

**2021 Arctic Data Committee Business Meeting - 7th December 2021**

15-18 CET / 9-12 am EST / 14-17 UTC

Teleconference

### Welcome and Introductions

Peter Pulsifer (ADC chair) welcomed everyone to this 2021 meeting of the ADC. Meeting Agenda can be found in Appendix 1. Attendees were given the chance to introduce themselves, their affiliations and line of work. The list of participants is found in Appendix 2. Link to the meeting recording can be found in Appendix 3.

### ADC Executive report including vision and strategy for 2021-2024

Peter Pulsifer acknowledged that, while there has been a gap in the ADC business meetings, ADC had been busy engaging in activities like the Polar Data Forum, the Polar to Global Hackathons. The goal for this meeting is to go over the upcoming change in leadership, as well as past, current and new activities of the ADC. Peter Pulsifer expressed the need for an open discussion on the vision and ADC strategy.

**3. ADC Executive report including vision and strategy for 2021-2024**

### a. ADC Background and past activities

Peter Pulsifer contextualised the creation of the ADC: it can be ultimately traced back to the International Polar Year of 2007-2008. The ADC was eventually formed in 2014. Peter Pulsifer detailed the ADC mandate. ADC’s priority is on facilitating collaboration.

Still to this day, the primary way to send out information about ADC’s work is the Polar Data Mailing List: <https://nsidc.org/mailman/listinfo/polardata>

### b. Current activities

Peter Pulsifer provided an overview of the current ADC activities:

* **Polar Data Forum IV (September 20 to 24, 2021)**

The last PDF was a great success with a record number of participants (350 registered participants). ADC contributed to organising the PDF but was not the primary lead this time. PDF IV was jointly organised with the Southern Ocean United Nations Decade. <https://polar-data-forum.org/>

* **Polar to Global Hackathon (P2G Hackathon)**

This concept emerged in June 2020 after the Arctic Observing Summit. This has become one of the primary

mechanism for bringing the ADC community together. There has been a dedicated series of hackathons on data policies led by Stein Tronstad (Norwegian Polar Institute) along with others (agenda item 3). A published paper came out of this process “Alignment of Polar Data Policies – Recommended Principles : <https://zenodo.org/record/5734900#.Yda5ymjMK8g>

* **Mapping the (Arctic) Polar Data Ecosystem**

This was the first ADC project established in 2014. This project will continue moving forward leveraging work currently done by POLDER and to develop new ways to visualise the data.

* **Polar Data Discovery Enhancement Research: POLDER**

Formed initially by ADC, by the Standing Committee on Antarctic Data Management (SCADM) and by the Southern Ocean Observing System (SOOS) as a Working Group. This has become a highly productive activity focused on federated search and semantics. <https://polder.info/>

* **Semantics and Vocabularies Working Group**

Was spun out of ADC, Interagency Arctic Research Policy Committee (IARPC) and SCAR’s Data Management Committee (SCADM).

### c. ADC Vision and Strategy for 2021-2024

Peter Pulsifer repeated the primary vision for the ADC to help push for “Free, ethically open, sustained and timely access to Arctic data and information through useful, usable, and interoperable systems”. He expanded upon the areas of significant progress to date, citing work with the International Arctic Science Committee (IASC), with the Sustaining Arctic Observing Networks (SAON), and the broader community as well as the Arctic Science Ministerial meeting as a very active area of ADC.

Areas of limited progress however have been in the sustained engagement of representatives from Indigenous Peoples and their representative organisations and in the completion of objectives.

### d. Proposed Elements of Strategy

Peter Pulsifer listed some suggestions on how to improve the work of ADC based on his own observations: rapidly developing new tactics, developing strategy for linkage to Indigenous data programs and activities, enhancing existing and build new partnerships, enhancing existing community/ADC capacity, leveraging existing/emerging community activities and organizations.

Peter Pulsifer emphasised the role of ADC in understanding and articulating what the polar data community needs, and how ADC can contribute and find ways to support the community in efficiently executing tasks.

Peter Pulsifer then opened the floor for discussion.

Bill Manley (University of Colorado) described the role of ADC, of the Working Groups and the hackathons as a glue that binds the community together.

Øystein Godøy (Norwegian Meteorological Institute, WMO GCW) agreed that ADC definitely serves a purpose. However one improvement in ADC’s work could be to focus more on the linkages to European Science Code, the INSPIRE Directive (Infrastructure for Spatial Information in the European Community)

Noor Johnson (NSIDC) concurred that ADC serves a very useful function. Noor noted the general disconnect between the level of research and data that is trying to support goals of arctic residents and community members and the pan-Arctic committees.

David Arthurs (Polar View) noted the ADC could perhaps collaborate more with ESA, the European Space Agency, and that the priority should also be given to improving interaction between data platforms.

Matt Jones (Arctic Data Centre) agreed that ADC is very useful as an organising body but that it is largely a representational unit as most of the work happens through projects and project funding.

David Arthurs noted that projects rarely build on each other, and many are reinventing the wheel. Perhaps a project like Arctic PASSION can build on what already exists and help bring people together.

He also expressed a fear that ADC could “spin out of control” with the upcoming change in leadership. Peter Pulsifer assured that a lot of people are now involved in the work and that we should instead focus on how this transition can be operated smoothly and who could step up to the challenge.

Bill Manley asked how in the future can ADC more greatly influence funders and funding opportunities.

Øystein Godøy suggested that ADC should link up to large scale projects instead of trying to create something new. ADC has a big role in helping to improve coordination between such projects.

**3. Aligning polar data policies, status and updates**

Peter Pulsifer presented again the new report entitled “Alignment of Polar Data Policies” published on Zenodo. This process was a follow up on the IPY pedigree. Stein Tronstad led this effort with ADC, SCADM, SAON: [https://zenodo.org/record/5734900#.Yda5ymjMK8g](https://zenodo.org/record/5734900" \l ".Yda5ymjMK8g)

A number of policies and policy drivers were examined. The report proposes a set of recommended core principles. This initiative has already received good traction. There were direct and partial references to this initiative in the [Reykjavik Declaration from the 2021 Arctic Council Ministerial Meeting](https://oaarchive.arctic-council.org/handle/11374/2600). This will be followed upon by meetings between the Arctic Spatial Data Infrastructure and the Arctic Council and its Working Groups early this year, in addition to a workshop at the end of March 2022 as part of the [ASSW](https://www.assw.info/) [AOS](https://arcticobservingsummit.org/summits/aos-2022/). The report does not quite have the engagement originally sought especially with indigenous organisation. But this initiative will continue to move forward and to be improved.

In the following conversation, Jonathan Blythe (BOEM, IARPC) asked how long did it take to develop the document that’s published and if there was a need for anything other policy type statement, or synthesis that we are working on?

Jan René Larsen (AMAP, SAON Secretariat) clarified that the Arctic Ministerial Statement mentioned by Peter Pulsifer shows that something should be done there. It provides a new framework, a new basis for trying to develop this even further. Plans could be made at the ASSW in March. The Arctic Council Data Policy could be delivered through the Norwegian Chairmanship to the Arctic Council.

Simon Riopel (Natural Resources Canada) congratulated and thanked the team that helped put together the data policy report and agrees with the work plan mentioned by Jan René Larsen. Simon suggested to continue the work of the Working Group on Arctic Data Policy with all the interested participants before the month of March 2022 (see also section 4g).

Stein explained that the hackathons were more or less bi-monthly with a 4 month gap in the summer. The writing took less than a year. The major discussion, the impetus for moving forward, occurred at the end of 2019. Stein added that he is hoping that ADC and Arctic Spatial Data Infrastructure (Arctic SDI) can join forces on the ASSW this coming march. Simon confirmed that this is doable in terms of budget and capacity.

**4. Project, Program, Member and National Reports:**

**a. Arctic PASSION**

Øystein Godøy presented the new project Arctic PASSION: A new 4 year program to advance a pan Arctic Observing System of Systems in support of Societal Needs, and explained about the specific tasks and deliverables related to the ADC. Arctic PASSION directly responds to the ROADS process and the ROADS document ([Starkweather et al., 2020](https://arcticobservingsummit.org/wp-content/uploads/2021/06/AOS2020_white_paper_short_statement_049.pdf)), and in addition it also addresses the perspective of an Arctic GEOSS implementation. After introducing the main partners and objectives of the project, Øystein explained that the most important goal for this group is to improve data interoperability and simplify access to application ready environmental data for the benefit of all users. This is focusing on analysis ready data but also establishing services of data.

Øystein Godøy is the Chair of the [Work Package 2 “Bringing the Arctic Data System to Action”](https://arcticpassion.eu/wp/wp2/). This WP is based on active promotion of data interoperability and handling of data. The efforts undertaken in WP2 on the data management will have to serve the needs of eight pilot services. Two deliverables for WP2 are directly connected to the work of ADC.

Jan René followed up on the deliverables that AMAP Secretariat is responsible for. One deliverable will aim to update the mapping of the Arctic Data System, a continued activity in the ADC forum. The core of the work is a harvesting matrix, and there has been a dialogue with the current owners of the system to update the data structure and the collected information. Heïdi Sevestre, who is now employed full time by the AMAP Secretariat will also be working on this task.

An other tasks seek to coordinate with existing data management bodies, provider and consumer communities and aims to make a synthesis report on the status of the Arctic Data System based on the activities of ADC and working groups as well as PDF activities. The first report is due for June 2022, but more regular reporting will be made. A table of content for this reporting has to be provided this coming spring.

Peter Pulsifer highlighted the fact that we are starting to see some movement on the international funding front and suggested that when experts put proposal together so that the group could try to leverage these proposals to contribute to the collective.

**b. Polar Observing Assets Working Group**

Bill Manley presented this new Working Group under SAON CON (Committee on Observation and Network), that aims to bridge the polar *data* communities with the polar *observing* community. The need is for an integrated polar observing system to meet observing needs. There’s currently very little interoperability and sharing of information.

So far 62 people have signed up to the Working Group with 8-15 joining the regular monthly meetings.

<https://www.polarobservingassets.org/>

Peter Pulsifer applauded the great potential connections that are starting to emerge here between these various initiatives.

**c. Northern Data Governance and Engagement**

Jenn Parrott (Inuvialuit Regional Corporation) shared recent Canadian publications related to the use of indigenous knowledge and its integration into decision making:

* <https://www.rcaanc-cirnac.gc.ca/eng/1575567784632/1575567805298>
* <https://www.canada.ca/en/impact-assessment-agency/programs/aboriginal-consultation-federal-environmental-assessment/indigenous-knowledge-policy-framework-initiative/indigenous-knowledge-policy-framework-project-reviews-regulatory-decisions.html>
* <https://www.canada.ca/en/research-coordinating-committee/priorities/indigenous-research/strategic-plan-2019-2022.html>

She explained that the key intention is focusing on equity capability to use the information and the mobilization of knowledge to make sure we have platforms that make a difference in the North, a difference with regards to basic understanding for the knowledge and decision making.

Jenn shared two new Inuit publications that set some guidelines on approaches to Inuit engagement and research relationship:

<https://www.inuitcircumpolar.com/project/icc-ethical-and-equitable-engagement-synthesis-report/>

<https://www.itk.ca/national-strategy-on-research-launched/>

She then introduced the National Inuit Data Management Committee (NIDMC) that was formalized in 2017. NIDCM aims to provide an opportunity for coordination across all major Inuit groups across Canada, to provide advice on strategic directions such as cyberinfrastructure. Jenn concluded by sharing some exciting plans: in 2022 Canada us embarking on a 3 year long project that aims to develop the Inuit Data Strategy.

Simon Riopel asked Jenn how one could work with her on the Arctic Data Policy work? Jenn suggested to submit a formal letter of interest. Jonathan Blythe enquired about funding and data ownership. Jenn explained that she works for an Inuit land claim organization, not for the Federal Government.

**d. Introductions and select U.S. data management activities**

Noor Johnson (NSIDC) introduced [ELOKA 5](https://eloka-arctic.org/welcome), a program that partners with organisations and researchers that work with Arctic communities. They provide data management support services including everything from general advising about data management and to working collaboratively to develop specific tools for data sharing.

Matt Jones (Arctic Data Center) asked about the intersection between ELOKA and Jenn’s presentation. Noor explained that ELOKA is not directly involved with policy but instead work as a partner to support organizations. Peter added that the infrastructure has been technically established in a way that it would be easy to make it more FAIR from a technical perspective.

Matt Jones added that the case studies of ELOKA could be thought about with respect of that to schema.org. He is looking forward to seeing more points of contact at the community level that isn’t necessarily constrained to the Arctic.

Jonathan Blythe, co-Lead of IARPC described his role: to link what is taking place nationally and the interagency research policy committee collaboration space. They are closing out their last 5 year plan that Peter Pulsifer helped design and implement. They are now embarking on a new plan where data is still a very important aspect. Another one of the foundational areas is co-production of knowledge and indigenous led research.

**e. POLDER activities**

Taco DeBruin (NIOZ Royal Netherlands Institute for Sea Research) introduced POLDER, the Polar Federated Search Working Group, the result of a collaboration between ADC, SCADM and SOOS: <https://polder.info/>

The POLDER group is writing a best practise document for schema.org as an interchange language for polar discovery metadata, using the Ocean Best Practices System template (OBPS).

POLDER needs help from the entire Arctic Polar Data community to find new Chairs. Taco DeBruin concluded by mentioning a series of tentative new funding opportunities.

**f. Arctic Observing Summit and Connection to ADC**

Maribeth Murray (Arctic Institute of North America) gave a brief update about the 6th Arctic Observing Summit that will take place right after the Arctic Science Summit Week from March 30th to April 1st 2022. The theme this year is “Arctic observing at the intersection of health, understanding, and resilience”.

Outputs from the summit usually include a statement and recommendations that are then delivered up to such entities as the Arctic Science Ministerial, different federal agencies and governments.

More information on the AOS and related deadlines is available here: <https://arcticobservingsummit.org/summits/aos-2022/>

**g. Arctic Council Data Policy**

Peter Pouplier (Ministry of Environment, Denmark) followed up on the Arctic Council Data Policy. Peter explained that we now have a political and administrative interest in developing an Arctic Council data policy (Ministers Declaration May 2021, Arctic Council Strategic Plan, SAO request).

Arctic Council’s Working Groups have started to be interviewed in order to establish the background for this work. Different perspectives are being assessed: scientific data, indigenous knowledge, decision supporting data, Arctic Council produced data, national data etc. After this initial round of interviews, the first workshop will be conducted in March 2022 with the goal to aim for the May 2025 Arctic Council Ministerial meeting during the Norwegian Chairmanship to release this work.

1. **Open reporting and discussion session for all**

Peter Pulsifer explained that it is now time for the election of new chairs for ADC. The ADC Terms of Reference says that the current chair will remain as part of the steering committee to ensure a smooth transition. Peter proposed that the announcement process will be similar to what has already been done with CON and that ADC will put up a broad call for nominations across the community. People can self-nominate or nominate others. This approach has been very successful with CON. The idea would be to have all the candidates by the end of February. This new process was agreed upon by the group.

A change in ADC Terms of Reference will be proposed to allow that the Chairs do not have to be National Representatives.

Peter Pulsifer thanked Marten Tacoma (NIOZ) and Stein Tronstad for having been co-Chairs to the group, and thanks the community for the great work that has been done and the advancements that have been made as a community.

1. **SAON: Report from the Board and the Committee on Observing Networks (CON)**

Jan René also took the opportunity to thank Peter Pulsifer, Marten Tacoma and Stein Tronstad for their work.

He then briefly introduced the ROADS process. One of the driving principles of this work is the concept of Shared Arctic Variables (SAVs), broad global variables that should be prioritized. These variables are at the meeting point between:

* Regionally-identified science and decision making needs
* Indigenous-led benefit identification and system implementation
* Essential Variables of Global Networks

Arctic PASSION is one of the initiatives that will work with SAON to develop the concept of SAVs. Another initiative is the RNA CoObs and the Working Group on Food Security. Expert panels will develop the SAVs within the framework described above. That work will lead to the creation of a new Advisory Panel that will meet in December 2021 for the first time. Within that framework each of these different initiatives that will define these variables that will be evaluated within the Advisory Panel.

Peter Pulsifer told the community to watch out for new emails regarding elections and other follow up emails. Most urgently will be to connect with Gerlis Fugmann regarding representatives for the International Conference on Arctic Research Planning (ICARP).

Peter Pulsifer again thanks everyone for their great work.

The next joint ADC AOS meeting is expected to take place at the end of March in Tromsø.

Appendix 1: Agenda

**2021 Arctic Data Committee Business Meeting - 7th December 2021**

15-18 CET / 9-12 am EST / 14-17 UTC

Teleconference

1. Welcome and introductions (Peter Pulsifer)
2. ADC Executive report including vision and strategy for 2021-2024 (Peter Pulsifer)
3. Aligning polar data policies, status and updates (Peter Pulsifer)
4. Project, Program, Member and National reports, including
5. Arctic PASSION, Work Package 2: *Bringing the Arctic Data System to action*(Øystein Godøy, Jan Rene Larsen, Heïdi Sevestre)
6. Polar Observing Assets Working Group (Bill Manley)
7. National Inuit Data Management Committee and Inuvialuit Regional Corporation Activities (Jenn. Parrott)
8. Introductions and select U.S. data  management activities (Noor Johnson, Matt Jones, Jonathan Blythe)
9. POLDER activities (Taco DeBruin)
10. Arctic Observing Summit and connection to ADC (Maribeth Murray)
11. Arctic Council Data Policy (Peter Pouplier)
12. Review of Terms of Reference, leadership review (Peter Pulsifer)
13. SAON: Report from the Board and the Committee on Observing Networks (CON) (Jan René Larsen)

Appendix 2: List of participants

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| **Name** | **Affiliation** |
| Shannon Christoffersen | Arctic Institute of North America, University of Calgary |
| Amber Budden | Arctic Data Center / DataONE / NCEAS |
| William Manley | University of Colorado |
| V S Samy | NCPOR, Goa, India |
| V S SAMY | NCPOR, GOA, INDIA |
| Ranjan Datta | Canada Research Chair |
| Sarah Manthorpe | British Antarctic Survey - Polar Data Centre |
| Øystein Godøy | Norwegian Meteorological Institute/WMO GCW |
| Peter Kirsch | British Antarctic Survey UKRI/NERC |
| Marten Tacoma | NIOZ |
| Chantelle Verhey | International Technology Office |
| Matias Takala | Finnish Meteorological Institute |
| David Arthurs | Polar View |
| Alberto Salvati | CNR |
| Shannon Christoffersen | Arctic Institute of North America, University of Calgary |
| Sarah Jana Manthorpe | British Antarctic Survey |
| Matt Jones | Arctic Data Center |
| Mikko Strahlendorff | Finnish Meteorological Institute |
| Stein Tronstad | Norwegian Polar Institute |
| Noor Johnson | NSIDC |
| Jonathan Blythe | BOEM, IARPC |
| Peter Pulsifer | Carleton University |
| Jan René Larsen | AMAP Secretariat, SAON Secretariat |
| Jenn Parrott | Inuvialuit Regional Corporation |
| Simon Riopel | Natural Resources Canada |
| Taco DeBruin | NIOZ |
| Maribeth Murray | Arctic Institute of North America |
| Peter Pouplier | Ministry of Environment, Denmark |

Appendix 3: List of documents

Meeting recording is found here: <https://arcticdc.org/meetings/adc-meetings/meeting-6-teleconference-ii>