

Sentinel-1

InSAR Coverage of Ice Sheets

**Compendium of Data Sets
(planned coming campaigns)**



Sentinel-1A planned ice sheet campaigns

Greenland

Objective

- ESA Sentinel-1 contribution to PSTG
- Provide full coverage in 2 or 3 consecutive 12-day repeat cycles
- One campaign during Arctic winter 2015 (Feb – March TBC)

See dedicated presentation

Approach

- Interferometric Wide Swath mode (250 km swath)
- Single polarisation HH
- Within the ramp-up phase, both ascending and descending is TBC
- Coast to coast tracks
- Coordination with MyOcean sea-ice monitoring activities

Metric estimates

- Total volume to be assessed
- One IW SLC scene is about 4 GB (single pol)

Sentinel-1A planned ice sheet campaigns

Antarctica

Objective

- ESA Sentinel-1 contribution to PSTG
- Provide coastal coverage in 2 or 3 consecutive 12-day repeat cycles
- During austral winter (indicatively June-August 2015)
- A partial coverage of priority areas may be possible in Winter 2014-2015

See dedicated presentation

Approach

- Interferometric Wide Swath mode
- Single polarisation HH
- Both asc and desc – TBC
- Hole not covered (contribution of Radarsat-2 expected)
- Coordination with MyOcean sea-ice monitoring activities

Metric estimates

- Total volume to be assessed
- One IW SLC scene is about 4 GB (single pol)