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ESTABLISHING AN ARCTIC DATA NETWORK THROUGH INTERNATIONAL COLLABORATION

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–During the Arctic Science Summit Week held in Helsinki, Finland in April 2014, the International Arctic Science Committee (IASC) and the Sustaining Arctic Observing Networks program (SAON) formed two related data management committees. While the committees were separate, they have complementary mandates and were to be co-managed.

IASC has a broad mandate to “encourage, facilitate and promote cooperation in all aspects of Arctic research in all countries engaged in Arctic research and in all areas of the Arctic region”. IASC cuts across all sciences and helps to promote science development, provides scientific advice and policy level documents, aims to maintain freedom and ethical conduct in science, and engages in long-term science visioning and planning (e.g., the International Conference on Arctic Research Planning). SAON activities are complementary to IASC’s by focusing on the specifics of establishing long-term Arctic-wide observing activities that provide free, open, and timely access to high-quality data.

In November 2014 the IASC and SAON data committees met to collaboratively develop a work plan to support the mandates of IASC, SAON and the broader Arctic and polar data management communities. During this meeting, it was decided to merge the individual committees into a single body. The unified committee developed a plan that includes the mapping of the Arctic data management “ecosystem,” establishment of a network for discovering and sharing detailed descriptions of data sets (i.e., metadata), development of guidance for data publication and citation, and implementation of a preliminary interoperability experiment that connects and utilizes metadata and data services in support of research resulting in societal supporting the visions and goals of international observation systems and bodies such as GEOSS, the Research Data Alliance and others.

Here we present the early results of this plan including the results of the interoperability experiment. The work plan and progress are discussed with respect to the establishment of a broad Arctic data network that connects to a multi-node global system (Pulsifer et al., 2014). Current plans and future directions are presented and discussed.

¹ Pulsifer, P. L., Yarmey, L., Godøy, Ø., Friddell, J., Parsons, M., Vincent, W., de Bruin, T., Manley, W., Gaylord, A., Hayes, A., Nickels, S., Tweedie, C., Larsen, J., and Huck., J. (2014). Towards an International Polar Data Coordination Network. *Data Science Journal*, 13, 94–102. doi:<http://dx.doi.org/10.2481/dsj.IFPDA-16>