CCADI and ARDI (Arctic Research Data Infrastructure) Governance

ARDI Project Management and CCADI/ARDI Long-term Governance Model

Diagram Courtesy of Maribeth Murray.
CCADI Objectives

Establish an integrated Canadian Arctic data management system that will:

- Facilitate transformative research on priority science questions about the Arctic system;
- Empower Inuit communities to address their data priorities;
- Demonstrate Canada’s ability to lead in providing accessible, interoperable, and useable data to the international community; and
- Enable translation of complex scientific information and Inuit TK into policy-relevant material.
CCADI
Architecture and Deployment

Diagram courtesy of David Arthurs and Peter Pulsifer.
CCADI Use Cases

1. Merged Observatory Data for Arctic Air Temperature - a contribution to T-MOSAiC, YOPP (Leads Warwick Vincent, ULaval, Maribeth Murray, UCalgary, Peter Pulsifer, CarletonU, Ravi Sankar, UCalgary, Etienne Godin, CEN/ULaval)


3. Landscape Change - permafrost, coastal processes and biodiversity (Lead: Warwick Vincent, ULaval; Maribeth Murray, UCalgary, Ravi Sankar, UCalgary, Etienne Godin, ULaval, Claude DuGuay, UWaterloo; Wesley Van Wychen, UWaterloo)

4. Mobilizing IPY data from the Circumpolar Flaw Lead Study – focus on sea ice type and quality (lead Tim Papakyriakou, Claire Herbert, UManitoba; Alexandre Forest, ULaval; Scot Nickels, Inuit Tapiriit Kanatami)
Locations of all weather stations in Yukon, NWT
Detailed Monthly Climate Summaries with photo of actual weather station
Detailed Monthly Climate Summaries for Kluane Lake
Detailed Monthly Climate Summaries with access to Metadata
Ethically Open Data

Data are made available fully, freely, and openly with minimal delay. The only exceptions to this requirement of full, free, and open access are:

- where human subjects are involved, confidentiality shall be protected as appropriate and guided by the principles of informed consent;
- where local and traditional knowledge is concerned, rights of the knowledge holders shall not be compromised;
- where data release may cause harm, specific aspects of the data may need to be kept protected (for example, locations of nests of endangered birds or locations of sacred sites).


The Canadian Consortium for Arctic Data Interoperability (CCADI) is an initiative to develop an integrated Canadian arctic data management system that will facilitate information discovery, establish sharing standards, enable interoperability among existing data infrastructures, and that will be co-designed with, and accessible to, a broad user base. Key to the CCADI vision are: standards and mechanisms for metadata, data and semantic interoperability; a distributed data exchange platform; streamlined data services with common entry, access, search, match, analysis, visualization and output tools; an intellectual property and sensitive data service; and data stewardship capacity.

The CCADI is currently composed of a group of Canada’s foremost Arctic scholars and Arctic data managers at the University of Calgary (Arctic Institute of North America), the University of Waterloo (Canadian Cryospheric Information Network and Polar Data Catalogue), Carleton University (Geomatics and Cartographic Research Centre), the University of Manitoba (Centre for Earth Observation Science), Université Laval (Centre d’études nordiques), University of Ottawa (Faculty of Law) and Nunavut Research Institute. Natural Resources Canada, Polar Knowledge Canada, Cybar Inc., Polar View, and Sansan-US Inc.

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Read more
Thank You!

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