Coherent Target Monitoring at High Spatial Density: Examples of Validation Results

Marco van der Kooij(1), William Hughes(1), Shinya Sato(1), and Valentin Poncos(1)

(1) Vexcel Canada Inc., 20 Colonnade Road, Suite 110, K2E7M6 Ottawa, Canada

Abstract

A new method is presented for the detection and processing of coherent information from stacks of SAR data. The detection process is separated from the measurement process which allows processing of insar data using familiar differential InSAR processing steps while still utilizing data with large baselines. Several key advantages can be identified compared to existing persistent scatterer methodology 1) a higher spatial density of usable coherent targets that can be extracted from the data (up to 10 times higher) 2) no motion model is required, each temporal measurement is independent from previous data.

Details of the method and major benefits will be described and discussed. Validation results of sites in Europe and N–America will be shown.