STARTED IN 2015

Land@Slide

EO-based Landslide Mapping: from Methodological Developments to automated web-based Information Delivery

COORDINATOR	*University of Salzburg – Z_GIS*
PARTNERS	*GRID-IT* *Geologische Bundesanstalt (GBA)*
INSTRUMENT	*FFG / ASAP*
DURATION	*03/2015 – 08/2017*
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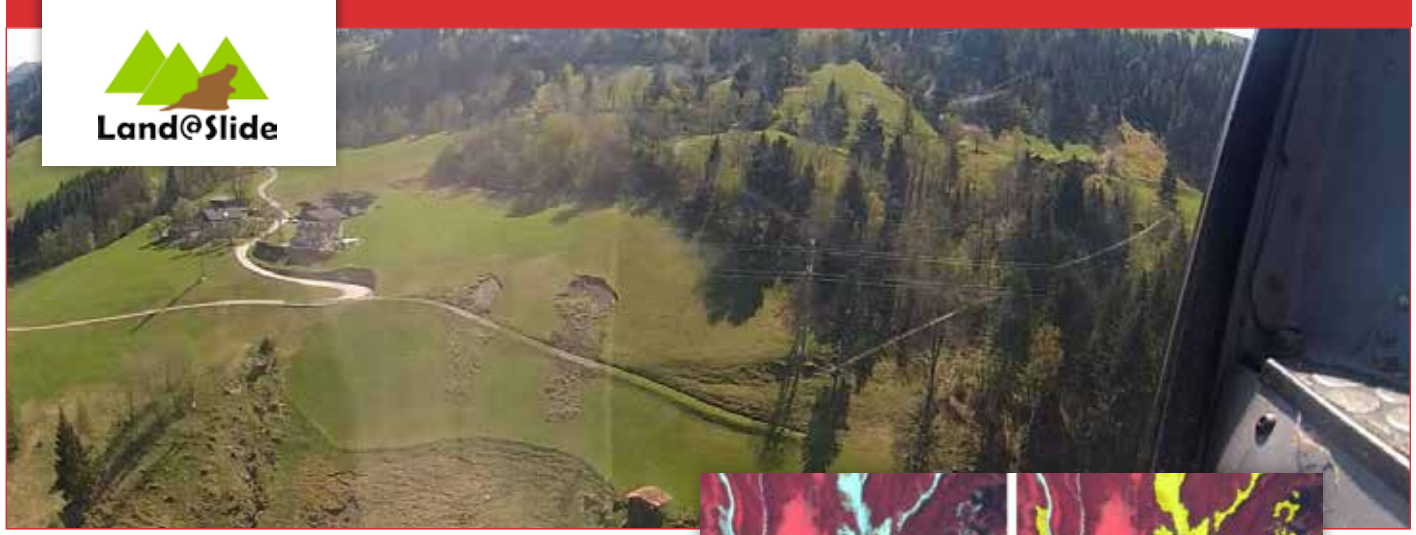
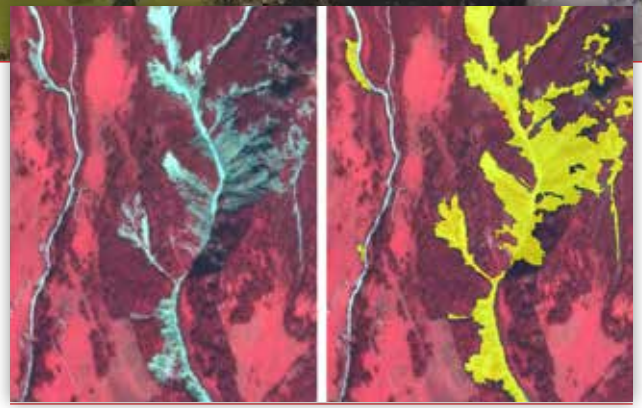
> http://landslide.sbg.ac.at
> www.zgis.at/research



Regional authorities and infrastructure maintainers in almost all mountainous regions of the Earth need detailed and up-to-date landslide inventories. The project Land@Slide addresses this need by developing an information extraction chain for efficient landslide mapping based on Earth observation (EO) data.



Semi-automatically detected landslides based on a SPOT image

Project at a glance – Objective

The increased availability and quality of Earth observation (EO) data and new computational methods such as object-based image analysis (OBIA) foster attempts to automate the production of landslide maps. The main objective of the project Land@Slide is to develop semi-automated OBIA mapping routines that are easily adaptable to changing input data and geographical settings. The most stable mapping routines are implemented in a pre-operational web-based service for EO-based landslide mapping, which provides users with information on the location and spatial extent of landslides and which allows the fast identification of landslide-affected infrastructure.

The methods are primarily developed for selected landslide-prone study sites in the Austrian and Italian Alps, but are designed to be applicable to other areas as well. The Interfaculty Department of Geoinformatics – Z_GIS, the company GRID-IT and the Geological Survey of Austria (GBA) cooperate closely to develop new tools to support regional authorities in the mapping of landslides. The results are validated in cooperation with stakeholders and decision makers, a step essential to produce information products that can assist targeted management of natural hazards.