

## Volcanoes Session – Seed Questions

## QUESTION(s) n. 1

- How will volcano studies be affected during the gap between Envisat and Sentinel-1?
- Is ALOS sufficient, and if not will other satellites such as RADARSAT, TerraSAR-X and COSMO-SkyMed be able to fill the void?
- More broadly, are we moving toward an effective global monitoring of volcanoes?

## QUESTION(s) n. 2

- a) What are the new directions in volcano InSAR analysis and what are the modeling approaches that are required to address them (i.e. small spatial scale processes, highly dynamic short-lived processes)?
- b) Is it time to put together a “cookbook” set of software for routinely generating 3D FEM solutions for open-source software packages, such as PyLith? (i.e. input topo, structure, boundary conditions, source properties and easily generate Greens functions?). More generally, has numerical modelling definitively replaced the analytical approaches? (I COPIED THIS QUESTION FROM THE SUMMARIES OF THE FRINGE 2007, BUT I THINK IT IS STILL RELEVANT)

### **QUESTION(s) n. 3**

- Is it time to develop a set of volcano analysis tools similar to what seismology did in the past?

#### **SUB-QUESTION(s) 3.a**

- What about heterogeneous data sets (i.e. GPS + InSAR)? What is desirable: the integration through the modeling of the sources or the direct integration of different data set?

#### **SUB-QUESTION(s) 3.b**

- Is it time to develop a standard set of InSAR time series analyses codes? Maybe this requires standard interferogram (or other) formats and meta-data files (or code that can handle a few of the common formats)?

#### **SUB-QUESTION(s) 3.c**

- What about temporally evolving approaches for modeling time series (i.e. Network Inversion Filter)?

## **QUESTION n. 4**

- Are the techniques for filtering/modeling atmospheric effects mature? (obviously, this question is not relevant to the cases where it is possible to apply time series analyses codes, which could minimize the atmosphere perturbing effects),

## **QUESTION n. 5**

- Will Super Sites facilitate addressing some of the above questions?