The Observation Facility Catalogue – an overview of the SIOS research infrastructure on Svalbard

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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 observations together into a coherent and integrated observational programme that will be sustained over a long period. Within SIOS, researchers can cooperate to access instruments, acquire data and address questions that would not be practical or cost effective for a single institution or nation alone. By bringing many types of observations together and asking questions about how these observations are influenced by each other, SIOS generates new insights about the Svalbard region’s role in the Earth system. Thus, SIOS offers unique opportunities for research and the long-term acquisition of fundamental knowledge about global environmental change.

SIOS facilitates access to Earth System Science (ESS) data from Svalbard through a free and open data portal that enables the users to search, retrieve, visualise, transform, and harvest ESS data relevant to Svalbard stored in the distributed data centres of SIOS partners. The Observation Facility Catalogue (OFC) is a part of SIOS data portal which allows collecting and sharing information about research infrastructures distributed in Svalbard.

The OFC gives an overview of existing, planned and historic observation facilities which collect SIOS data. An observation facility can be one instrument or a collection of instruments. The annotation is standardised based on WMO standards as far as possible, in order to make entries unambiguous and interoperable internationally.

The purpose of the OFC is to make better use of the existing research infrastructure by facilitating the search for given parameters and their location. In this way, duplication can be avoided and new measurements can be co-located with existing ones. The catalogue has a map interface and advanced search function. The search interface allows users to search for GCMD keywords or to filter by status, type or observatory.
