The Growing Role of GEO in the Urban Nexus including Citizen Science

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Role of Citizens in Tackling Urban Issues

• Stakeholders in co-creation of urban solutions/Living Labs
• Adopting more sustainable practices, e.g., urban mobility, greening, renewables
• As citizen scientists / engagement in Citizen Observatories / engagement in participatory processes
  • Monitoring urban biodiversity, air pollution, flooding, thermal comfort, greenspace quality (in situ data collection/sensors)
  • Visual interpretation of imagery for training/validation of remotely sensed products
Impediments and Needs

- Many issues related to data
  - Data interoperability requirements
  - Discoverability vs. standards
  - Data quality
  - Lack of data / data not aligned with needs
- Many citizen science projects take place at the local level
- What are the benefits to citizens?
- Federation and registration infrastructure missing
- More dialogue between cities/citizen science projects/citizen observatories
- More projects and funding for citizen observatories, e.g., Horizon Europe’s recent call on urban sensing and EO
Relevant Activities in GEO

• GEO Citizen Science Community Activity
  • Mapping of citizen science, EO and the SDGs including SDG 11
  • Interoperability experiments
  • Earth Challenge covering urban issues
  • Lisbon Declaration as roadmap for a way forward
  • Showcasing examples/good practice, funded projects

• Global Urban Observation and Information Initiative
  • EXTREMA project

• GEO Human Planet Initiative
  • Geo-Wiki campaign to collect reference data on built-up surfaces