Geophysical Research Abstracts, Vol. 8, 08691, 2006
SRef-ID: 1607-7962/gra/EGU06-A-08691


# Insar monitoring of Canadian landslides

**V.Singhroy** (1), R.Couture (2) and K.Molch (1)

(1) Canada Centre for Remote Sensing. (2) Geological Survey of Canada.
(vern.singhroy@ccrs.nrcan.gc.ca)

Recent research has shown that interferometric SAR techniques can be used to monitor landslide motion under specific conditions. Provided coherence is maintained over longer periods, as is possible e.g. in non-vegetated areas to observe surface displacement of a few cm per year. Using data pairs with short perpendicular baselines, short time intervals between acquisitions, and correcting the effect of topography on the differential interferogram, reliable measurements of surface displacement were achieved. In this study we used InSAR techniques to monitor current post slide motion at several landslides along transportation and energy corridors. Our results that motion are triggered by spring melt and heavy rainfall events. In the northern Mackenzie valley pipeline corridor motion is related to permafrost melt.