Fringe 2005 extracted recommendations by session

Thematic Mapping and DEMs

- The ENVISAT baselines should be maintained at least at the level they currently are.
- Full-resolution SAR data should be disseminated online for quicker and more convenient access.

Methodology: Long-term DInSAR and Terrain Motion

• In addition to the PSIC4 other datasets with reliable ground-truth information are desired in order to assess the performances of the different approaches under varying conditions.

Methodology: Advances in PSI

- Scattering models must/can be improved, in particular scattering at buildings
- Stratospheric autonomous HALEs ("Stratellites") are promising platforms for remote sensing and should be studied in detail.

Ice and Snow

- ESA proposed to change all background IM and WS acquisitions over Greenland and Antarctica from VV to HH. No objections to this were raised.
- Switch from VV to HH over polar land-ice
- Keep on measuring with ENVISAT!
- True 3-D would be useful. Investigate ascending + descending + alternative angle of incidence. Investigate options for optimizing acquisition modes of different radars in orbit
- Continue WS in the interior of Greenland and Antarctica. Encourage and support WS-WS interferometry
- Allocate some resources to IM mode in Greenland and Antarctica
- Investigate options for easy ENVISAT-user access to ECMWF data and derived products
- We would welcome: A mechanism for easy ENVISAT-user access to magnetometer data
- Further studies and measurement campaigns about PolInSAR are required.
- For ice motion applications more channels should not be traded for spatial or temporal resolution
- Another Tandem like (1- or 3-days repeat) configuration or a constellation is most wanted by the community
- Future missions should keep (or enhance) spatial resolution. Enhanced temporal sampling is recommended

Volcanoes

- A concerted community effort to pool volcano InSAR monitoring results by existing research groups at the regional level should be undertaken.
- A Global Observing System umbrella should be sought to provide an international conduit for results.
 - ESA support for this via Background Mission -type support would be necessary.

Earthquakes and Tectonics

- More research is needed to assess the potential of MERIS in measuring atmospheric water-vapour variations.
- Data from the ERS archives should become freely available and easily accessible
- Envisat wide-swath data acquisitions should be continued to build up archives
- The Envisat background mission is highly appreciated and very important and should definitely be continued (extended?)

Landslides

- For further developing and supporting the use of InSAR for operational landslide monitoring, long-term continuity of SAR missions is crucial
- Provide new space-borne systems (C-band or L-band) with short revisiting time (several days)
- Stimulate interaction between InSAR community and Engineering geologists community
- Stimulate research aiming at integration of processed InSAR data into user practices
- Standardisation of InSAR-derived landslide products would enhance the acceptance of the technique and products by the users
- Improve accessibility of available JERS-1 data archived at ESA for InSAR purposes