

Bringing the Svalbard science community together in times of global pandemic of COVID-19

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Svalbard Integrated Arctic Earth Observing System (SIOS) is an international collaboration of 24 research institutions from 9 countries studying the environment and climate in and around Svalbard to address broad earth system science questions. SIOS coordinates various scientific activities including the annual State of the Environmental Science in Svalbard (SESS) report, the Access programme to enable international researchers to access research infrastructure (RI) in Svalbard, Earth observation (EO) and remote sensing (RS) services, tailored training courses for the Arctic science community, and providing free and open access to the data. In this presentation, we will mainly focus on the activities of SIOS Knowledge Centre (SIOS-KC), the central hub of SIOS, and Remote Sensing Working Group (RSWG) in response to the global pandemic COVID-19. The global pandemic of COVID-19 has affected the Svalbard research in many ways including nationwide lockdown in many countries, strict travel restrictions in Svalbard because of obvious reasons, and quarantine regulations declared by national authorities. In addition, most of the physical meetings and conferences were cancelled by the first week of March 2020 with the rise of number of cases in Europe and China. In response, many countries started sealing or closing borders disabling travels to many parts of the world including Svalbard. This resulted in cancellations of many field campaigns to Svalbard and future campaigns are still uncertain for an unforeseen future. In response to this situation, SIOS developed new activities suitable to neutralize these challenges. This presentation provides an overview of SIOS's operational activities developed in response to COVID-19 to support the Svalbard scientific community. These include (1) patching up field data with RS observations, (2) logistics services for effective field activities in the pandemic times, (3) a monthly webinar series and panel discussion to engage community, (4) the online conference on EO and RS, (5) SIOS's special issue in Remote Sensing journal, (6) the online version of terrestrial remote sensing training course, and (7) the announcement of opportunity (AO) in airborne remote sensing using aerial imagery and hyperspectral data. SIOS has also approached the situation with a general attitude of flexibility and service mindedness, for example being generous with extensions to deadlines for various applications calls and trying to find solutions to logistical problems in field campaigns. We hope that our practical services, experiences, and activities implemented in these difficult times will motivate other similar monitoring programs and observing systems to respond to future disruptions to research activity.