

JCADM Report to the SCAR Delegates meeting, Moscow, Russia, 2008

Reporting period: July 2006 – June 2008

Introduction

Scientific data are very valuable. In the first place their intrinsic value for scientific research: without data no science. But there is also an economical value of data: it's extremely expensive to collect the data. This is especially true for Antarctic data.

To maximize the value of data and to preserve data for future (re)use, data need to be carefully managed in a professional manner. Data management includes all activities to archive data, to make data accessible and to exchange data. To make archived data accessible the existence and availability of the data must be made known. This includes building (metadata) directories and catalogs, defining exchange formats and developing web techniques for data exchange over the Internet.

Antarctic data management

For Antarctic data the Antarctic Treaty (Article III – 1c) requires that “Scientific observations and results from Antarctica shall be exchanged and made freely available”

To facilitate preservation and exchange of Antarctic data, nations are called upon to establish National Antarctic Data Centres (ATCM XXII Resolution 4.1).

To coordinate Antarctic data management and to support SCAR and COMNAP to fulfill the Antarctic Treaty obligations as described above, SCAR and COMNAP established the SCAR/COMNAP Joint Committee on Antarctic Data Management (JCADM) in 1997.

Members of JCADM are the managers of the National Antarctic Data Centers, or a relevant national contact if a NADC has not yet been established.

JCADM meets annually, with every second meeting in conjunction with SCAR and COMNAP

Revised Terms of Reference

In the aftermath of the Hobart meetings in July 2006, SCAR and COMNAP agreed on revised Terms of Reference for JCADM. These are included in Appendix 1.

JCADM ToR 3:

To support the establishment and ongoing work of National Antarctic Data Centres, in accordance with ATCM XXII Resolution 4.1 (1998),

Recruitment of new NADCs

JCADM has welcomed the representative from Pakistan.

JCADM has now membership from the following 31 nations: Argentina, Australia, Belgium, Bulgaria, Canada, Chile, China, Estonia, Finland, France, Germany, India, Italy, Japan, Korea, Malaysia, Netherlands, New Zealand, Norway, Pakistan, Peru, Poland, Russia, Spain, South Africa, Sweden, Switzerland, Ukraine, United Kingdom, United States, Uruguay.

Capacity building workshops and JCADM-10 and -11 meetings

JCADM organized international capacity building workshops, during the JCADM-10 meeting in Hobart, Australia, July 2006 and the JCADM-11 meeting, Rome, Italy, September 2007.

The capacity building workshop in Rome was a two day workshop, prior to the JCADM-11 meeting. This workshop (and the JCADM-11 meeting) was attended by a record number of representatives from 20 countries. The financial support by the Italian government and POGO is kindly acknowledged.

JCADM ToR 4 and 5:

To encourage submission of scientific metadata and data to the Antarctic Data Management System,

To further improve and populate the AMD and provide guidance to the AMD host,

Populating the Antarctic Master Directory.

The Antarctic Master Directory (AMD) is the world's largest on-line directory of Antarctic data set descriptions.

The number of data set descriptions has grown from 3907 in July 2006 to 4673 in May 2008.

The number of nations contributing their data set descriptions, has grown from 23 nations in July 2006 to 25 nations in May 2008. Also, the SCAR-MarBIN project and large (Remote-Sensing) organizations contribute.

The statistics show a tremendous increase in usage of the AMD since the start of the IPY in March 2007. The number of downloads (of data set descriptions) has grown from a steady 500 per month since January 2004 to about 3000 per month since March 2007.

JCADM ToR 6:

To provide linkages to other relevant data management systems and thereby enhance the ADMS,

JCADM and the International Polar Year 2007-2008 (IPY)

JCADM as a data infrastructure is part of the IPY Data and Information Service (IPYDIS)

The JCADM Chief Officer is one of the two co-chairs of the IPY Subcommittee on Data Policy and Management.

Individual JCADM members are active in a whole suite of IPY projects.

JCADM ToR 7:

In partnership with EGGI [=SC-AGI] to work with SCAR SSGs, COMNAP and the Antarctic Treaty Secretariat to identify and develop fundamental scientific datasets of value to the Antarctic Community.

Liaison with SCAR groups and projects

JCADM has liaisons with the three SCAR SSGs and with all five SCAR Scientific Research Programmes (SRP), to advice and assist the SRPs on data management issues.

The new Standing Committee on Antarctic Geographic Information (SC-AGI, established in 2006) and JCADM are connected both at the executive level as well as through liaisons.

JCADM is actively involved in building the data management part of the planned Southern Ocean Observing System (SOOS).

JCADM has participated in the SCAR Cross Linkages Workshop in Italy, October 2006 and in the Chief Officers' meeting in the USA, July 2007.

The JCADM liaison is a member of the Steering Committee of the SCAR-MarBIN project.

JCADM is working on building data portals for each of the SCAR Research Projects. The contents of these portals is specifically targeted at the needs of the scientists working in these SRPs. Essentially, the data portals are a subset of the entire Antarctic Master Directory (AMD). The EBA data portal is the first one, built as a pilot project. In St. Petersburg, the EBA data portal will be evaluated and there will be discussion how to proceed for the other 4 SRPs.

Links to organizations outside SCAR and COMNAP

The Antarctic Master Directory is a very valuable tool for discovery of data needed in environmental reporting. For some time now, JCADM has been exploring the role it can play in data management for environmental reporting and how it, as a SCAR and COMNAP body, can help the Committee for Environmental Protection with data management advice and activities. Out of this process and through contacts between JCADM members and CEP executives, came the idea to submit an informal information paper on Antarctic data management to the Committee on Environmental Protection (CEP) meeting in June 2008.

This paper is the first step in a process to submit a working paper on Antarctic data management to the CEP meeting in 2009, in close consultation with the SCAR, COMNAP and CEP Executives and Secretariats.

Goal is to forge a closer relationship and possibly collaboration with CEP on data management issues.

JCADM advised the Antarctic Treaty Secretariat on data management formats for the development of the ATCM Electronic Information Exchange System.

JCADM ToR2:

To assist in establishing Antarctic scientific data management policies, priorities and best practices,

SCAR Data Strategy

JCADM was asked by the SCAR Executive Director to draft a SCAR Data Strategy. After several consultation rounds within JCADM and with the SCAR Secretariat, the final draft version was sent to all Delegates and Chief Officers of the SSGs and SRPs recently, for further discussion.

The Delegates are asked to set up an effective process, which will lead to the adoption of the Data Strategy and an accompanying, feasible implementation plan.

The most recent version of the draft SCAR Data Strategy, including an exchange of emails on the subject, may be found on the JCADM web site at www.jcadm.scar.org

Challenges

Links to SCAR and COMNAP – Funding of JCADM

At the meeting in Hobart, July 2006, COMNAP decided to stop funding JCADM in 2009. From 2009 onwards, JCADM will therefore become a SCAR (-only) Standing Committee on Antarctic Data Management, funded by SCAR.

The total amount of funding from SCAR and COMNAP is now 10 k US\$/year (2/3 SCAR, 1/3 COMNAP). This is equivalent to the agreed amount of money which goes to the GCMD, for

hosting the Antarctic Master Directory and assisting SCAR, COMNAP and JCADM in many ways.

Delegates are asked by the SCAR Executive Director to approve the change of name and the contribution of additional resources (US\$13,000/year) to ensuring the effective implementation of the SCAR Data Strategy.

Other challenges

JCADM, as a (voluntary) organizational body, faces two other challenges.

- resourcing of its member NADCs at the national level
- building an efficient internal organization, resulting in an active involvement of all JCADM members

Members of JCADM are the managers of the National Antarctic Data Centers, or a relevant national contact if a NADC has not yet been established. However, out of the 31 JCADM member states, only about 10 have established a National Antarctic Data Center.

An action to adopt a resolution at the SCAR and COMNAP Delegates meetings in Hobart, July 2006, led to an official letter from SCAR to all National SCAR Committees, requesting these to resource their NADCs adequately.

Unfortunately, this letter did not lead to any tangible results.

The second issue is being addressed by agreeing on a whole series of Rules of Procedure.

The JCADM website is seen as an important communication tool, both for external as well as internal communication. A major revision and improvement of the web site was done in 2006.

A new tool to further involvement will be the JCADM newsletter. The first issue of this JCADM newsletter will be issued shortly before the St. Petersburg meeting in July 2008.

Appendix 1.

Terms of Reference of JCADM (as agreed by SCAR and COMNAP in 2006)

1. To promote long-term preservation and accessibility of scientific data relating to Antarctica and the Southern Ocean in sustainable repositories,
2. To assist in establishing Antarctic scientific data management policies, priorities and best practices,
3. To support the establishment and ongoing work of National Antarctic Data Centres, in accordance with ATCM XXII Resolution 4.1 (1998),
4. To encourage submission of scientific metadata and data to the Antarctic Data Management System,
5. To further improve and populate the AMD and provide guidance to the AMD host,
6. To provide linkages to other relevant data management systems and thereby enhance the ADMS,
7. In partnership with EGGI [=SC-AGI] to work with SCAR SSGs, COMNAP and the Antarctic Treaty Secretariat to identify and develop fundamental scientific datasets of value to the Antarctic Community.