



www.zgis.at

# PLUS

#### WHO WE ARE

The Interfaculty Department of Geoinformatics – Z GIS is an interdisciplinary department (80 scientific and technical staff) established at the Paris Lodron University Salzburg (PLUS; www.uni-salzburg.at). It is dedicated to fundamental and applied research, integrated spatial analysis, outreach activities and networking, professional education (www.unigis.net) and training. As experts for the spatial view Z\_GIS focuses on interoperable GIS usage, spatial modelling, satellite remote sensing, image analysis, digital cartography and GI-based communication. Z\_GIS is strongly involved in global and EU-funded RTD activities, development cooperation and educational projects in Asia and Africa (together with UNEP, UNDP, NGOs) and is actively supporting and promoting the Copernicus initiative in an inter- and transdisciplinary research and communication scheme by fostering new technologies for EO-based spatial decision support and policy implementation. The department promotes a systemic understanding of multi-scale, multi-dimensional spatial phenomena by targeting its research on both environmental integrity and human security. The spatial view is fundamental to tackle global societal challenges in a sustainable way. Since 1988 Z\_GIS has been organizing the leading GIS conference in German speaking countries (AGIT, www.agit.at) and started 2007 with the international symposium Geoinformatics Forum Salzburg (GI\_ Forum, www.gi-forum.org).

#### **OUR EXPERIENCE**

- ★ Wireless, real-time and standard compliant sensor networks (OGC, ISO, W3C)
- \* Web enabled technologies for spatial decision support and policy implementation
- ★ Transdisciplinary holistic landscape planning approaches for integrated water resources management, multifunctional landscapes and landscape management
- ★ Landscape monitoring and analysis
- ★ Holistic systems-based modelling approaches
- ★ Early Warning Systems on extreme rainfall events
- ★ Harmonisation, exchange and integration of geo-spatial information
- ★ Satellite-derived image information (OBIA)
- ★ Dissemination, education and distance learning



PLUS





GI Forum



Landscape \_ab



Z GIS



**AGIT** 



UNIGIS



### WHAT WE DO IN ESMERALDA

- \* Stakeholder interaction and networking with the LTER Austria community
- ★ Linking biophysical ES valuation
- ★ Incorporate farmers, environmental managers, municipalities and (non-) governmental agencies
- ★ Developing business standards for ES mapping in the hydrology domain

### WE ARE ALSO INVOLVED IN

International: SMART | EU: TIRAMISU, G-NEXT, MILESECURE-2050, HEALTHY FUTURES, KNOW-4-DRR, CAERUS | DFG: Urban Emotions | FFG: geoSPS, EO4HumEn, Land@Slide, iSLIDE, AutoSentinel-2/3 | FWF: ABIA, COLD Yamal | Institutional: ARISE, ÖKS15



# Hermann Klug

- **Professor in Geoinformatics**
- Real-time integrated holistic landscape analysis and decision support
- Automated geosynthesis of spatial phenomena



## Steffen Reichel

- WebGIS services
- standardised (real-time) data distribution/supply
- technical/semantic data harmonisation processes