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Title The SIOS Observation Facility Catalogue as first step towards research infrastructure optimisation

Last Name of PRESENTING Author Ignatiuk

Middle Name or initials of PRESENTING Author

First Name of PRESENTING Author Dariusz

Country of PRESENTING Author Norway

Institution, organization or general address SIOS Knowledge Centre, Postboks 156, 9171 Longyearbyen, Norway

Theme -Theme 1: Design, Optimization and Implementation of the Observing System

Author list (in order) Ignatiuk*, Dariusz; Jennings, Inger; Ferrighi, Lara; Lihavainen, Heikki; Andersen, Bo; Godøy, Øystein; Hübner, Christiane; and Jawak, Shridhar

Poster title (brief) The SIOS Observation Facility Catalogue as first step towards research infrastructure optimisation

Abstract - text box

Svalbard Integrated Arctic Earth Observing System (SIOS) is an international consortium to develop and maintain a regional observing system in Svalbard and the surrounding waters. SIOS brings together the existing infrastructure and data of its members into a multidisciplinary network dedicated to answering Earth System Science (ESS) questions related to global change. SIOS develops and implements methods for how observational networks are to be systematically designed and implemented in Arctic environment. The overall goal of the SIOS monitoring programme is to (a) involve as many of the institutions operating research infrastructure in Svalbard as possible in the monitoring programme, (b) integrate the monitoring of vertical coupling through the entire atmosphere, down to the Earth surface and into the ocean, (c) integrate measurements of horizontal transfer of Earth System relevant variables across the archipelago and within the surrounding ocean and (d) monitor changes in the land-based environment and its biodiversity. The Observation Facility Catalogue, developed by SIOS, gives an overview of existing, planned and historic observation facilities. The Observation Facility Catalogue provides an overview of the observation facilities which collect SIOS data. An observation facility can be one instrument or a collection of instruments, e.g. a weather station. The annotation is standardised following the WMO standards as far as possible, in order to make entries unambiguous and interoperable internationally.

The purpose of the catalogue is to make better use of the existing research infrastructure by facilitating the search for given parameters and their location. The catalogue may also be used to gain a simple overview of collected parameters and how to access the data.