Establish the connection of Citizen Observatories resources with central catalogue

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Challenge Aim

- Citizen Observatories → community-based environmental monitoring and information systems
- Fragmented landscape of related activities
- Enable the integration of the H2020 Citizen Observatories (i.e. LandSense, GroundTruth2.0, GROW, SCENT) datasets with the NextGEOSS catalogue as an approach to connect citizen science into GEOSS.

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Background

- The use of mobile devices and low-cost portable sensors coupled with data analytics, quality assurance and modelling approaches pave the way for citizens to have an active role and voice in environmental decision making.
- Citizen-science campaigns conducted across different European regions and beyond, leading to the collection of valuable environmental information i.e. land cover/land use, soil parameters, water & air quality parameters, phenological observations, disaster resilience
- Connection with H2020 WeObserve Communities of Practice (www.weobserve.eu/cops/)

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Results

- Analysis of existing infrastructure and endpoints that enable machine-to-machine access to resources.
- Compilation of a template /online questionnaire for documenting data and resources involving community-based environmental monitoring citizen science projects.
- Implementation, testing and deployment of a data harvester for a part of SCENT citizen-science data, aiming to constitute a prototype for the ingestion of citizen-science resources (metadata) into a centralised catalogue.
- The implemented harvester is also available in github: https://github.com/NextGeoss/ckanext-nextgeossharvest/wiki/17.-Harvesting-Scent-products

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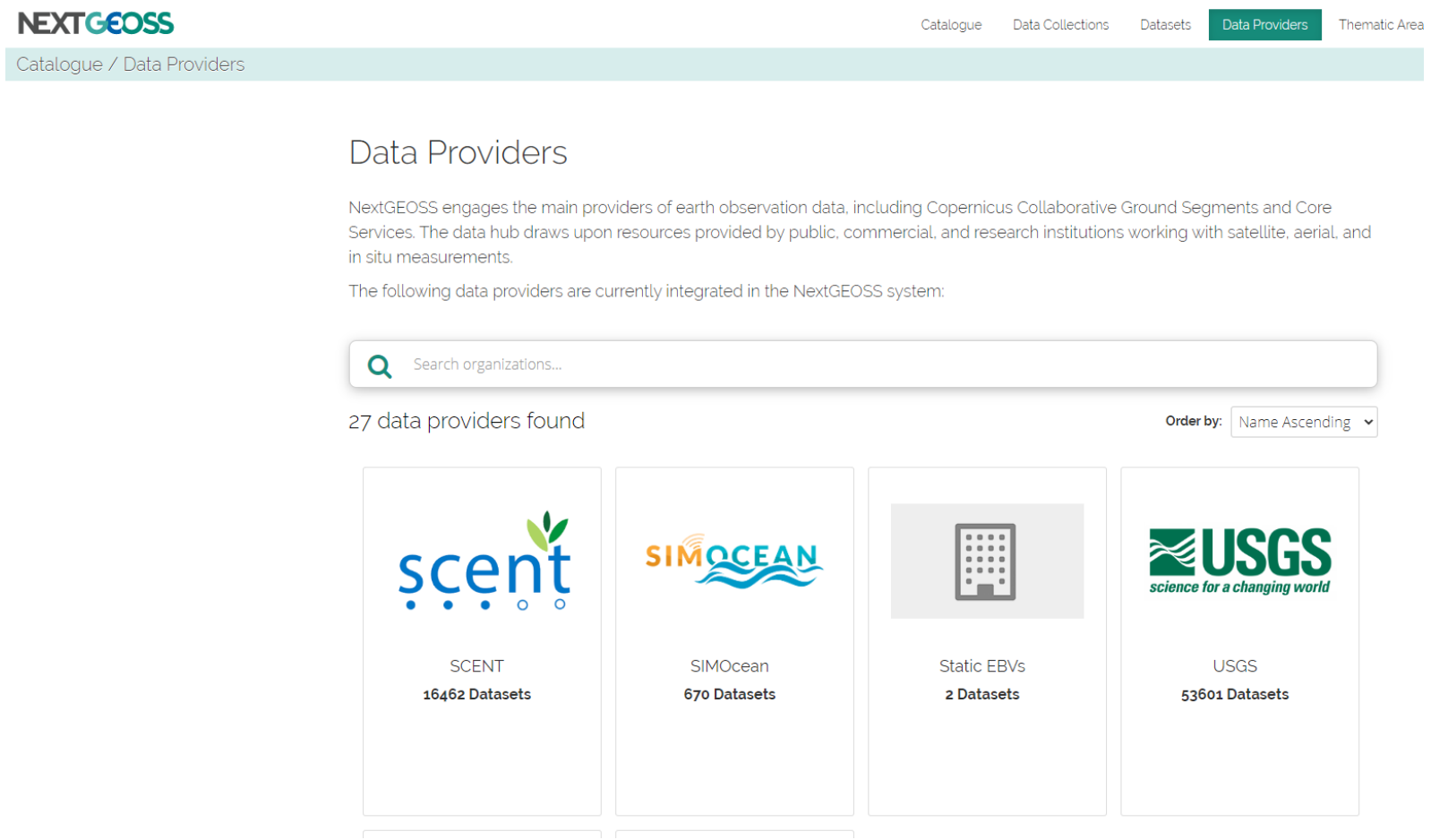
Results



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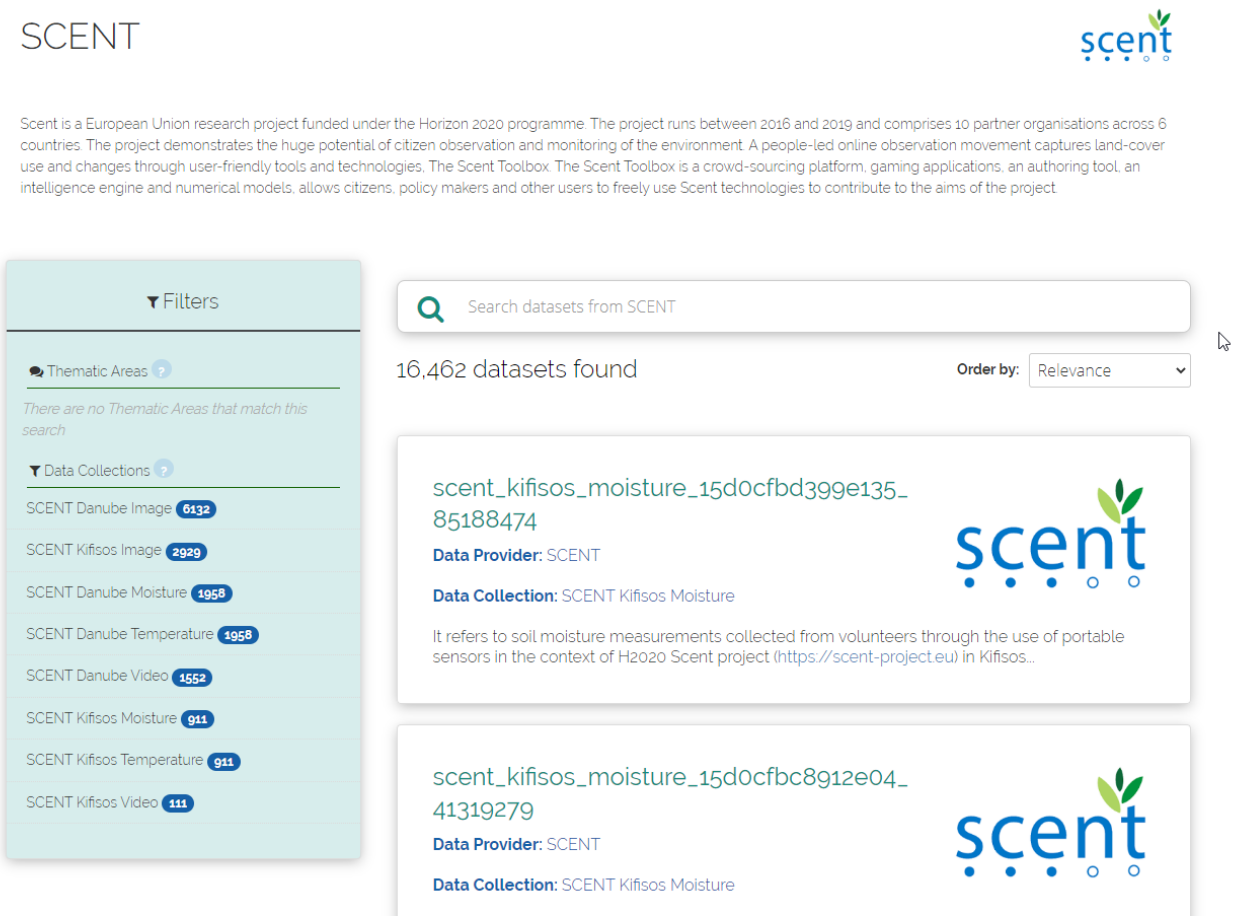
Results



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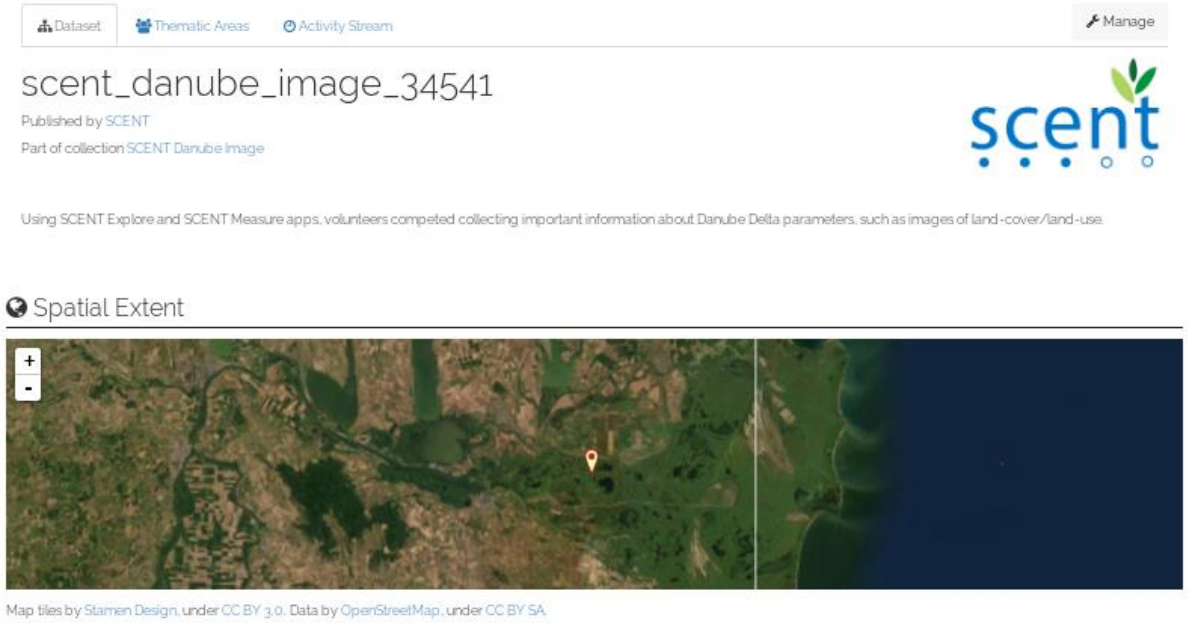
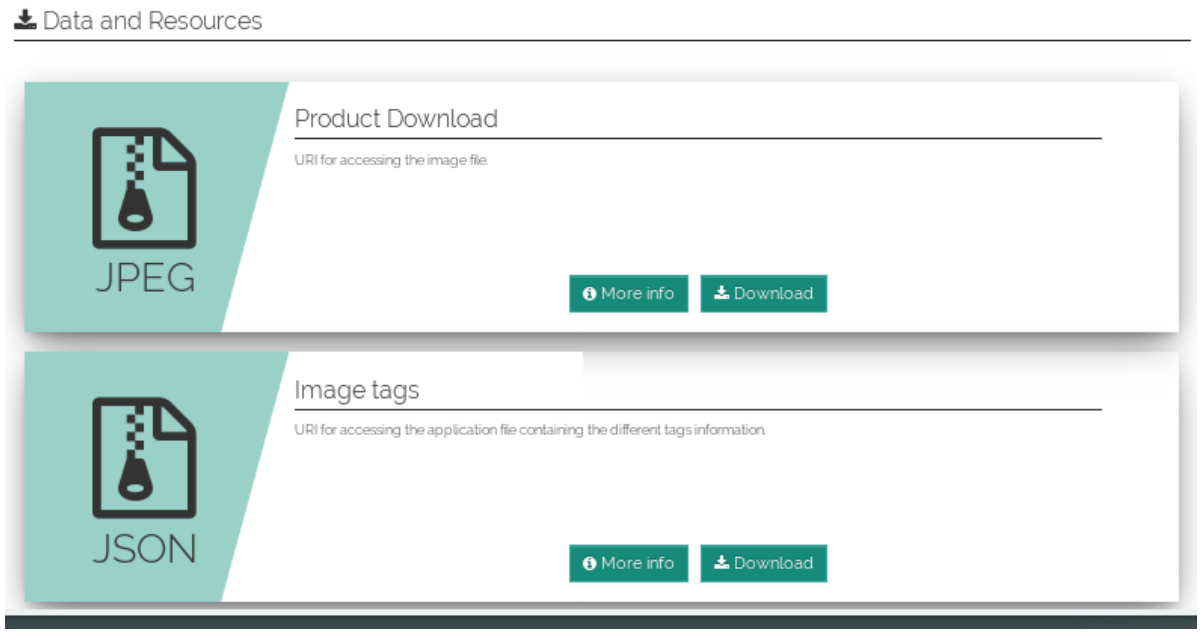
Results





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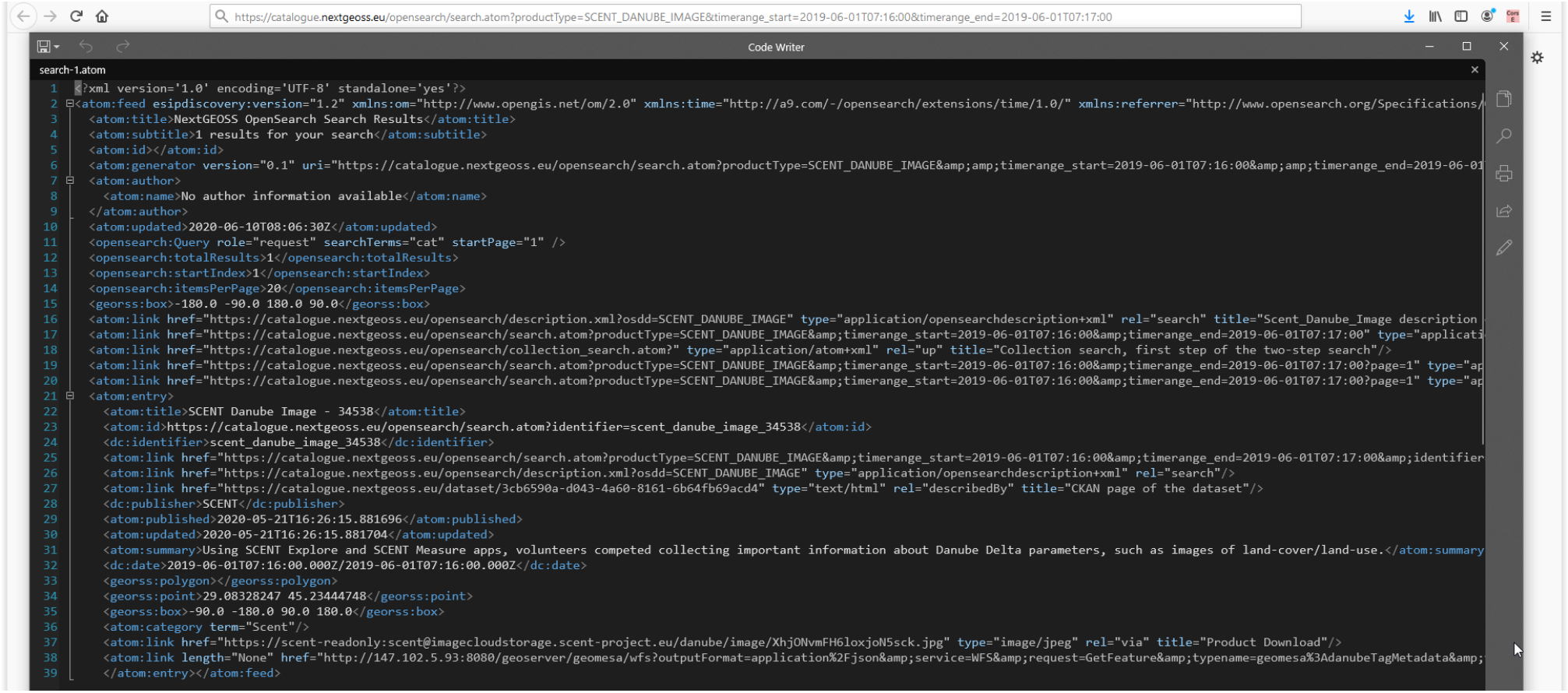
Results



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Conclusion

Main benefits:

- Maximise the value of citizen-science data by facilitating the discoverability and usability along with EO and other in-situ data;
- Deterring factor towards creating silos of resources;
- Promoting the use of open solutions and common standards for data sharing;
- Facilitate uptake of citizen-science resources as part of SDGs monitoring and implementation processes;
- Applicable methodology for other existing Citizen Observatories data.