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Science Council

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Standing SCADM
Committee

Person Johnathan Kool
Responsible:

SCAR Delegates Report 2022

Standing Committee on Antarctic Data Management (SCADM)

2020-2022 Report

Summary

Report Author(s)

Johnathan Kool (Australia)

Summary of activities from 2020-22

2020-21

SCADM jointly developed a polar data policy recommended principles document in conjunction with the Arctic Data Community and Southern Ocean Observing System (SOOS). The completed principles document is available for viewing at <https://zenodo.org/record/5734900#.Yt3OlnZBxaQ>.

The Antarctic Master Directory portal was re-developed in response to architectural changes made to the Global Change Master Directory by NASA. The re-developed website's location is <https://search.earthdata.nasa.gov/portal/amd/search>. SCADM also collectively decided to change the name going forward from the Antarctic *Master* directory to the Antarctic *Metadata* directory to better describe the function of the site, and to move away from using terms with connotations of inequality.

2021-22:

SCADM supported and attended the Fourth Polar Data Forum held in the Hague, Netherlands and online in September 2021, with 351 participants from 50 different countries. For details on activities, see <https://polar-data-forum.org/>.

As part of Polar Data Forum IV, SCADM participated as part of the planning committee, and also offered an award for presentations that related to Antarctic or Southern Ocean data or data management, improved or exemplified FAIR data practices, and favoured Early Career Researchers. Following the event and on the basis of unanimous consent from SCADM members, two teams were awarded the Prize: Alice Fremant and Julien Bodart from the British Antarctic Survey, and Chiara Ripa and Giulio Verazzo from the Istituto di Scienze Polari in Italy. Both teams gave an extended presentation of their work to SCADM, and the initiative was regarded as a successful and productive use of funds to support increased engagement, particularly of early-career researchers.

This principles document developed during 2020-21 was used to revise the SCAR Data Policy. The document went through several rounds of collective revision among

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SCADM members, and then was submitted to the SCAR Executive Committee. The document was subsequently endorsed by the Committee, and is available for viewing at <https://www.scar.org/library/products/scadm/5767-scar-data-policy-2022>. The document is in the process of being formatted by the SCAR Secretariat for release as a SCAR report.

SCADM has also been promoting increased use of schema.org by National Antarctic Data Centres. A prototype search portal has been developed by the World Data System (WDS). The National Centre for Polar and Ocean Research of India has agreed to potentially assume hosting responsibilities for the site.

SCADM continues to engage new members, including new representatives for Spain (Susana Diez Tagarro) and Italy (Alberto Salvati). Attendance at regular monthly meetings continues to be strong (membership numbers), reflecting growing interest and engagement relating to polar data management.

Summary Budget 2020 to 2023

	2020	2021	2022	2023
	Spent	Allocated	Request	Request
(US\$)1	0	2000	5000	5000

Future plans

Planned use of funds for 2022 to 2024

Year (YYYY)	Purpose/Activity	Amount (in USD)	Contact Name	Contact Email
2023-2024	Support Polar Data forum workshop planning, attendance, and infrastructure support	\$1250	Johnathan Kool	johnathan.kool@aad.gov.au
2023-2024	Provide prizes for student and early career projects advancing data management and data science	\$1250	Johnathan Kool	johnathan.kool@aad.gov.au
2023-2024	Develop tools and web capability to improve access to AMD collections (improve the AMD)	\$1000	Johnathan Kool	johnathan.kool@aad.gov.au
2023-2024	Improve integration with global biodiversity delivery systems	\$500	Johnathan Kool	johnathan.kool@aad.gov.au
2023-2024	Increase engagement capability with developing Antarctic data programs	\$1000	Johnathan Kool	johnathan.kool@aad.gov.au
2022-2023	Provide support for an international workshop on data interoperability for data from icebreakers	\$8000	Johnathan Kool	johnathan.kool@aad.gov.au
2022-2023	Develop tools and web capability to improve access to AMD collections (improve the AMD)	\$1000	Johnathan Kool	johnathan.kool@aad.gov.au

Additional detail on funds usage and desired results/outcomes

Percentage of the budget to be used for support of early-career researchers

2022: 40% (direct)
 2023: 25% (direct)
 2024: 25% (direct)

Percentage of the budget to be used for support of researchers from countries with developing Antarctic programmes

2022: 20%
 2023: 25%
 2024: 25%

Membership

Leadership

Role	First Name	Last Name	Affiliation	Country	Email	Date Started	Date Term is to End
Chair	Johnathan	Kool	AAD	Australia	johnathan.kool@aad.gov.au	July 7, 2019	July 6, 2024
Vice	Helen	Peat	BAS	UK	hipe@bas.ac.uk	July 7, 2019	July 6, 2024
Vice	Frank	Nitsche	LDEO	USA	fnitsche@ldeo.columbia.edu	July 7, 2019	July 6, 2024

*Please identify early-career researchers with * in first column*

Other members

First Name	Last Name	Affiliation	Country	Email
Diego	Gomez Izquierdo	Instituto Antártico Argentino	Argentina	diegogi@dna.gov.ar
Anton	Van de Putte	SCAR Antarctic Biodiversity Portal	Belgium	antonarctica@gmail.com
Sergey	Karaka	Institute for Nature Management	Belarus	sk001@yandex.ru
Roberto	De Pinho	Ministério da Ciência, Tecnologia e Inovações	Brazil	roberto.depinho@mcti.gov.br
Rosita	Yaneva	National Center for Polar Studies	Bulgaria	r.s.yaneva@gmail.com
Greg	Vey	Polar Data Catalogue	Canada	gvey@uwaterloo.ca
Ricardo	Jaña	Instituto Antártico Chileno	Chile	rjana@inach.cl
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Imogen	Jones	SOOS	Australia	jones@soos.aq

*Please identify early-career researchers with * in first column*

Additional information

Detailed information on activities to date

Major Outcomes

The completed polar data principles document and the associated revised SCAR Data Policy represent major milestones for SCADM, and have already generated impacts at the national and international level (see next section).

Polar Data Forum IV was successfully held in conjunction with the UN Ocean Decade workshops in the Hague.

SCADM has also significantly advanced its use of schema.org metadata to enhance searches over National Antarctic Data Centre collections. Schema.org metadata allows for Antarctic data collections to be searched and discovered through portals such as Google Datasets (<https://datasetsearch.research.google.com/>).

SCADM continues to progressively increase its engagement with National Antarctic Data Centres. SCADM maintains regular monthly meetings, with strong participation from many members, and providing a forum for sharing of information and best practices (e.g. sharing capability on how to set up and run a data portal). SCADM also helps coordinate collaboration with broader community initiatives such as the UN Decade of the Ocean.

Major Products

Antarctic Metadata Directory: SCADM is responsible for operating and maintaining the Antarctic Metadata Directory – the chief source for the global collection of Antarctic Data.

Revised Scar Data Policy (2022): SCADM has completed an updated version of SCAR's data policy, which has been endorsed by the SCAR Executive Committee.

Major Impacts

The polar data principles document and the associated revised SCAR Data Policy have been used as the basis of new versions of the SOOS data policy, and the Australian Antarctic Data Policy. The documents have also been taken into consideration in new revisions to the Intergovernmental Oceanographic Commission (IOC)'s data policy, New Zealand's Antarctic data policy, and the National Science Foundation (NSF) of the United States' Polar Data Program Data Policy.

SCADM continues to have strong community engagement and provides a forum for National Antarctic Data Centres to share information regarding data management best practices.

Continued delivery of Antarctic data collections through the Antarctic Metadata Directory.

Direct support from outside organisations received for your activities

1. NASA provides ongoing In-Kind support for hosting the Antarctic Metadata Directory
2. The World Data system has provided support in developing a schema.org-based data access portal.
3. The Indian National Polar Data Center has offered to host the schema.org-based data access portal.

Major collaborations your group has with other SCAR groups and with organisations/groups beyond SCAR

Within SCAR

1. Anton Van de Putte is the liaison between SCADM and the Life Sciences Group;
2. Frank Nitsche has contacts to the SCAR Scientific Research Programme PAIS (Past Antarctic Ice Sheet dynamics) and the Antarctic Seismic Data Library System (SDLS);
3. Imogen Jones is the liaison between SCADM and SOOS;
4. Johnathan Kool has contacts to the SCAR Standing Committee on the Antarctic Treaty System (SCATS) and Integrated science to support Antarctic and Southern Ocean Conservation ([Ant-ICON](#)).

Outside SCAR

1. The group is currently engaged with the Arctic Polar Data community (contact: Peter Pulsifer);

2. Chantelle Verhey of the World Data System is a regular attendee at SCADM meetings, and has provided support for delivery of a new data access portal leveraging schema.org.

Outreach, communication and capacity building activities

SCADM held a workshop as part of Polar Data Forum IV - “Best practices for polar data management - an interactive session bringing together polar researchers and polar data managers”. The workshop was co-hosted by Johnathan Kool and Helen Peat with the intent of being an open forum to discuss data management challenges and to assist with building networks.

Contributions to equality, diversity, and inclusion (EDI)

SCADM has explicitly written into its revised data policy the need for data to be free and ethically open, and that the FAIR principles of Findability, Accessibility, Interoperability, and Reusability should be applied to the greatest extent practicable. Information should be shared and distributed in an egalitarian manner.

SCAR Fellowship Reviewers

First Name	Last Name	Email	Principal Expertise
Anton	Van de Putte	antonarctica@gmail.com	Biodiversity data management
Imogen	Jones	data@soos.aq	Ocean data management