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# Active landslides detection at regional scale: comparing multitemporal InSAR with “handmade” inventories

Marc-Henri Derron (1), Clément Michoud (), Michel Jaboyedoff (), and Tom Runne Lauknes (2)

(1) University of Lausanne, CRET, Lausanne, Switzerland (marc-henri.derron@unil.ch), (2) Northern Research Institute, Tromso, Norway

Advanced multitemporal differential SAR interferometry has proved to be able to detect unexpected active landslides in areas difficult to access. That makes this technique very useful to complete inventories. But that does not mean that applying A-DInSAR is a sufficient tool to build an inventory. Some A-DInSAR results have been compared in areas where independent landslides inventories exists, in Norway (J. Dehls at the Geological Survey of Norway) and Italy (A. Tamburini, TRE Milano). Roughly, depending on the surface cover, geomorphology and images availability, from 0 to 50% of the already known landslides can be detected with A-DInSAR results.
We are testing a similar approach in Switzerland, in the county of Vaud where two landslides inventories are available (DUTI 1985, Jaboyedoff 2009). A set of 24 Envisat ASAR images (single frame/ single track) have been processed with PS-INSAR and SBAS techniques. Because of the large variety of surface cover (urban, forested, rocky) and morphology (plane and mountainous areas), both techniques provides very different results depending on local conditions.