



## **SCAR Executive Committee Meeting 2017**

**Brno, Czech Republic, 31 July - 2 August 2017**

# **The Future of the SCAR Products**

### **Report Author(s):**

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### **Summary (<150 words):**

SCAR has a number of database and mapping products and more are being developed – sometimes using a SCAR product as a base and other times independently. To help facilitate better coordination and avoid duplication, a workshop should be planned with product contact points, host institutes and other interested parties. The goal being to develop a strategic view of what SCAR wants in terms of its products.

**Recommendations that EXCOM should consider (if any):** *Please indicate if approval is necessary or if they are just asked to note information.*

The SCAR Executive Committee is asked to note this concern and endorse the efforts of the Data and Mapping communities to come together to better coordinate future efforts.

## Background:

SCAR has ~9 database products and 8 major mapping products. In addition, several new initiatives are being developed such as the SOOS DueSouth database. There is a risk that new or emerging products may duplicate or cut across existing Products. A list of the current products is included in this paper.

Maintenance of these products are dependent mostly on the contributions of volunteers and through the generous support of countries and institutions hosting them.

## Future Plans:

Many of the creators and maintainers of these products have expressed a need to have a comprehensive review of what the products currently offer, share plans for further development or sunset plans.

In addition, several people have suggested ways to build on current SCAR products. One example being the suggestion from ICED of a targeted effort such as SCAR-MarBIN/biodiversity.aq for the pelagic zone to aide in ecosystem modeling.

As a matter of priority to better coordinate these efforts moving forward, it is suggested to have a small workshop with the contact points for these products and key personnel at institutes hosting them. The goal of the workshop would be to develop a strategic view of what SCAR wants/needs from its products.

Topics for discussion at such a workshop could be:

- What is a SCAR product?
- Is the current list of products complete and up to date?
- What can we add to the SCAR website to provide an indication of the status of the products in terms of maintenance, updates, etc?
- Are there gaps in products/subjects that SCAR could help to address?
- Is there overlap in products or does each have a special niche?
- Are new products being planned and if so how do we prevent duplication?
- How can new products benefit from what's already there?
- Are there certain standard procedures that SCAR products should have (eg. interfaces)?
- How do we ensure products are easy to use and promoted?

The Executive Director has agreed to put forward \$15,000 from the 2016 Contingency Funds to hold such a 2-3 day workshop, ideally in Cambridge sometime within the next year.

# SCAR Databases



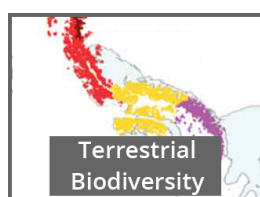
## Antarctic Master Directory (AMD)

the largest collection of Antarctic data set descriptions in the world, holding over 7700 dataset descriptions from 25 countries



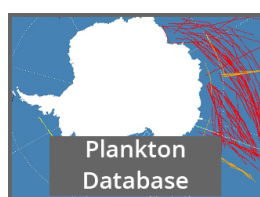
## biodiversity.aq

establishes and supports a distributed system of interoperable databases, giving easy access through a single internet portal to a set of resources relevant to research, conservation and management pertaining to Antarctic biodiversity (also known as ANTABIF, the Antarctic Biodiversity Information Facility)



## Antarctic (Terrestrial) Biodiversity Database

an online database of terrestrial species that captures all recorded species observations and their locations from the Antarctic and subantarctic including information on taxonomy, collections and observations, bioregions, and alien species



## Continuous Plankton Recorder Database (CPR)

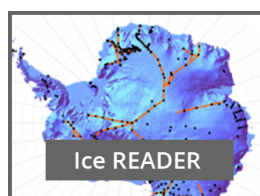
a high quality dataset for the purposes of mapping plankton biodiversity: monitoring and development of models at seasonal, inter-annual, decadal, and spatially local and global scales; and providing core plankton data for ecosystem models

## Reference Antarctic Data for Environmental Research (READER)

ID	Name	Latitude	Longitude	Height	Comments
00000	Adelphi	61.00	68.00 W	Sea	NO-REF-REF-122-1
00001	Admiral Byrd	64.00	62.00 W	Ten	NO-REF-REF-122-1
00002	Amundsen-Scott	90.00	0.00	3500m	NO-REF-REF-122-1
00003	Antarctic Peninsula	65.00	60.00 W	Sea	NO-REF-REF-122-1
00004	Antarctica	71.00	25.00 E	Wides	NO-REF-REF-122-1
00005	Bellingshousen I.	74.00	58.00 W	Sea	NO-REF-REF-122-1
00006	Bolshaya I.	77.00	54.00 W	250m	NO-REF-REF-122-1
00007	Bryde I.	62.00	59.00 W	100m	NO-REF-REF-122-1
00008	Cape Adare	68.00	12.00 E	100m	NO-REF-REF-122-1
00009	Cape Adare	68.00	12.00 E	100m	NO-REF-REF-122-1
00010	Cape Adare	68.00	12.00 E	100m	NO-REF-REF-122-1
00011	Cape Adare	68.00	12.00 E	100m	NO-REF-REF-122-1
00012	Cape Adare	68.00	12.00 E	100m	NO-REF-REF-122-1
00013	Cape Adare	68.00	12.00 E	100m	NO-REF-REF-122-1
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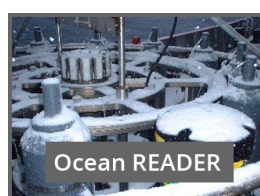
## Met-READER

a database contains monthly mean surface and upper air climatological data derived from the in-situ meteorological observations made at Antarctic stations with long-term records, including temperature, surface pressure, wind speed/direction and geopotential height



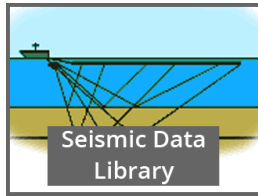
## Ice-READER

a list and interactive maps showing the locations of all the cores that have been collected as part of the International Trans-Antarctic Science Expedition and other initiatives that includes data on the depth of the core, sampling frequency, time coverage, mean snow accumulation, chemical analysis



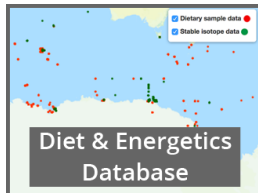
## Ocean-READER

a portal to oceanography data that may be of interest to those concerned with climate change at high southern latitudes, mainly focusing on temperature, salinity and current data



### Seismic Data Library System (SDLS)

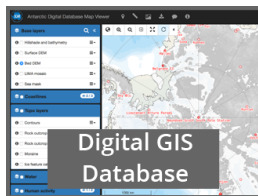
provides open access to all multichannel seismic reflection (MCS) data collected south of 60° S



### Southern Ocean Diet and Energetics Database (SO-Diet)

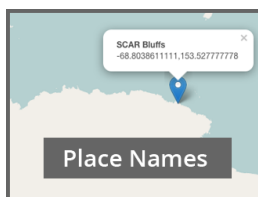
a centralised database for information related to diet and energy flow from conventional (e.g. gut content) and modern (e.g. molecular) studies, stable isotopes, fatty acids, and energetic content fundamental to a diverse range of Antarctic and Southern Ocean biological and ecosystem studies

## SCAR Map and Geographic Information Products



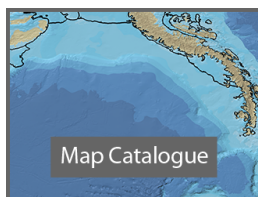
### ADD - Antarctic Digital Database

a compilation of the best international topographic mapping for Antarctica at scales between 1:250,000 and 1:10 M that can be viewed on a range of vector and satellite image backdrops. The underlying data can be downloaded free of charge in a range of formats for onward work in desktop GIS



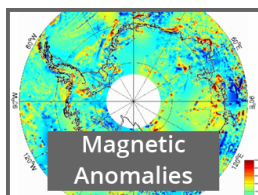
### Composite Gazetteer of Antarctica (CGA)

a searchable database of all Antarctic place-names from each country active in Antarctica including the names of features south of 60° S, both terrestrial and undersea or under-ice



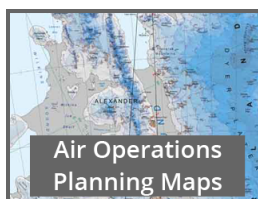
### Antarctic Map Catalogue

a catalogue of international maps for Antarctica is compiled and maintained by the Australian Antarctic Division Data Centre containing entries for over 5000 hard copy maps from 26 countries and about 1000 digital maps from five countries



### ADMAP - Antarctic Digital Magnetic Anomaly Project

a digital database of all existing near-surface and satellite magnetic anomaly data collected in Antarctica and surrounding oceans south of 60 degrees



### Air Operations Planning Maps

a series of maps at 1:1M scale, together with a continent over-view map, to support Air Operations planning. The maps are compiled collaboratively by Belgium (in cooperation with Australia), Norway, the UK and USA. The maps and digital data are freely available for download.



### BEDMAP2 - Antarctic Bedrock Mapping

a new suite of gridded products describing surface elevation, ice-thickness and the sea floor and subglacial bed elevation of the Antarctic south of 60° S



### International Bathymetric Chart of the Southern Ocean (IBCSO)

an enhanced digital database that contains bathymetric data available south of 60S latitude used to produce a consistent bathymetric chart of the Southern Ocean

*Drake Passage Bathymetry Map: a new map covering an area of 1470000 km<sup>2</sup> between parallels 52°S and 63°S and between meridians 70°W and 50°W, where the high resolution bathymetric data covers more than 70% of the region with a 200 m cell resolution of the sea floor topography*



### Quantarctica

a downloadable collection of Antarctic geographical datasets which works with the free, open-source software QGIS and currently includes geography, glaciology and geophysics data, and will expand with contributions from the research community