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HARMONIZATION OF EUROPEAN
LAND USE AND LAND COVER DATABASES
FOR THE CREATION OF VALUE ADDED SERVICES

# National Land Information System

## Pilot 2.1 - Easy Exploration of Complex Data

*Tomas Soukup, WP3 leader, GISAT*

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- Land - why it is so important
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# Land - why it is so important

- Land Cover - reflects potential for land to provide services
- Land Use - reflects how this potential is actually used
- Changes in Land Cover and Land Use reflect related natural and socio-economic processes behind these changes
- Land Cover / Land Use as key datasets to help integrate other data - integrated assessment

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# Land - why it is so important

- An understanding of the causes and the implications of **land cover** and **land use patterns, their changes and trends** is a fundamental part of spatial planning for sustainable development.
- Together, **land cover and land use** provide for particular territory complementary **information both on landscape potential and on realizing this potential** - the information which is essential for future decisions.

*Landscape Mosaic, painting by Jerry Points © Jerry Points*

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# From mapping to monitoring

- Strong need for spatial data on Land Cover / Land Use
- Strong need for long-term consistent monitoring
- Reflection on European level (CORINE LC, GMES Land services: Urban Atlas, GIO High Resolution Layers)
- Reflection on national level, regional and local level (SIOSE, LISA…. see more soon in your district)
- **more temporality to come - a clue for understanding**

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# From scarceness to congestion

- In the past: data shortage - **recently: flooded by data**
- More to come in LC / LU: **Sentinels era to come**

INSPIRE

- Data availability
- Data accessibility

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- Data harmonisation
- Data integration

2.1 Focus

- Data presentation, exploration and analysis

# LI System requirements identified

- provide integrated view (multiple spatial / non-spatial data sources, multi-temporality)
- provide user-friendly interface
- provide instant response
- support (non-technical) policy discussion
- support  hardcopy reporting as well as live collaboration
- flexible for customisation - **develop flexible framework**

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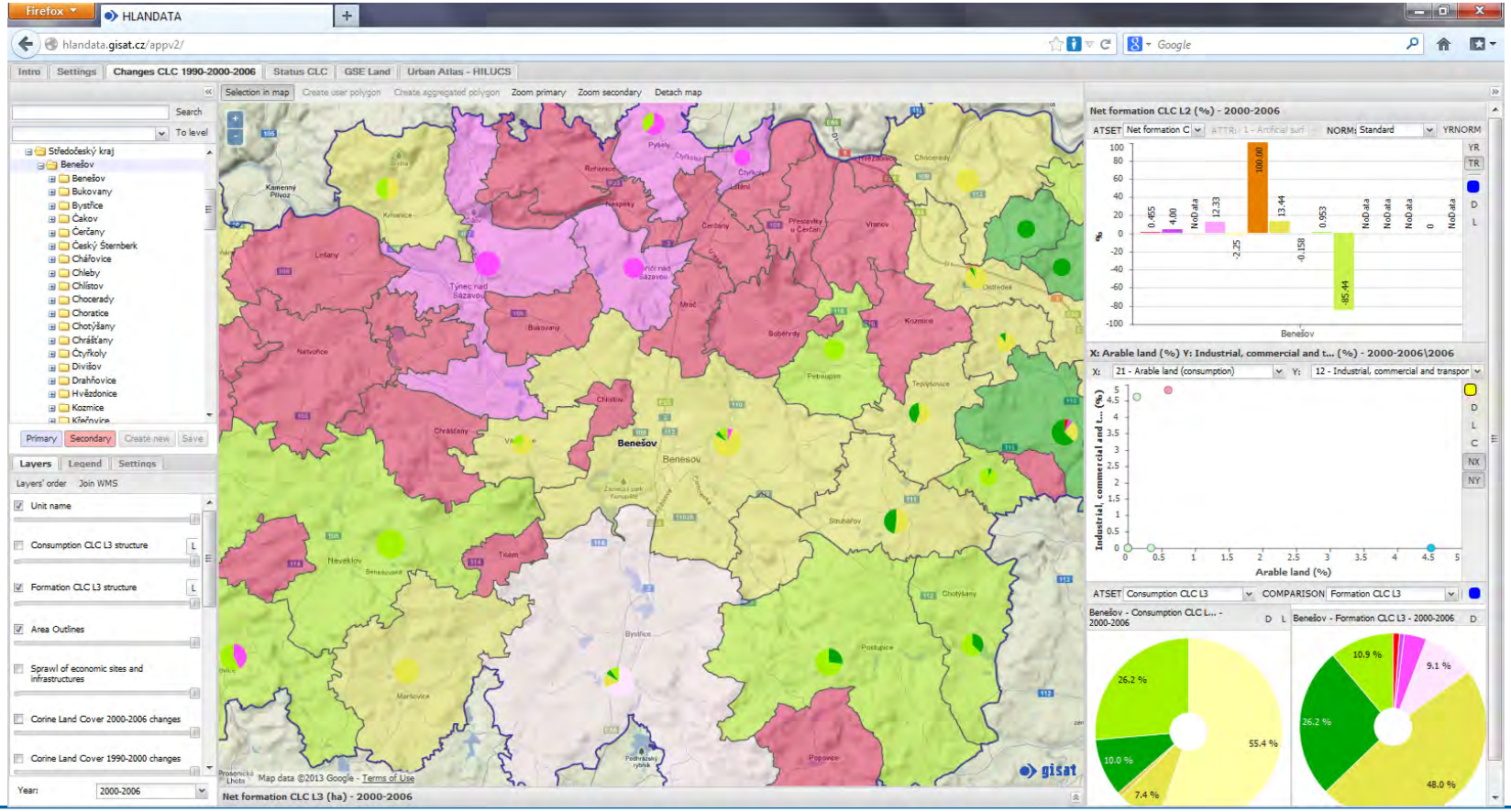
# Key features implemented

- ✔ **seamless analysis scale – flexible analytical units**



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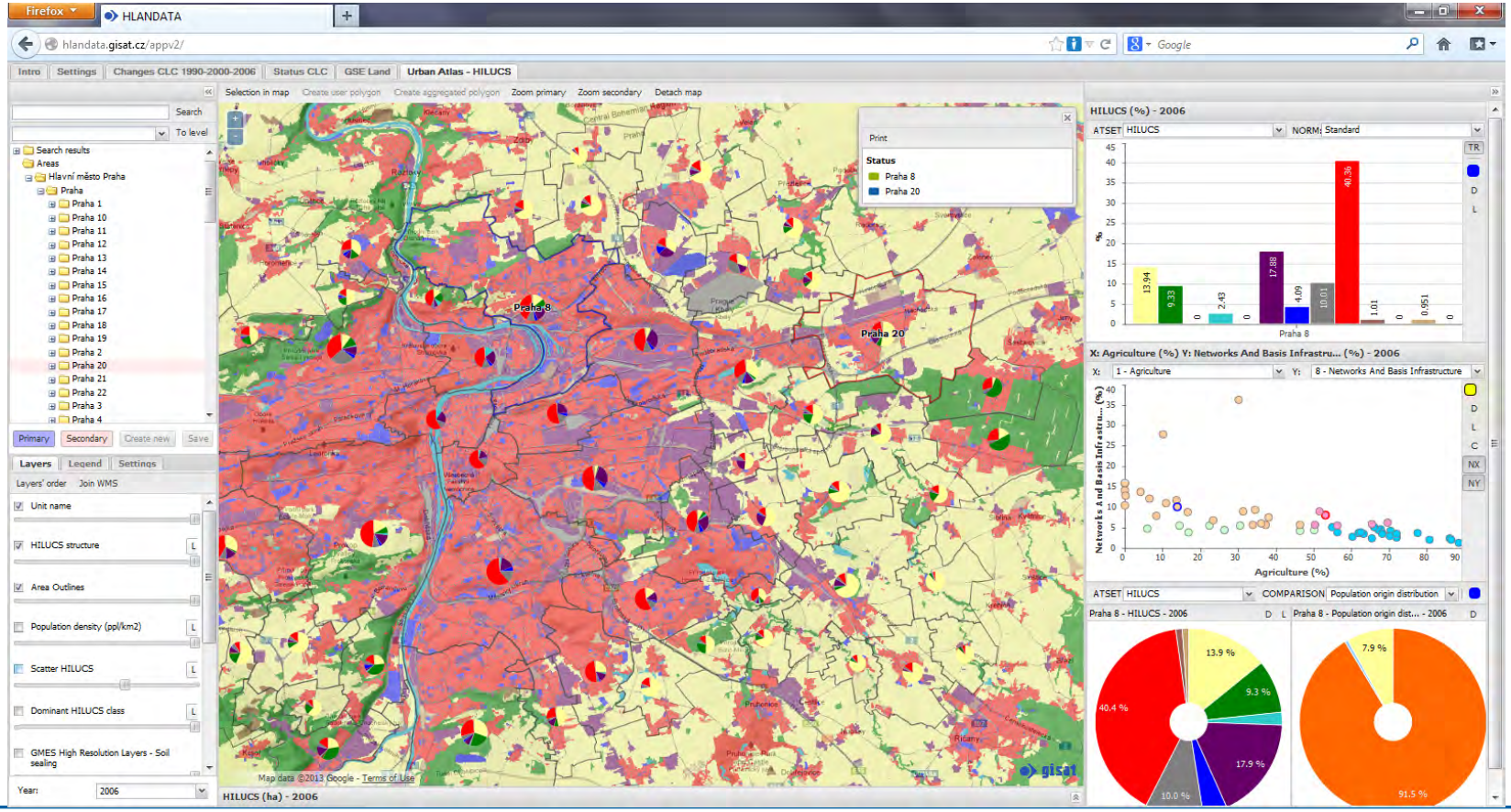
# Key features implemented

- ✔ **flexible analysis scope – spatial / temporal / thematic**



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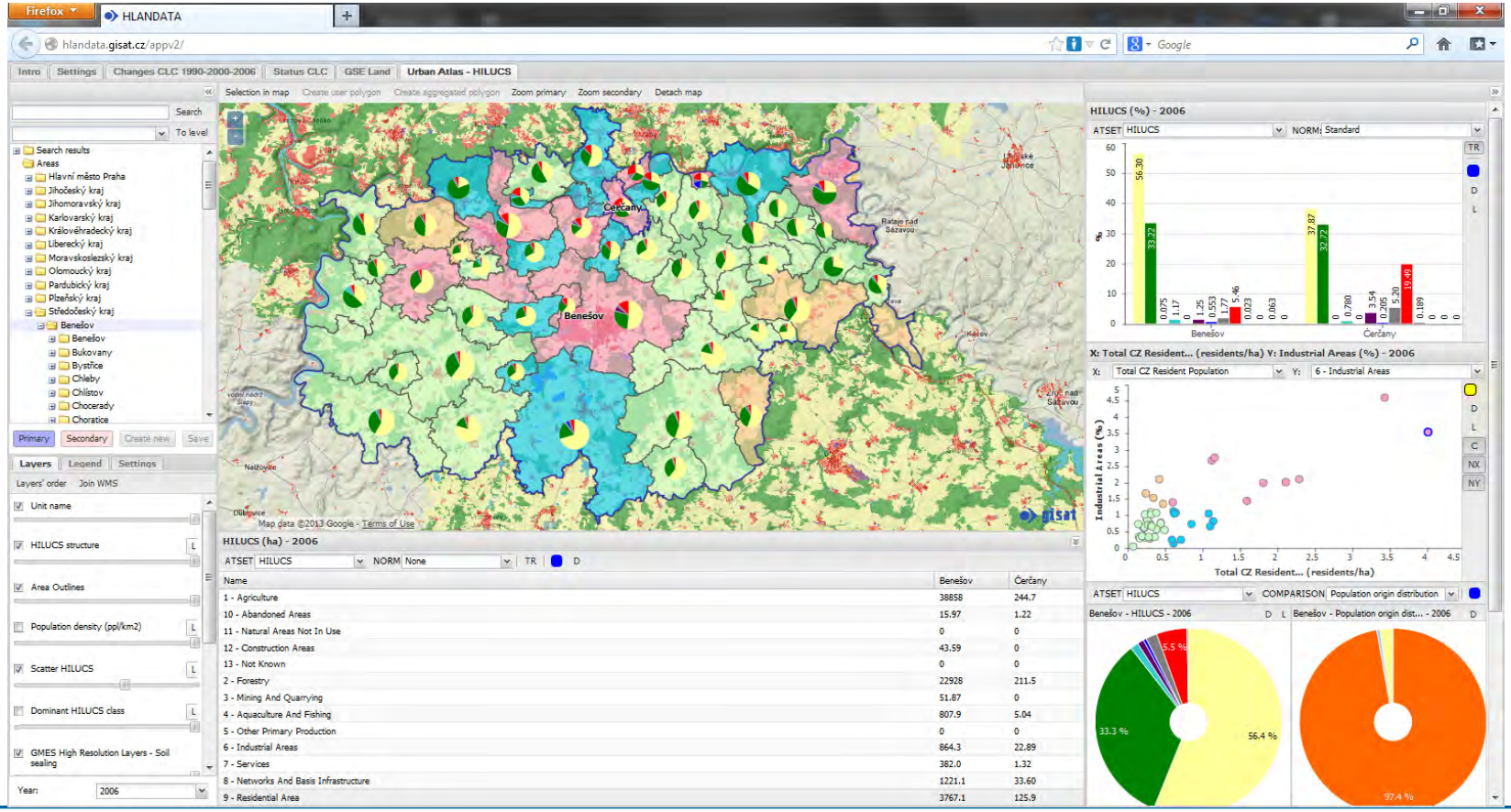
# Key features implemented

- ✔ various data integration – spatial / non-spatial



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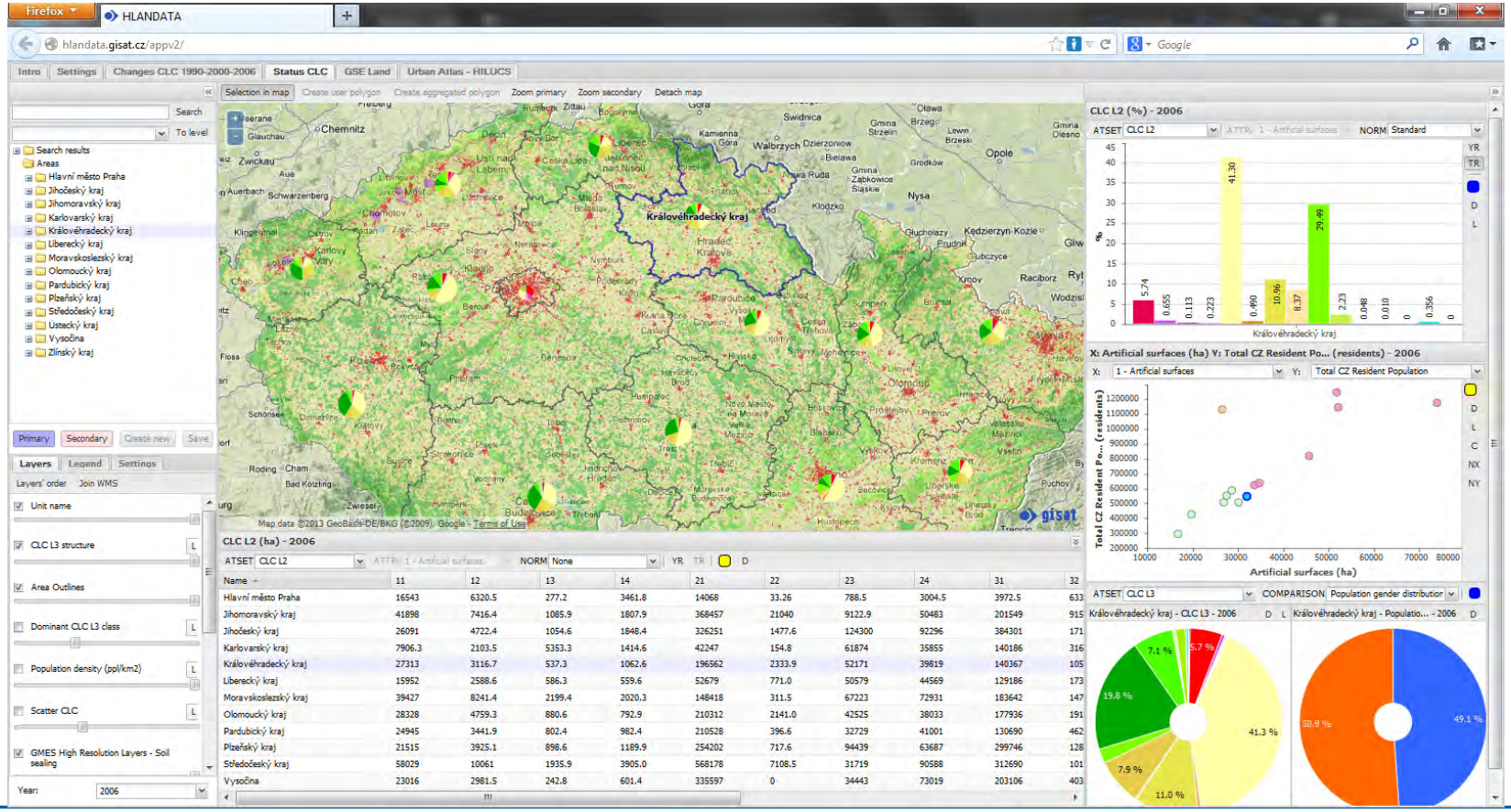
# Key features implemented

- various presentation modes – active and interlinked



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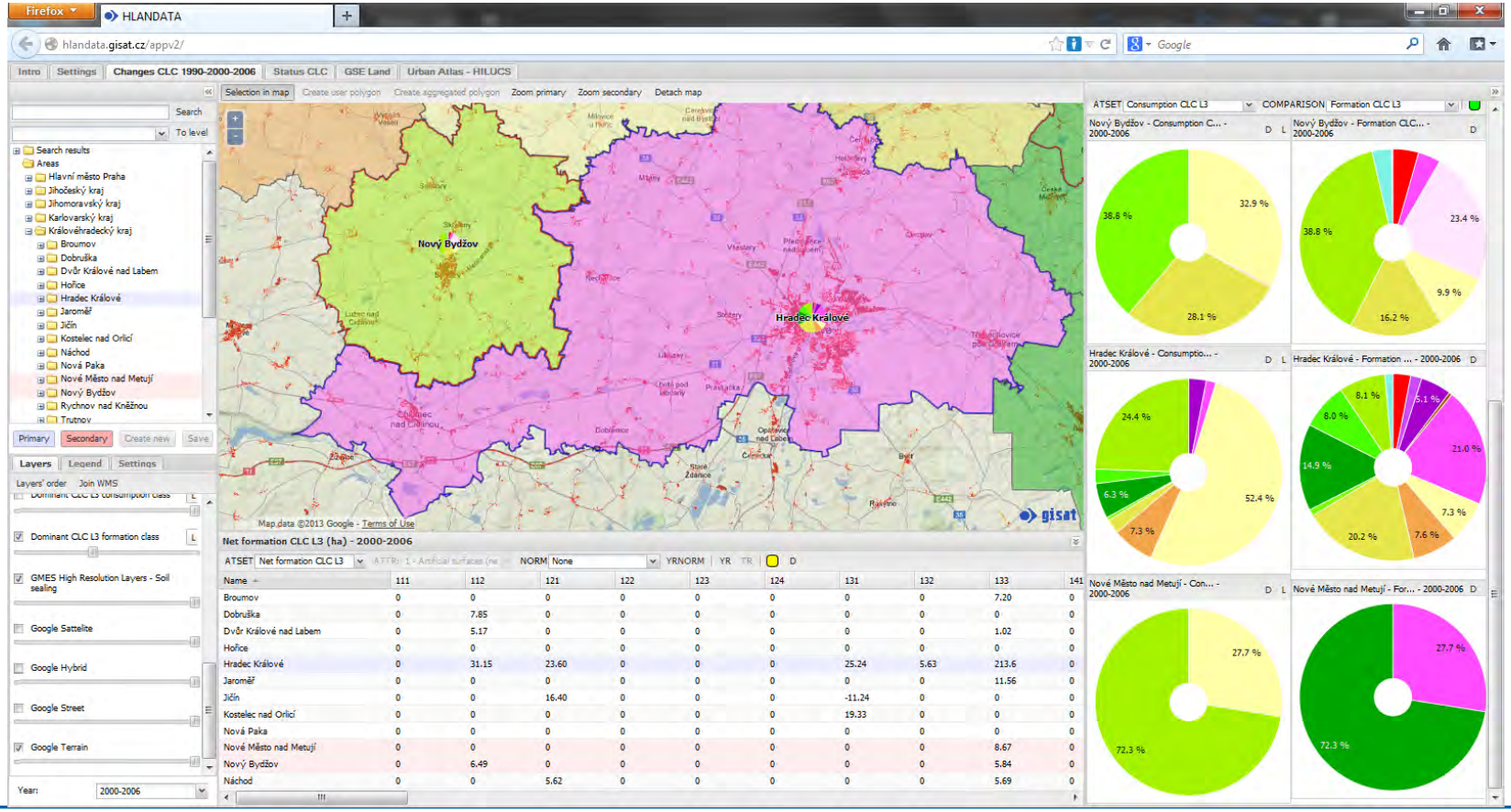
# Key features implemented

- fast / instant response



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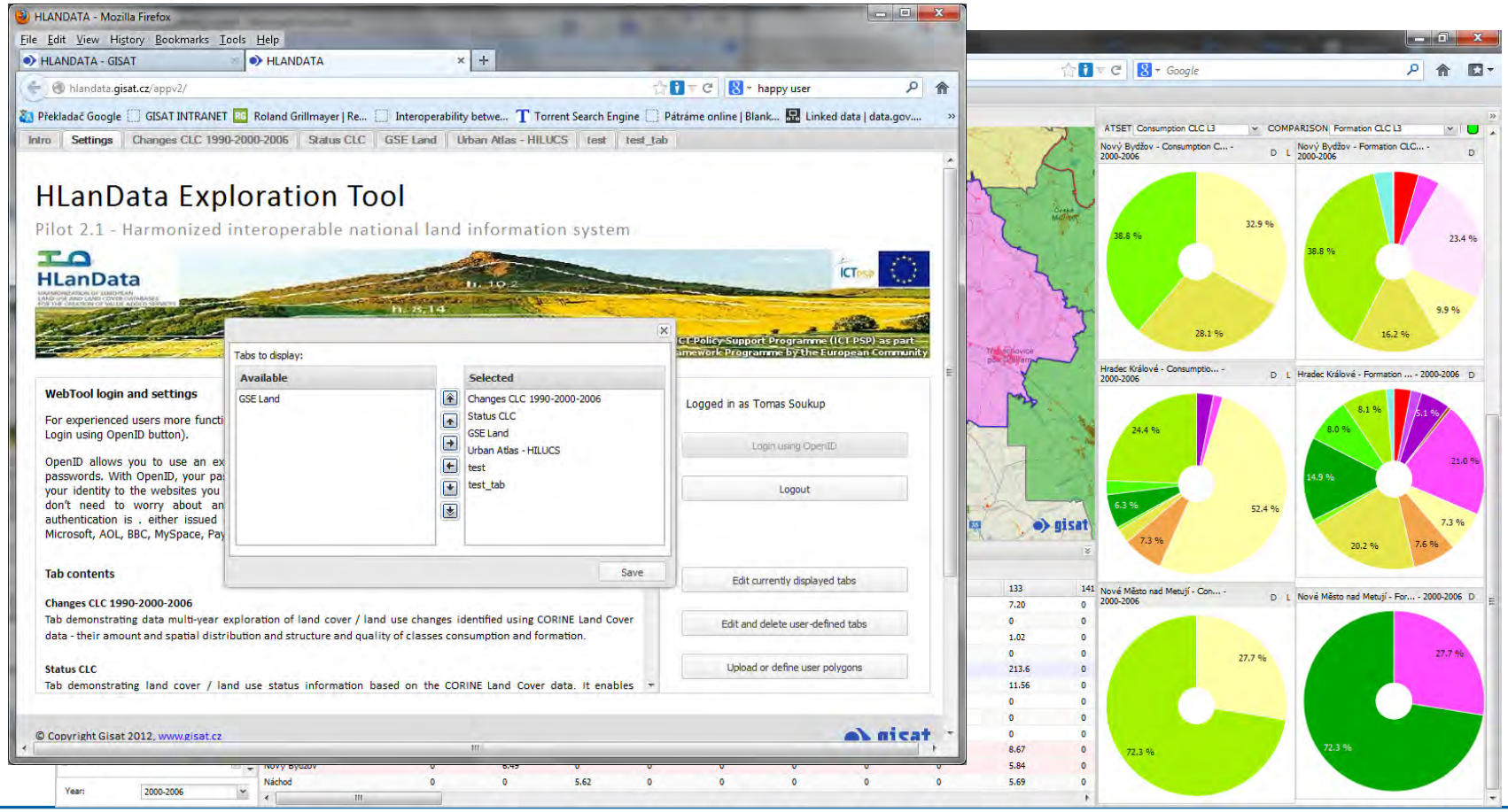
# Key features implemented

- user preferences – user authentification



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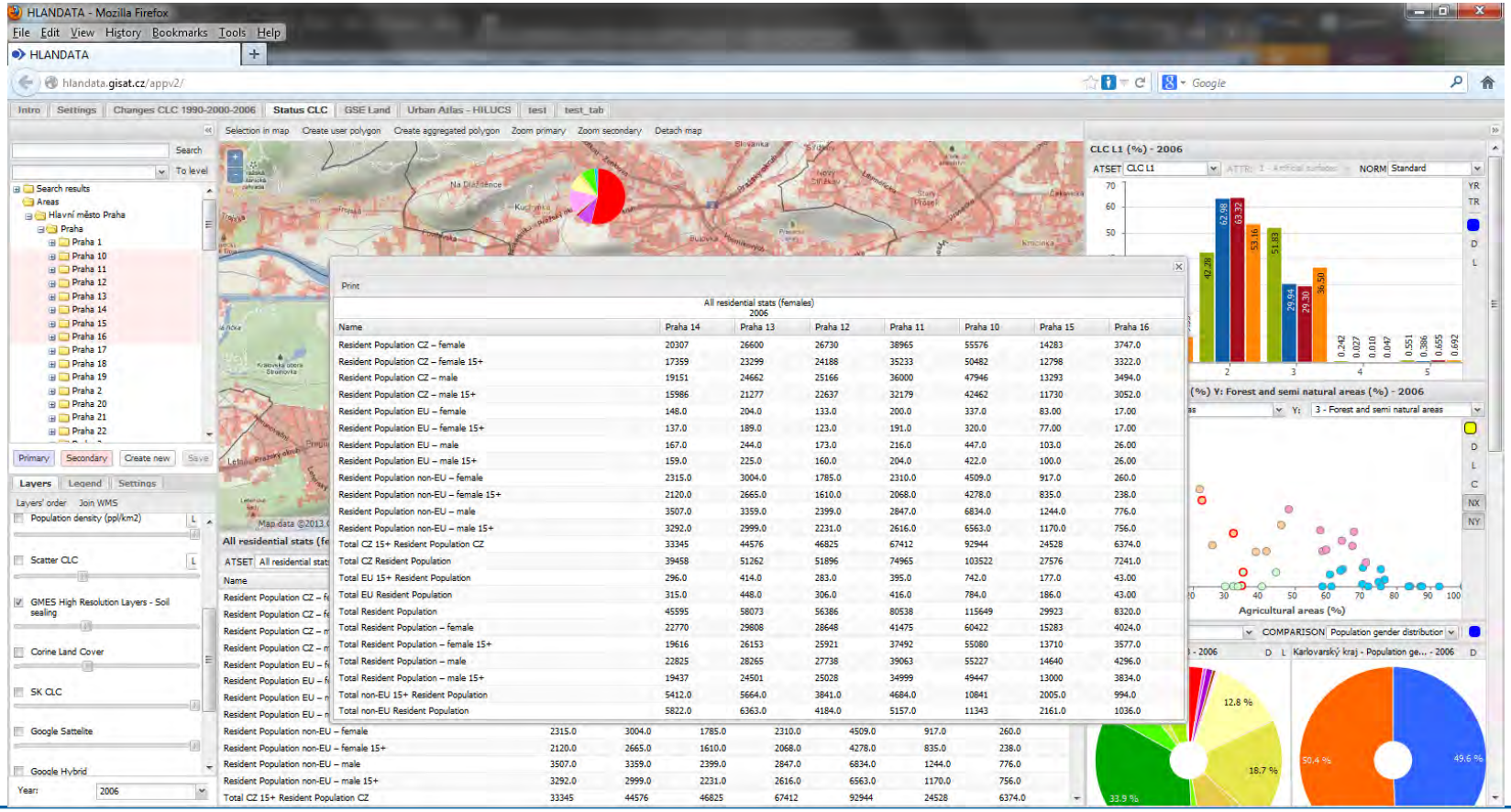
# Key features implemented

- collaboration - elements export



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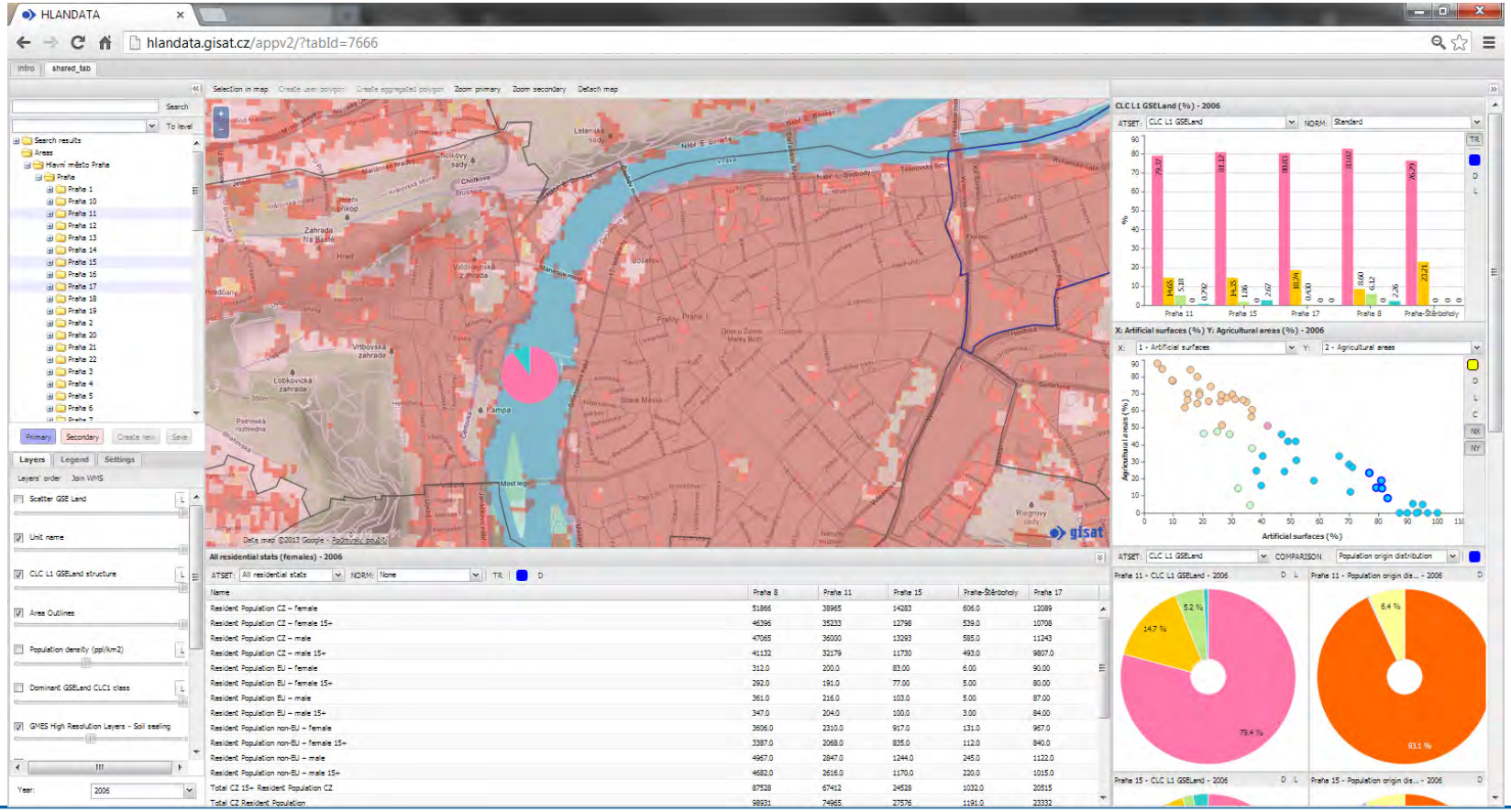
# Key features implemented

- collaboration - views sharing



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# User validation / utility feedback

- very positive feedback on concept
- very positive feedback on performance
- very positive feedback on integrated data exploration
- Suggestions for more interface friendliness / clarity
- Suggestions for more thematically focused clones
- Suggestions for more documentation
- Suggestions for additional features

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# Spin-offs / Follow-ups

- **UrbanAtlas Exploration Tool** - GMES Masters 2012

  http://urbanatlas.gisat.cz

- **SATCHMO AFRICA** - geoland2

  http://satchmo-africa.gisat.cz

- **EOEUROPA** - European Investment Bank / ESA

  http://eoeuropa.gisat.cz

- **PUMA** - World Bank

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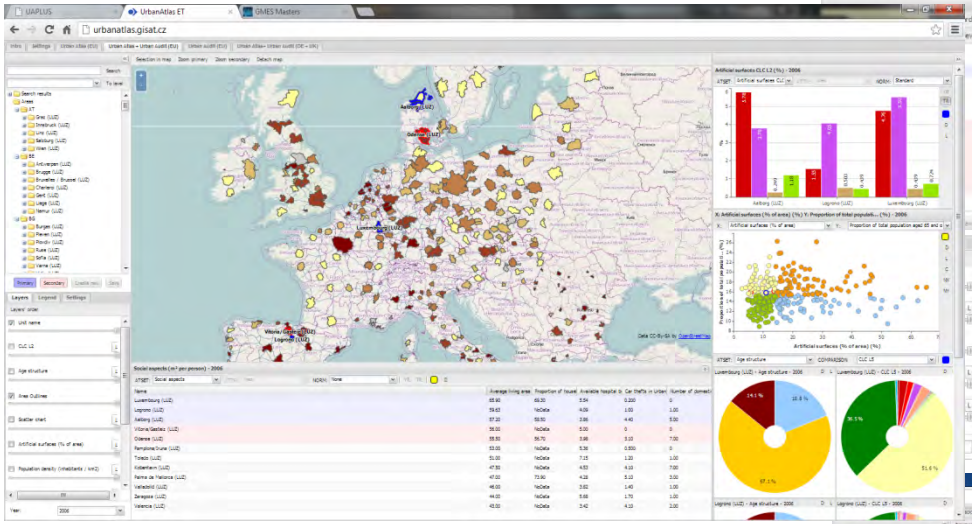
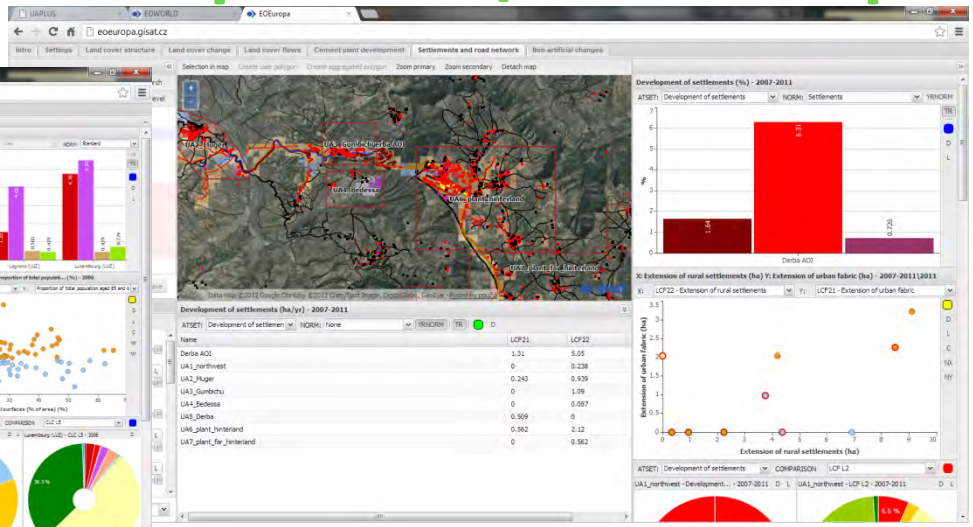
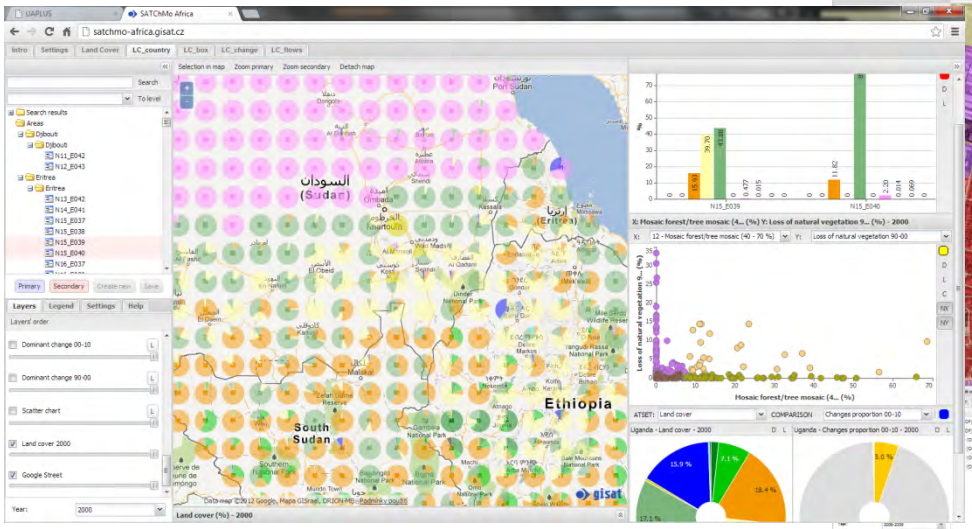
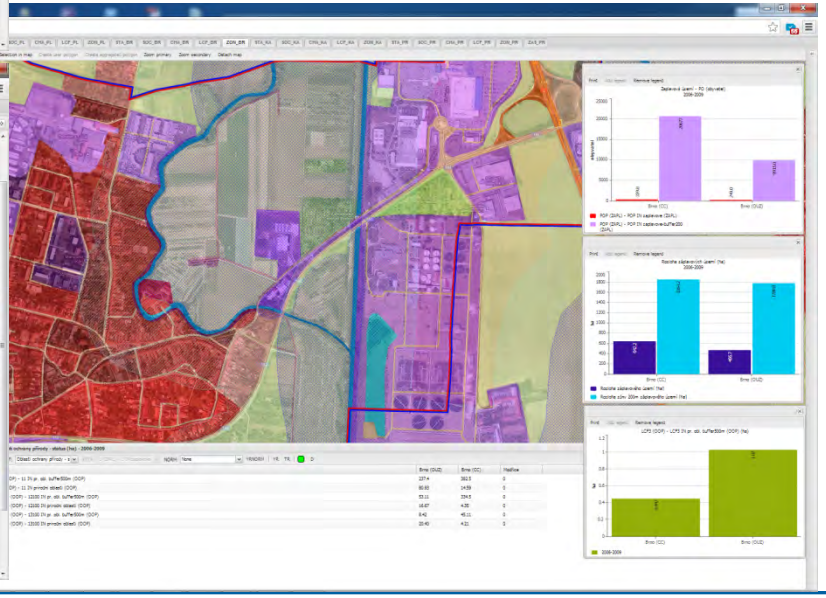
# Spin-offs / Follow-ups



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# Conclusion

- Far more data to come - far more soon
- Availability of harmonised data is a way forward, but not the end
- It matters to deliver data in the form accessible by non-technicians
- It matters to provide interactive exploration tool
- It helps transform complex data into relevant information to decision makers

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# Conclusion

Recent achievements in web presentation capabilities, data visualisation, data-driven documents or infographics facilitate development of new data delivery options

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# Thank you


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