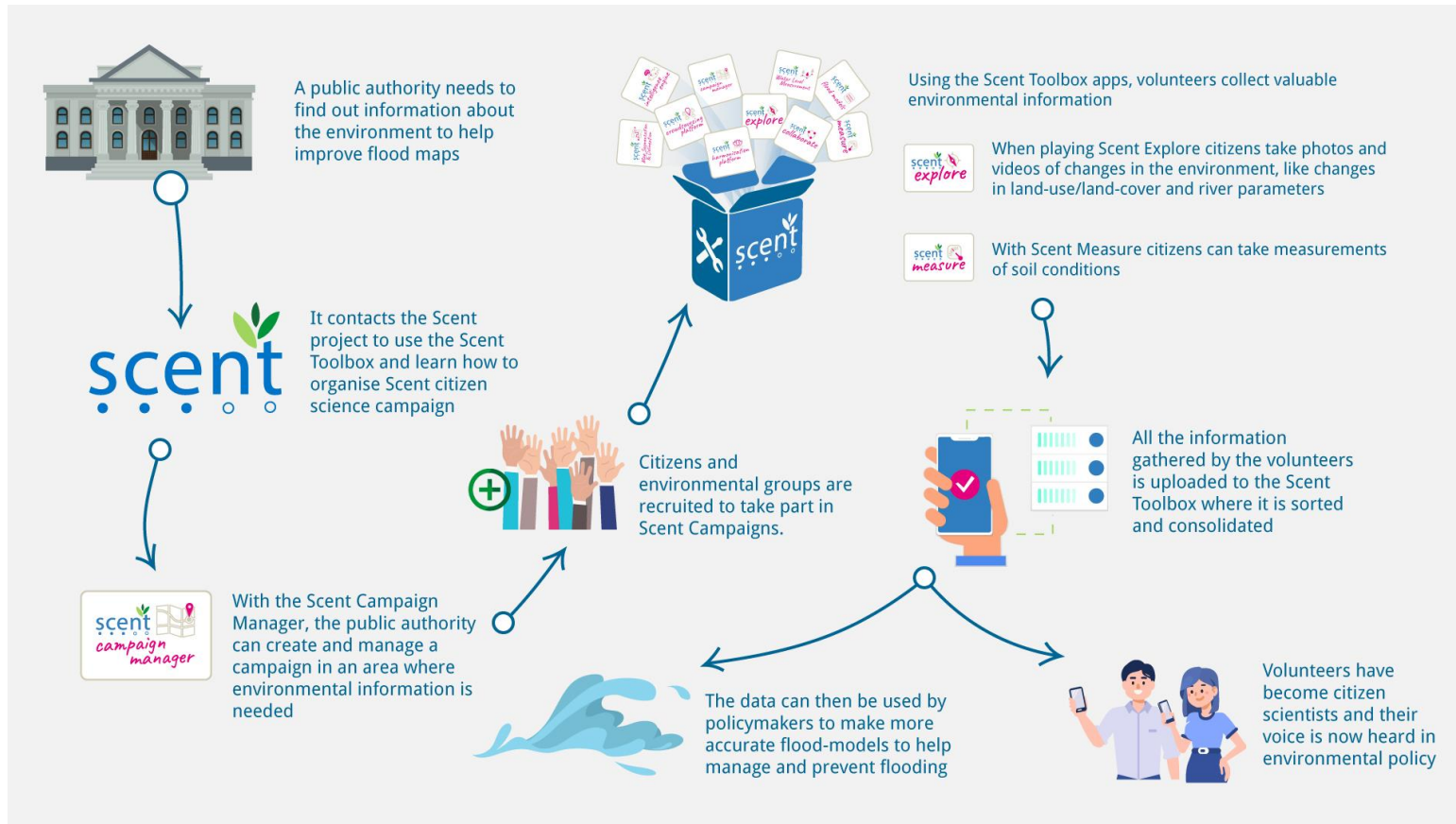
From crowdsourcing environmental measurements to their integration in the GEOSS portal

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H2020 Scent Citizen Observatory



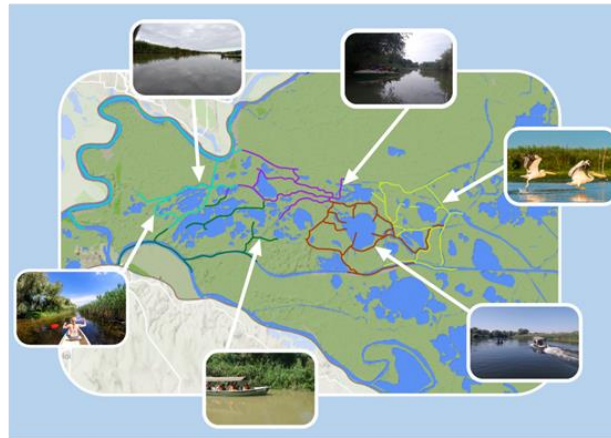
How does it work ?



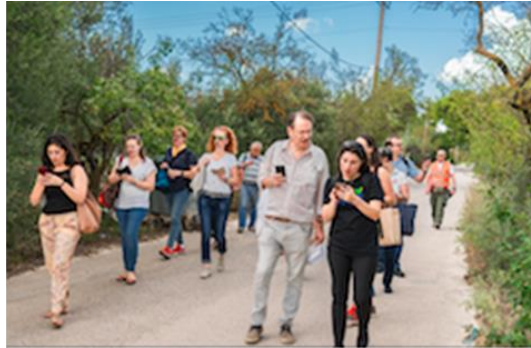
CS campaigns in Danube Delta



- ✓ Rural / remote environment
- ✓ Training session in beginning of each campaign
- ✓ On-board data collection
- ✓ Duration: 3-7 days
- ✓ 15-20 people per route, 8-10 volunteer per boat



CS campaigns in Kifisos



- ✓ Urban & rural environment
- ✓ Training session in the beginning of each campaign day
- ✓ Duration: 2-4 days
- ✓ 20-25 volunteers per route



River measurements

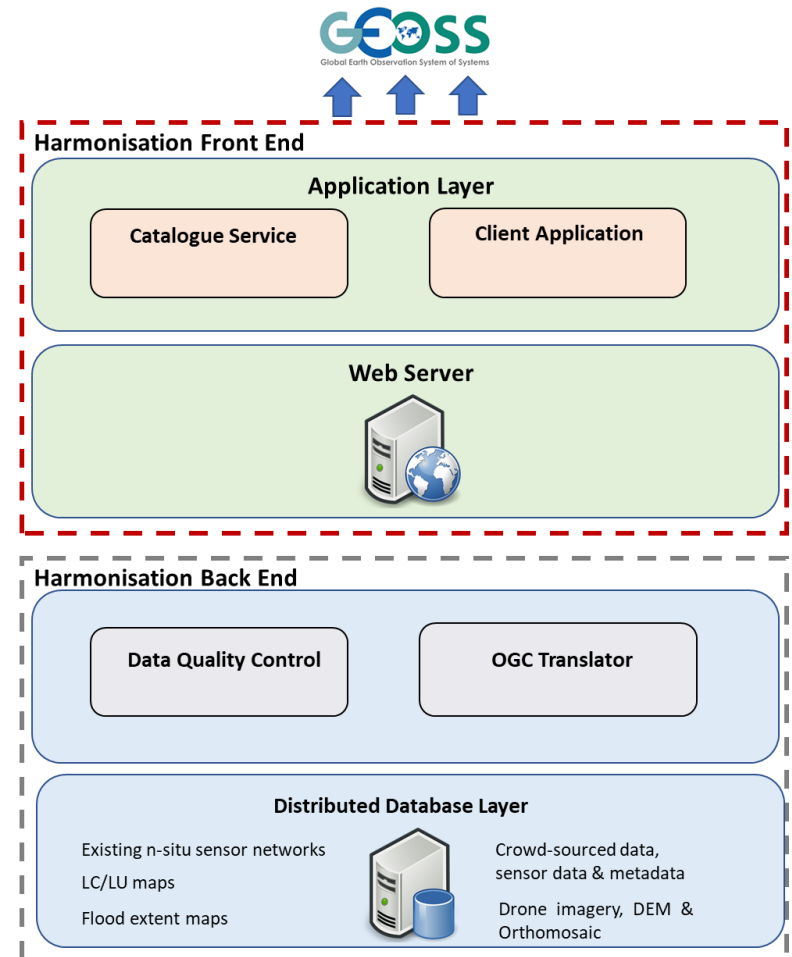
- **Water Level Measurement Tool:** It receives an image of a water level indicator that is half-submerged into water and extracts the water level measurement.
- **Water Velocity Calculation Tool:** It receives a video of a pre-defined floating object in a water body and calculates the surface velocity of the water.



SCENT Harmonisation Platform

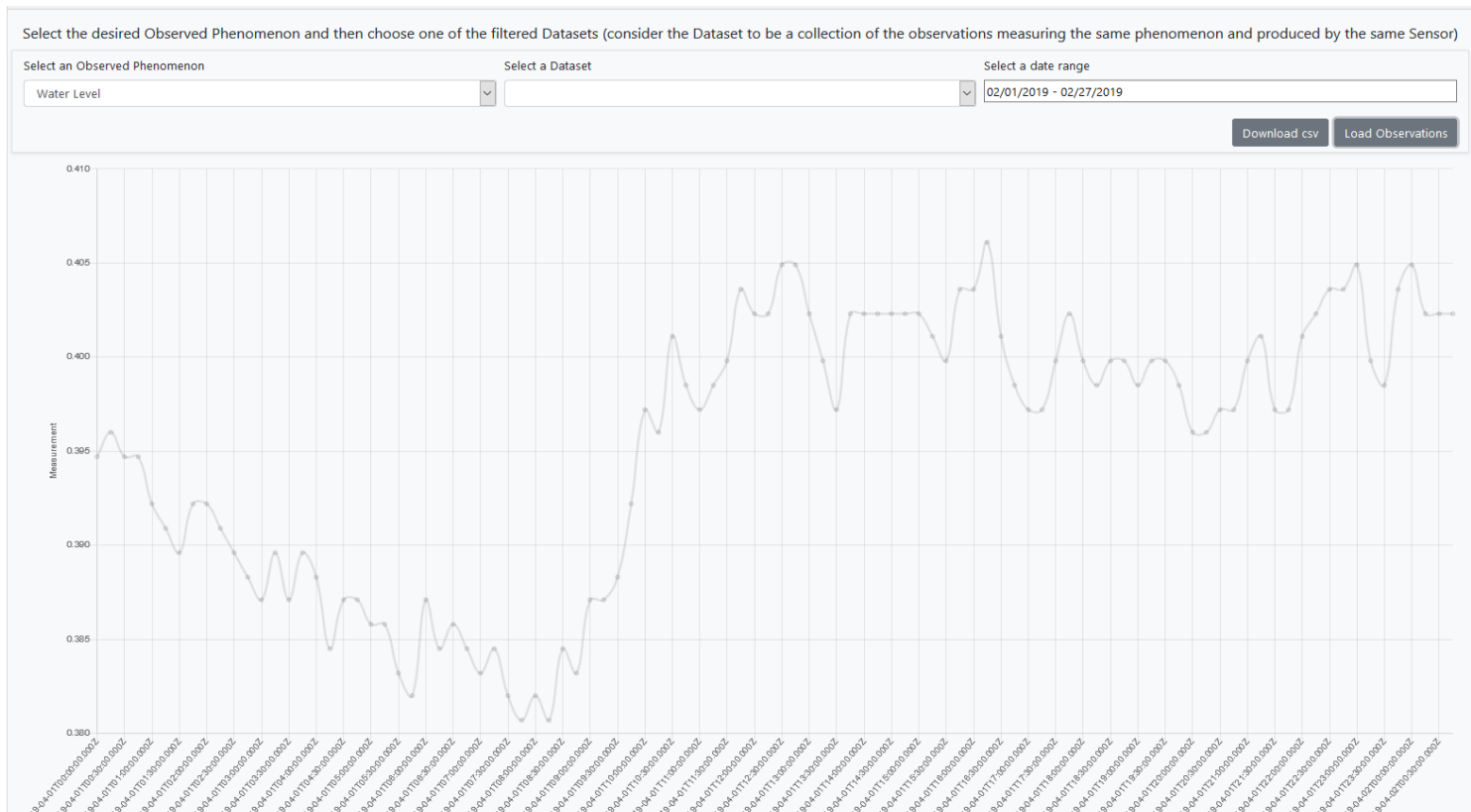


- Management storage, visualisation and provision of citizen-generated and in-situ data
- Data fusion of crowdsourced data with in-situ measurements
- Implementation of OGC web services
- Custom API with filtering capabilities for the provision of bulk data to stakeholders)



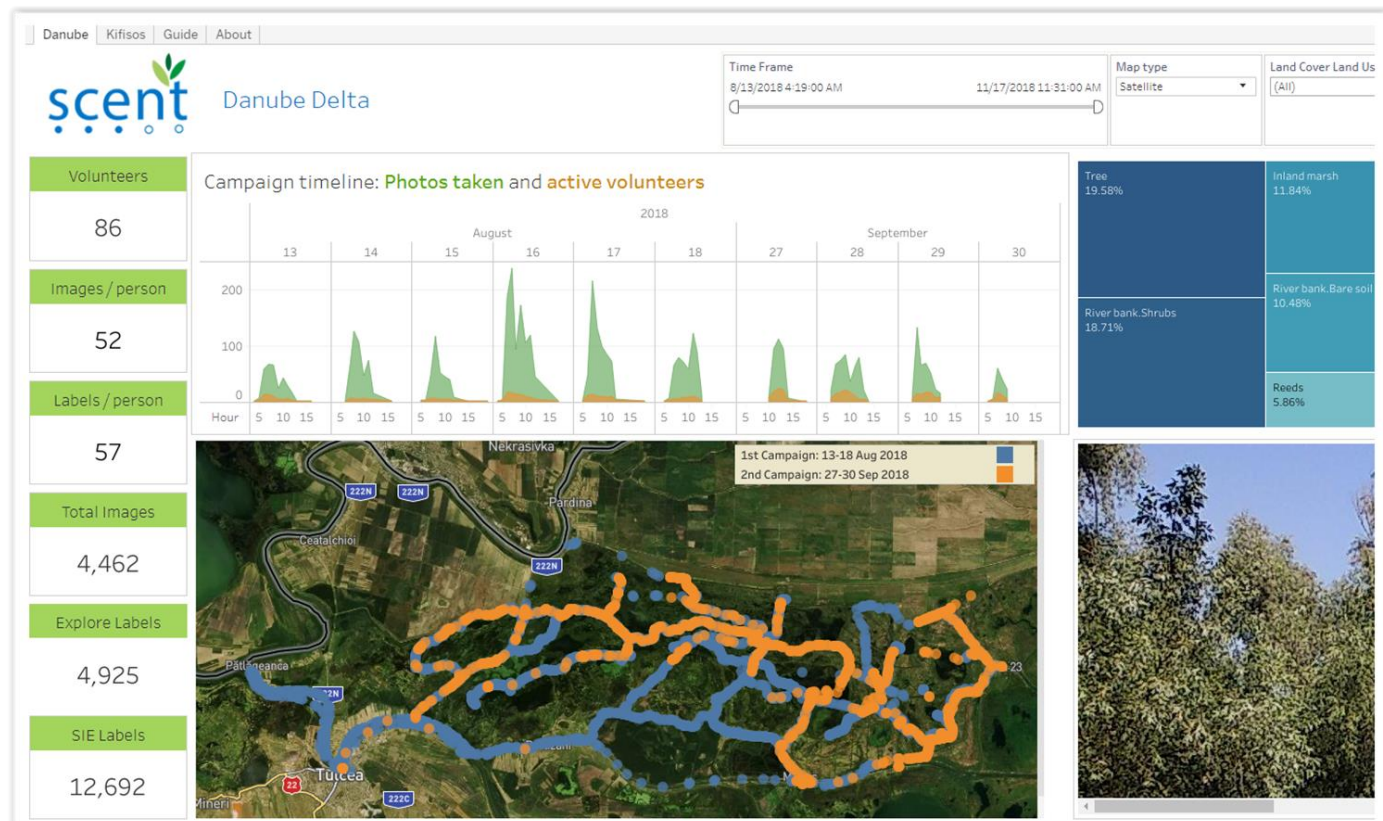
Harmonisation Platform - Visualisation Site

➤ Timeseries visualisation of citizen-generated measurements



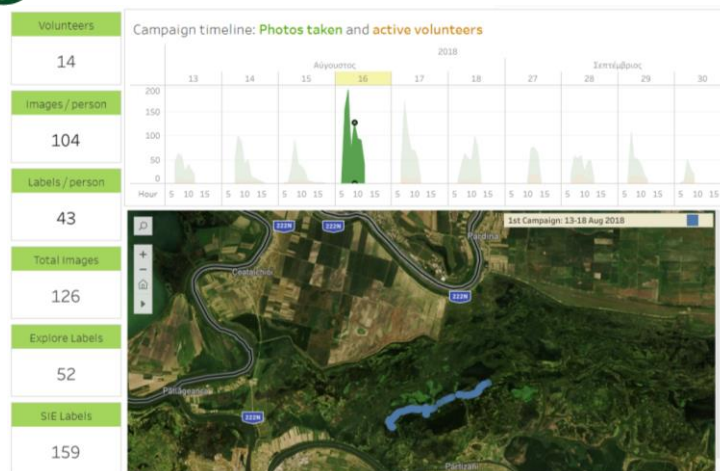
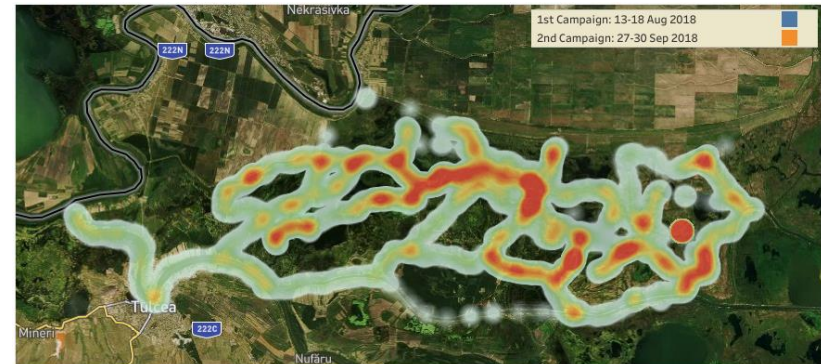
Harmonisation Platform - Visualisation Site

- Campaign dashboard enabling the spatial visualisation and graphic representation of the images of Land Cover/ Land Use elements



Harmonisation Platform - Visualisation Site

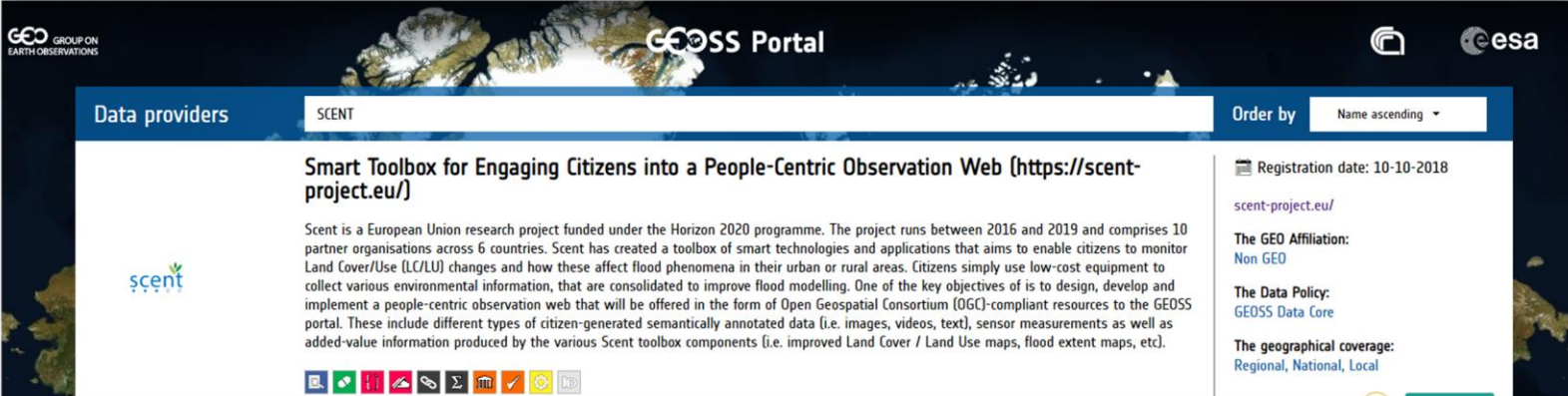

- Density graphs/heat maps for LC/LU spatial distribution inspection
- Campaign activity analysis across day-time and annotation's distribution across LC/LU classes



- Filtering based on campaign and LC/LU class/annotations and visual inspection of photos taken
- Focusing on data with respect to space and time

Connection with GEOSS

- Management storage, visualisation and provision of citizen-generated and in-situ data
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The screenshot displays the GEOSS Portal interface. At the top, the 'GEOSS Portal' title is centered, with the 'GEO GROUP ON EARTH OBSERVATIONS' logo on the left and the 'esa' logo on the right. Below the header, a search bar contains the text 'SCENT'. To the right of the search bar, there is an 'Order by' dropdown menu set to 'Name ascending'. The main content area features a card for the 'SCENT' data provider. The card includes the 'scent' logo, a title 'Smart Toolbox for Engaging Citizens into a People-Centric Observation Web (<https://scent-project.eu/>)', and a detailed description of the project. To the right of the description, there is a sidebar with metadata: 'Registration date: 10-10-2018', 'scent-project.eu/', 'The GEO Affiliation: Non GEO', 'The Data Policy: GEOSS Data Core', and 'The geographical coverage: Regional, National, Local'. At the bottom of the card, there is a row of icons representing various data types and services.

GEOSS Portal

Data providers SCENT

Order by Name ascending

Smart Toolbox for Engaging Citizens into a People-Centric Observation Web (<https://scent-project.eu/>)

Scent is a European Union research project funded under the Horizon 2020 programme. The project runs between 2016 and 2019 and comprises 10 partner organisations across 6 countries. Scent has created a toolbox of smart technologies and applications that aims to enable citizens to monitor Land Cover/Use (LC/LU) changes and how these affect flood phenomena in their urban or rural areas. Citizens simply use low-cost equipment to collect various environmental information, that are consolidated to improve flood modelling. One of the key objectives of is to design, develop and implement a people-centric observation web that will be offered in the form of Open Geospatial Consortium (OGC)-compliant resources to the GEOSS portal. These include different types of citizen-generated semantically annotated data (i.e. images, videos, text), sensor measurements as well as added-value information produced by the various Scent toolbox components (i.e. improved Land Cover / Land Use maps, flood extent maps, etc).

Registration date: 10-10-2018

scent-project.eu/

The GEO Affiliation:
Non GEO

The Data Policy:
GEOSS Data Core

The geographical coverage:
Regional, National, Local

Connection with GEOSS



GEOSS Portal

Enter search words

FILTER BY **ADVANCED**

Keyword	Format	Source
Protocol	Organisation	Service Health

Sensor measurements of air temperature collected in Danube Delta (Organisation: Smart Toolbox for Engaging Citizens...) It refers to air temperature measurements collected from volunteers through the use...	Metadata of event reports collected in Danube Delta (Organisation: Smart Toolbox for Engaging Citizens...) It refers to metadata of images of flood related events collected from volunteers...
Metadata of event reports collected in Kifisos (Organisation: Smart Toolbox for Engaging Citizens...) It refers to metadata of images of flood related events collected from volunteers...	Metadata of event reports collected in Danube Delta (Organisation: Smart Toolbox for Engaging Citizens...) It refers to metadata of images of flood related events collected from volunteers...
Metadata of images collected in Danube Delta (Organisation: Smart Toolbox for Engaging Citizens...) It refers to metadata (textual descriptions) of images of Land Cover/Land Use (LC/LU)...	Sensor measurements of soil moisture collected in Danube Delta (Organisation: Smart Toolbox for Engaging Citizens...) It refers to soil moisture measurements collected from volunteers through the use...
Sensor metadata for the portable sensors used in Danube Delta (Organisation: Smart Toolbox for Engaging Citizens...) It refers to the portable sensors used by...	Sensor measurements of soil moisture collected in Kifisos (Organisation: Smart Toolbox for Engaging Citizens...) It refers to soil moisture measurements...

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THANK YOU!

Any Questions?

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