## **Satellite Monitoring of the Snow on Svalbard**

Malnes, E.; Haarpaintner, J.

Norut, NORWAY



## Multisensor monitoring of the cryosphere and phenology on Svalbard





Arctic Frontiers, Tromsø, 28.01.2010

<u>Eirik Malnes</u>, S.R.Karlsen, B. Johansen and K.A.Høgda



## Snow monitoring on Svalbard

- Norut have used 5 years data from Envisat ASAR and Terra MODIS to develop a baseline snow climatology on Svalbard
- SAR and optical data have been combined into a multitemporal/multisensoral cloud free time-series
- First and last day of snow is subsequently detected pixelvise based on the multisensor time series
- Average maps for first and last day of snow shows good correspondence with phenology maps indicating start and end of growth season









