Earth observation and remote sensing activities to develop an efficient regional observing system in Svalbard: experiences from SIOS Remote Sensing Working Group

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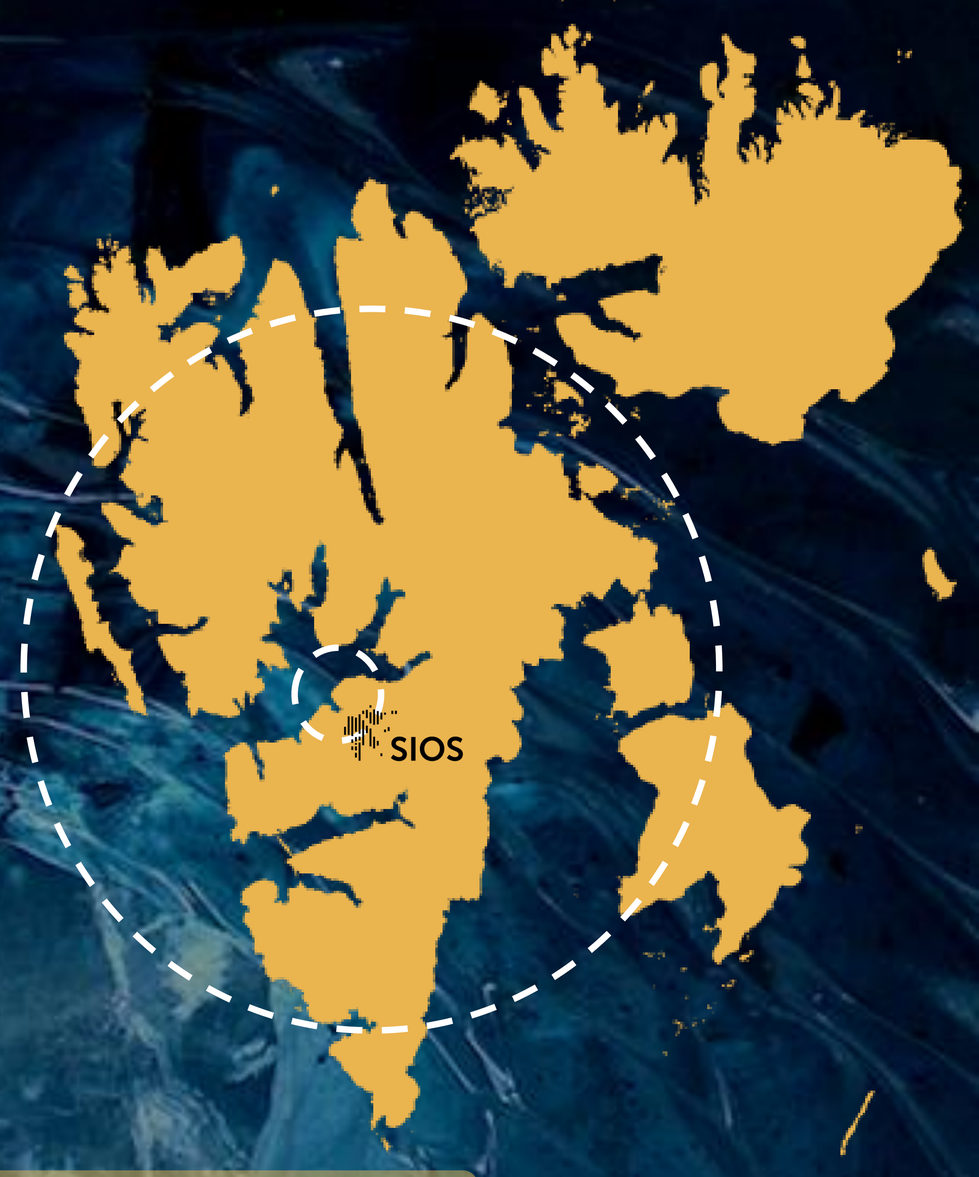
BACKGROUND

The **Svalbard Integrated Arctic Earth Observing System (SIOS)** is an international observing system for long-term sustained measurements in and around the Norwegian archipelago of Svalbard. SIOS research infrastructures (RIs) are distributed across and around Svalbard for collecting long-term in-situ observations.



IN-SITU OBSERVATIONS

In situ observations are a key element not only for ground-based studies but also for calibration/validation (Cal/Val) of current and future satellite missions. Integration of in-situ and satellite-based measurements is critical for developing a consistent network of observations and to fill observational gaps.

UPCOMING ACTIVITIES

1) Unified platform for satellite data availability for Svalbard

2) EO and RS researcher's forum to facilitate dialogue and collaboration between field scientists and remote sensing experts

3) Citizen science project model for supporting satellite Cal/Val activities

4) 'Satellite image of the week campaign' on social media for outreach.

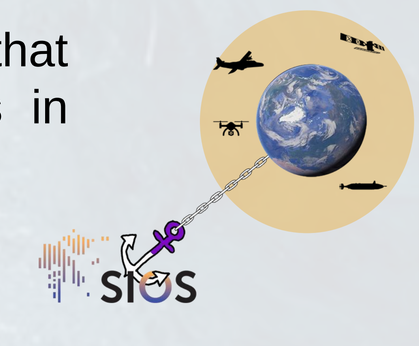
5) RSWG surveys on user requirements, product inventory and citizen science project

6) AI training course in Svalbard 5th -9th September 2022 in Longyearbyen.

ON-GOING ACTIVITIES

1) Capacity building e.g., webinar series, online conference, and training courses on EO and RS studies in Svalbard

2) Infrastructure development that can attract Cal/Val activities in Svalbard



3) Airborne remote sensing campaigns

4) Remote sensing service tools for field scientists

DEADLINE: 15th MAY

AI COURSE

DEADLINE: 15th APRIL

User requirement survey

BACKGROUND IMAGE CREDITS: Katarzyna Stachniak