

## **The Polar Data Catalogue: Data and Information Portal for Northern Research and Monitoring**

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Since 2007, the Polar Data Catalogue (PDC, <http://www.polardata.ca>) has served as Canada's primary on-line source for data and information on the cryosphere and the polar regions. The PDC was developed as a collaborative project between the Canadian Cryospheric Information Network (CCIN, <http://www.ccin.ca>), the ArcticNet Network of Centres of Excellence, the Government of Canada Program for the International Polar Year 2007-2008, and the Department of Fisheries and Oceans Canada. Additional partners who have been instrumental in providing direction and support include Environment Canada, Inuit Tapiriit Kanatami, the Inuit Circumpolar Council, the Northern Contaminants Program, the ArcticNet Student Association, and the Centre for Northern Studies. The PDC has been adopted as the metadata and data portal and archive for the Circumpolar Biodiversity Monitoring Programme, the Canadian Ice Service, and the Beaufort Regional Environmental Assessment, among others.

To contribute to the PDC, researchers across Canada upload data files and metadata which describe their projects. By searching the on-line Catalogue, Indigenous people, Arctic residents, and other researchers can learn about projects and access data from studies taking place in northern communities and across the polar regions. To facilitate exchange of knowledge and data, we have been working with users in Canada's North to create a PDC Lite Search which functions at low bandwidth. This new web tool, which complements the full-featured Catalogue, will allow "off-line" searching of PDC metadata records and include new features to accommodate northern geographies. To improve sharing of information between the PDC and other polar data portals in Canada and around the world, emerging web sharing protocols are being investigated and tested to allow increased national and international access to the PDC records.

Additionally, the CCIN website is undergoing a complete redesign. The CCIN site, which has contained the State of the Canadian Cryosphere website since the 1990's, receives thousands of hits per month. The site's scientific content is being updated, and new data visualizations are being created which allow the user to graphically view and investigate PDC datasets. Social media tools are being integrated into the site: Newly available PDC metadata and data are announced via Twitter, and a blog section provides opportunities for users to share stories about the cryosphere or changes they are experiencing; post images and videos; link to news articles or other websites; and generate, share, and coordinate information on pertinent research and monitoring projects. Social media has proven its ability to bring people together in times of political and other crisis; As a new avenue of interaction, it can also advance collaboration as well as our understanding of and response to polar environmental and socio-economic change.

We welcome feedback on our on-line tools and encourage inquiries regarding new opportunities and partnerships to better serve the needs of polar research, community-based initiatives, and northern monitoring programs.

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