

## → FRINGE 2011 WORKSHOP

Advances in the Science and Applications of SAR Interferometry and Sentinel-1 Preparatory Workshop

# Terrain Subs. & Landslides Session

Chairs: M. Crosetto & P. Pasquali

Seed Questions

1. **What recommendations does this thematic community have for Sentinel-1 observation scenarios over InSAR areas of interest, in terms of revisit frequency and pass (ascending / descending)?**
2. **What are the achievements obtained using the VHR SAR imagery? What has improved and what has not improved?**
3. **In the wide areas PSI products (e.g. country-wide), how are treated the low spatial frequency effects (e.g. tilts) due to orbital errors?**
4. **Is the average displacement rate enough, or are there other (and which) synthetic descriptors more suitable for providing a condensed overview of the phenomena that can be discriminated in a certain area, in particular in case of long observation intervals and / or strong non-linear displacements?**

5. Considering the operation plan currently selected for Sentinel-1, are there additional requests / recommendations that can be made in view of monitoring subsidence and landslide phenomena?
6. The geological modelling is nowadays ready to ingest and exploit displacement maps obtained from differential interferometry to derive precise and quantitative information about the phenomena that originated the displacement (e.g. inversion of the source parameters) in case of earthquakes and volcanoes. How far can nowadays the models for landslide and subsidence take advantage in a quantitative way of the measurements obtained from DInSAR, and in particular from time series analysis, and what should be developed more on the data and / or on the modeling side?
7. What are the advances in PSI and DInSAR landslide monitoring of the last two years, i.e. from Fringe 2009: analysis tools, new applications, validation results, etc.?