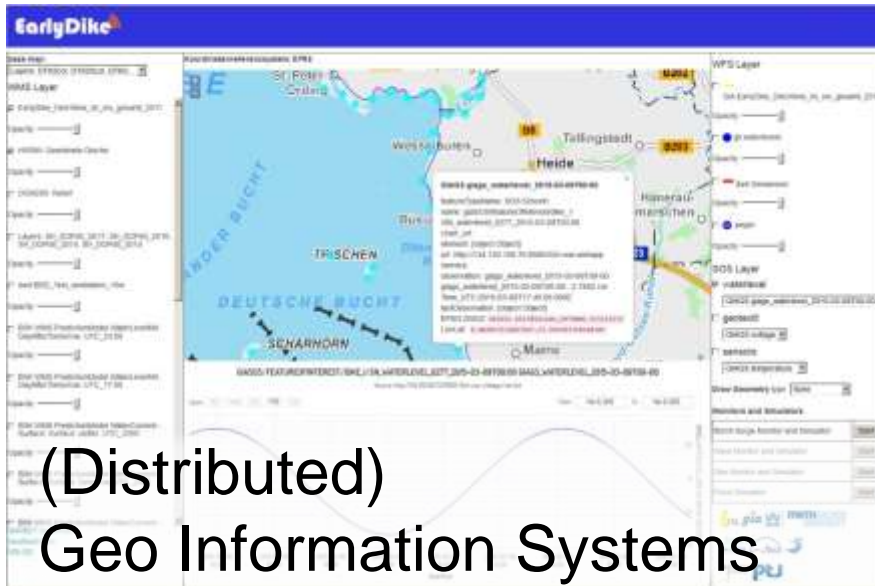


3D Data Capturing and Modeling (for BIM)



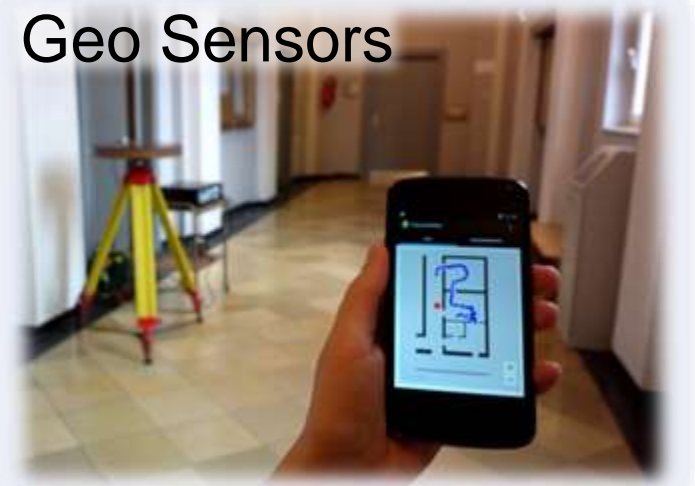
[Source: Katasteramt der Städteregion Aachen und geobasisNRW 2014]

- Data Capturing
- Automatic Modeling (→ BIM)
- Application (e.g. Mixed Reality)



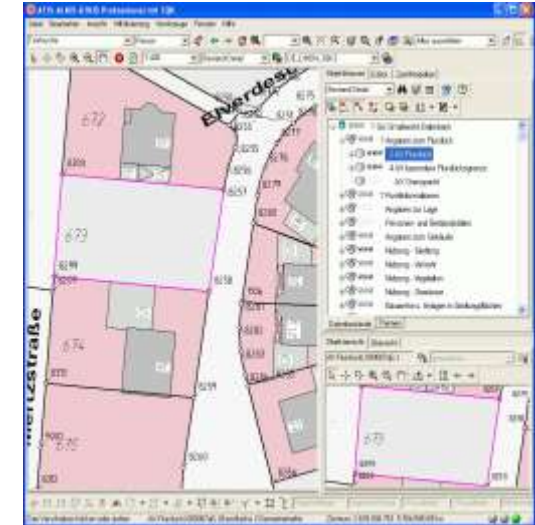
- Cadastral Information Systems
- Geo Services, Geo Data Infrastructures, IoT
- Mobile Applications

Geo Sensors

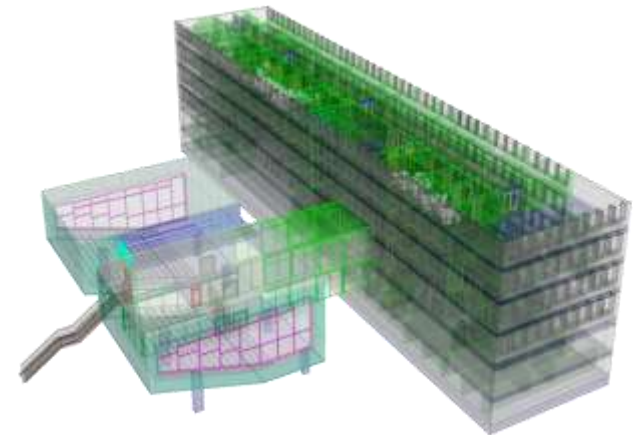
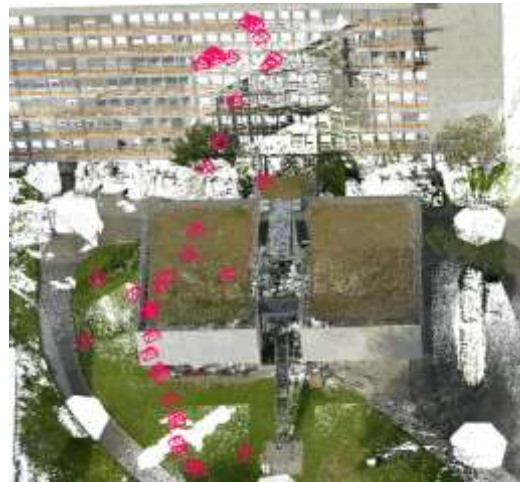
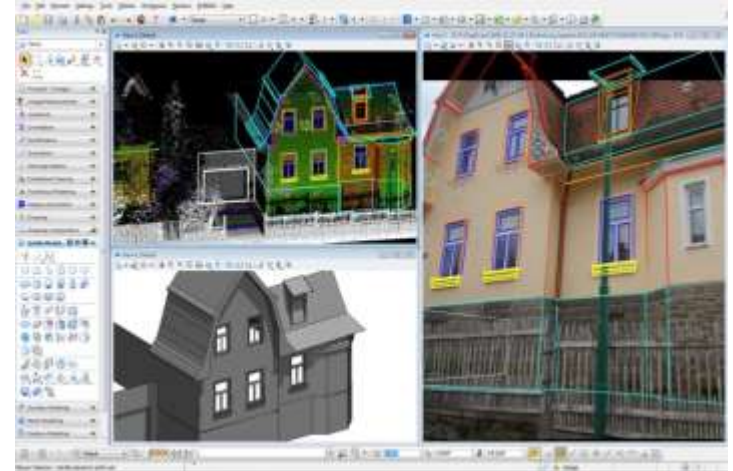


- Geo Sensor Networks
- Indoor Positioning

- Development of software components for the German Real Estate Cadaster System (ALKIS)
- Transformation and homogenization (KATHOM, NTv2)
- Sensor and spatial data infrastructures



- Generation of (semantic) building models
 - As-built documentation for BIM
 - Digital analysis system PHIDIAS for imagery and laser scanner data



Applications

- Visualization
 - (Mobile) 3D viewer for CityGML (& IFC)
- Mobile virtual/augmented reality (MVR/MAR)
 - Immersion/Interaction with semantic building models
- Indoor positioning
 - Support of the position analysis

