

# SIOS airborne platforms and campaigns; a proof of concept to facilitate international collaboration and optimize usage of research infrastructure

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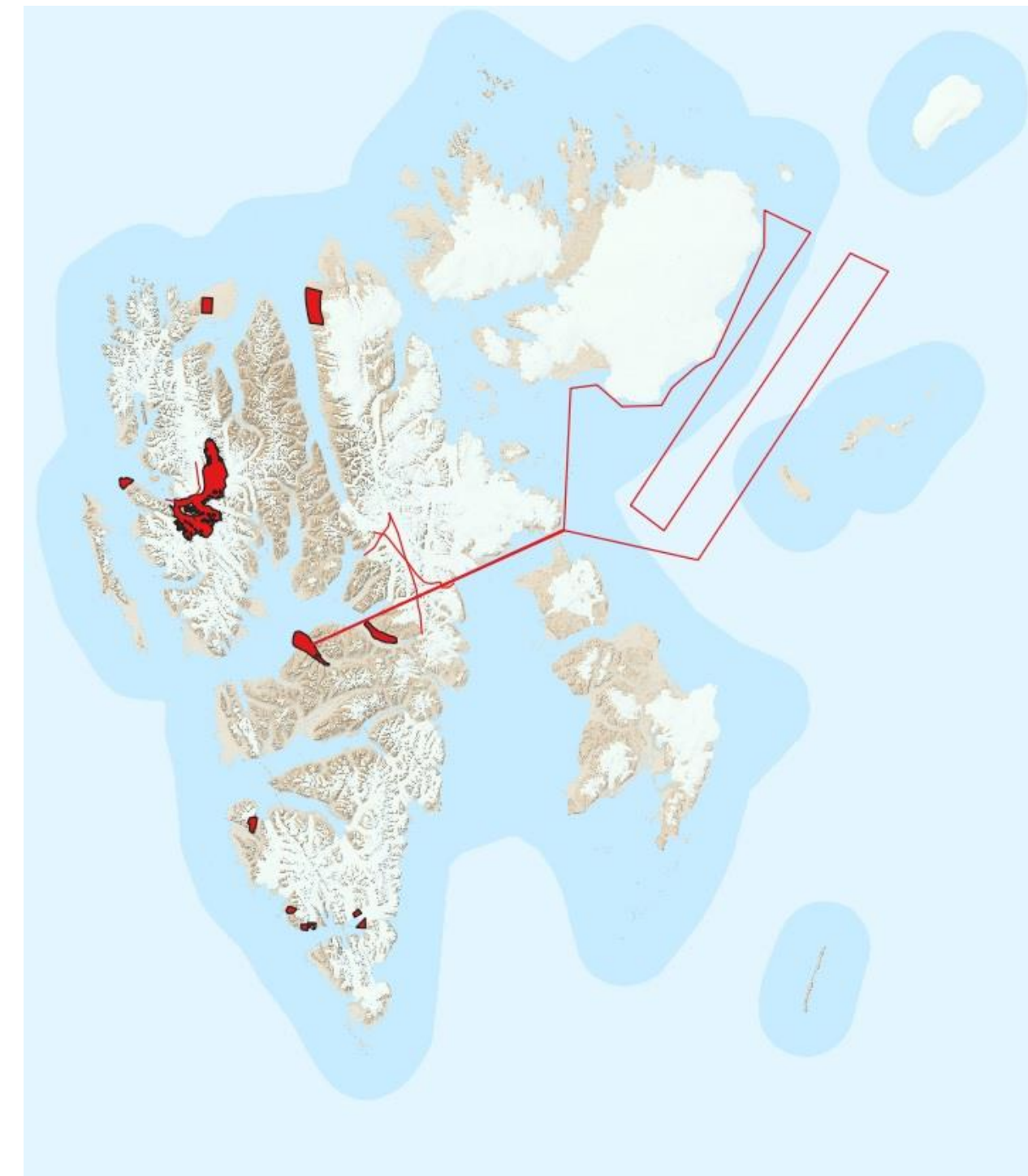
SIOS has supported around 20 scientific projects to utilize 50 hours of flight time. SIOS Knowledge Centre (SIOS-KC) coordinates all the flight campaigns for the optimized usage of the aircraft and to further reduce the environmental footprint of observations.

## Campaigns 2020



10 projects, 25 flight hours

## Campaigns 2021



11 projects, 25 flight hours



SIOS's airborne research infrastructure is an example of facilitating optimized usage of infrastructure to reduce environmental footprint and facilitate international collaboration.

## Hyperspectral Remote Sensing Training Course



- (1) regular passenger activities and research activities are being coordinated to reduce flight hours in carrying scientific observations.
- (2) supported projects for the usage of aircraft-based measurements facilitated international collaboration.
- (3) measurements conducted during 2020 and 2021 are critical to filling the gaps in in-situ observations in Svalbard associated with the travel restriction due to the global pandemic of Covid-2019.
- (4) data acquired from Dornier aircraft is being used to train the next generation of polar scientists as a part of the annual SIOS remote sensing training course.
- (5) airborne measurements are useful for complementing in situ measurements and calibration/validation of running and upcoming satellite missions, e.g., European Space Agency's Sentinel series.



SIOS 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](http://www.sios-svalbard.org)