

Optimizing Polar Observing with Asset-Level Metadata Interoperability Across Networks

William Manley¹, Roberta Pirazzini², and other Members of the SAON Polar Observing Assets Working Group³

¹University of Colorado, ²Finnish Meteorological Institute, ³<https://polarobservingassets.org>

A fundamental challenge exists for assessment, planning, and synthesis of Arctic observing. Assets such as sites, tracks, observatories, projects, and programs are deployed in a diverse and distributed fashion across numerous observing systems. At this time, it is difficult to strategically assess status, overlap, and gaps because most inventories and portals are limited in scope. Furthermore, only a fraction of observing systems share information about observing assets in a way that can be accessed, harmonized, and aggregated for a comprehensive perspective. To help address this challenge, a new Polar Observing Assets Working Group has been formed under the SAON Committee on Observations and Networks (CON). This group builds upon steps taken by the polar data community for the interoperability of “dataset-level” metadata, but in this case for discovery-level details in “asset-level” metadata. The group will identify and promote best practices for the use of relevant metadata standards, controlled vocabularies, crosswalks, federated search, and linkages to scientific datasets. For more details on three identified tasks, see <https://www.polarobservingassets.org>. Outcomes will make it easier for networks and planners to avoid duplicated effort while optimizing resources. Participation is open and encouraged, and will help to showcase and integrate the summed contributions of multiple systems.