Geophysical Research Abstracts
Vol. 12, EGU2010-15040, 2010
EGU General Assembly 2010

Application of a portable radar interferometer and terrestrial long-range lidar for high resolution data acquisition of natural rock slopes

Andrew Kos (1), Tazio Strozzi (2), William Tomkinson (3), Dario Conforti (3), and Andreas Wiesmann (2)

(1) Geological Institute, Swiss Federal Institute of Technology, ETH Zurich, Switzerland & terRAR Ltd, Switzerland, (2) Gamma Remote Sensing AG, Switzerland, (3) Optech Inc., Canada

The application of portable radar interferometry using real aperture technology, integrated with long range terrestrial lidar for monitoring unstable rock slopes will be presented. Measurement precision as well as spatial and temporal resolution of the combined methods will be discussed in terms of selected case studies. The advantages of system portability and method of data acquisition will be highlighted since field inaccessibility often hinders the placement of instruments for optimal lines-of-site or range for the acquisition of high resolution data.