Coordinated operational remote sensing services to support an international observing system for Svalbard

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The **Svalbard Integrated Arctic Earth Observing System** is a distributed international research infrastructure for Arctic Earth System Science, coordinating a regional observing system for long-term measurements in and around Svalbard.

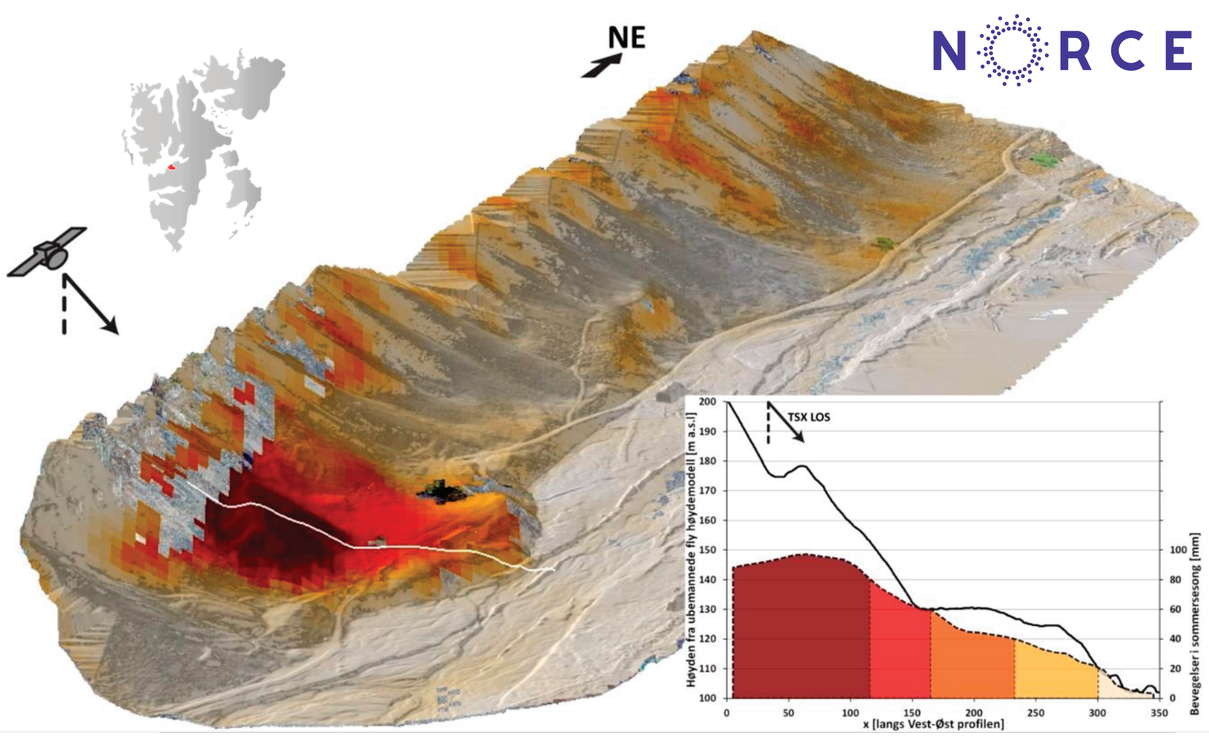
www.sios-svalbard.org

24 consortium members/observers (9 countries)

SIOS Remote Sensing Service

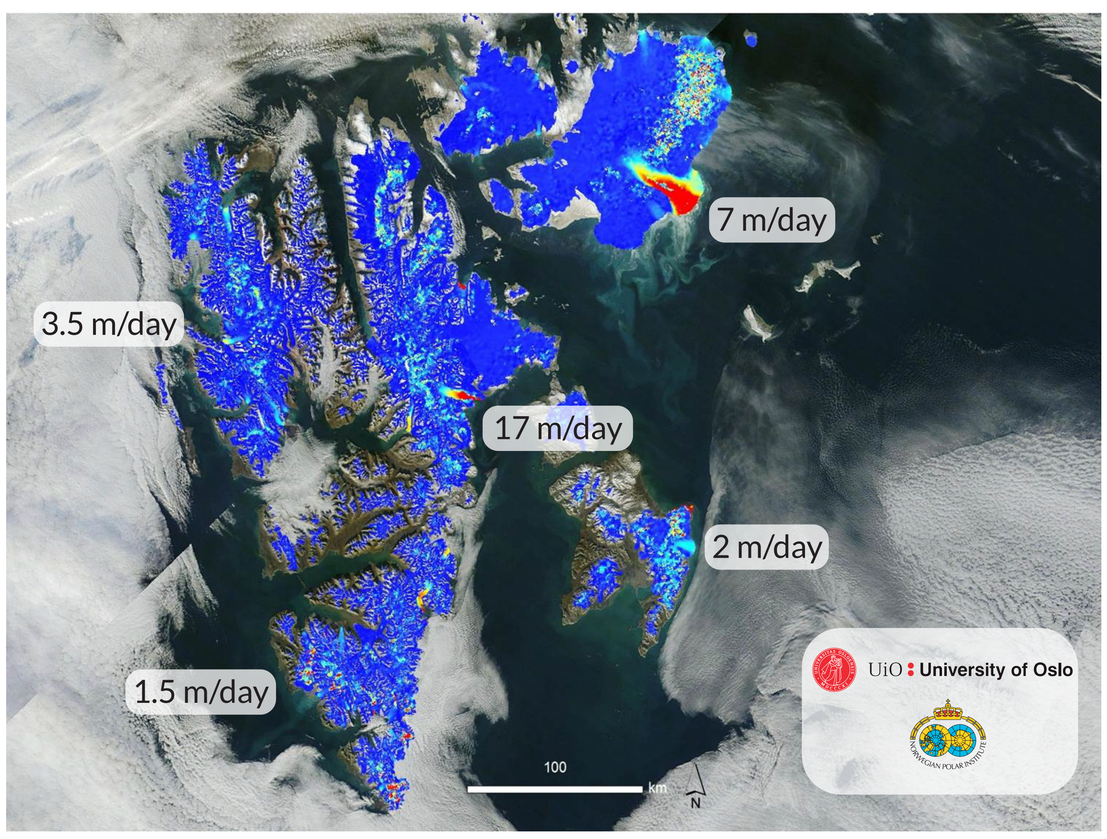
- Map opportunities and needs for Satellite data
- Ensure streamlined access to EC Copernicus programme satellite data for Svalbard
- Encourage user uptake of satellite data through training activities
- Manage tailored-processing of satellite data by consortium partners
- Establish links to satellite owners and promote Svalbard as a Cal/Val site

Satellite based surface movements



3D overview of Sverdrupbyen and the left side of the Longyear Valley from unmanned aerial elevation model and InSAR results from TerraSAR-X sensor in ascending geometry. Profile - height (black line) - and average movements in summer season (dotted line of colors per class of deformation, each 20 mm).

Sentinel-1 based seasonal surface velocities



Glacier speed 2018