UTU Geospatial Labs
Geospatial resources and expertise Hub
at the University of Turku

UTU Geospatial Labs is a geospatial resource and knowledge hub of the University of Turku. It gathers university’s geospatial, Earth Observation and location technology resources and applied knowhow under one place for easier access and use. UTU Geospatial Labs promotes growth of multidisciplinary geospatial research and education knowledge at UTU. Visit us at http://geospatial.utu.fi/ and learn more.

### Research

We have geospatial research expertise at UTU especially in applied geospatial research. Examples of application fields are fluvial processes and flood modelling, land cover/land use mapping, biodiversity and mapping of habitat dynamics, coastal and marine spatial planning, urban climate, participatory GIS and citizen-science approaches, health geography and geospatial and EO technology innovations and business development. We use living Lab approaches to develop novel geospatial methods and applications under our university’s thematic profile Digital Futures (http://digitalfutures.fi/).

### Education

Teaching of geospatial skills ranges from basic undergraduate courses (BSc) to specialized masters and doctoral courses (PhD). We also educate secondary school geography and biology teachers (MSc) with geospatial skills. Nationally education development is done through Fluginet (www.fluginet.fi). Internationally through various scientific networks and institutional cooperation with the Universities in Europe and in the Global South.

### Facilities

Key facilities consist of laboratories and units equipped with hardware and geospatial software, linked into centralised IT management and services. Open access to data, resources and cloud-based computing environment is the backbone. Mobile devices (laser scanners, UAVs, GPSs, GNSS receivers) are available for field working. Facilities are nationally developed via Finnish Geospatial Research and Education Hub Geoportti (http://www.geoportti.fi/).

### Cooperation and networks

UTU Geospatial Labs is active in several regional, national and international networks promoting geospatial and EO research and education, and use of open source technologies. Key international networks include AGILE, EARSel, Copernicus Academy and Geo for All and nationally Fluginet, Geoportti community, ProGIS. Working closely with public and private sector actors forms an important element of cooperation. UTU is founding member of Regional Open Data Hub Lounaistieto (https://www.lounaistieto.fi/).

### Services for partners

UTU Geospatial Labs offers support and services of geospatial research and education within our specialization fields incl.

- Institutional development of geospatial skills and competences
- Expert consultations regarding different specialization fields of geospatial research and education
- Practical GIS and image processing training for government and private sector