



SCAR Expert Group on IBCSO Report to GSSG

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Retrospect

- Ad-hoc GEBCO-Meeting in Durham, May 2002
- IBCAO-Meeting in Hawaii, November 2002
- IOC-CGOM @ GEBCO Centenary Conference 2003



- Adoption: XXXVII IOC EC (Res. EC-XXXVII.5), 2004
- Kick-Off Meeting XXVIII SCAR, 2004
 - > SCAR GSSG Expert Group
- Implementation of the IBCSO EG Infrastructure



IBCSO is supported by:

SCAR Standing Scientific Group on GeoSciences (SSG-GS)

Intergovernmental Oceanographic Commission (IOC)

Hydrographic Commission on Antarctica (HCA) of IHO

General Bathymetric Chart of the Oceans (GEBCO)



Primary Goal:

**Production of a high quality bathymetric chart of the SO
Marine geodata base for Antarctic sciences**

&

Secondary Goal:

**combine this DB with existing spatial
geophysical, geological, glaciological,
oceanographic data sets, etc., forming the
Southern Ocean Geographic Information System**



Network of institutions & data centers:

AAD: Australian Antarctic Database

AWI: Alfred Wegener Institute & PANGAEA

BAS: Antarctic Digital Database (ADD)

BODC: GEBCO Digital Atlas (GDA)

LDEO: GeoMapApp / AMBS

NGDC: IHO Data Center for Digital Bathymetry

NOAA: National Geophysical Data Center

etc.

Recent data contributions:

Australia (Macquarie Island, Kerguelen Plateau)

Germany (Weddell Sea, Cooperation Sea)

Japan (Cosmonaut Sea)

New Zealand (Ross Sea)

United Kingdom (Scotia Sea, Bellinghausen Sea)

United States (BS, Amundsen Sea)

Ukraine (Antarctic Peninsula)

etc.



Integration with existing products:

Antarctic Digital Database (ADD)

Radarsat Antarctic Mapping Program (RAMP)

Antarctic Bedrock Topography (BEDMAP2)

Antarctic Digital Magnetic Anomaly Project (ADMMap)

Earth Topography (ETOPO2v2)

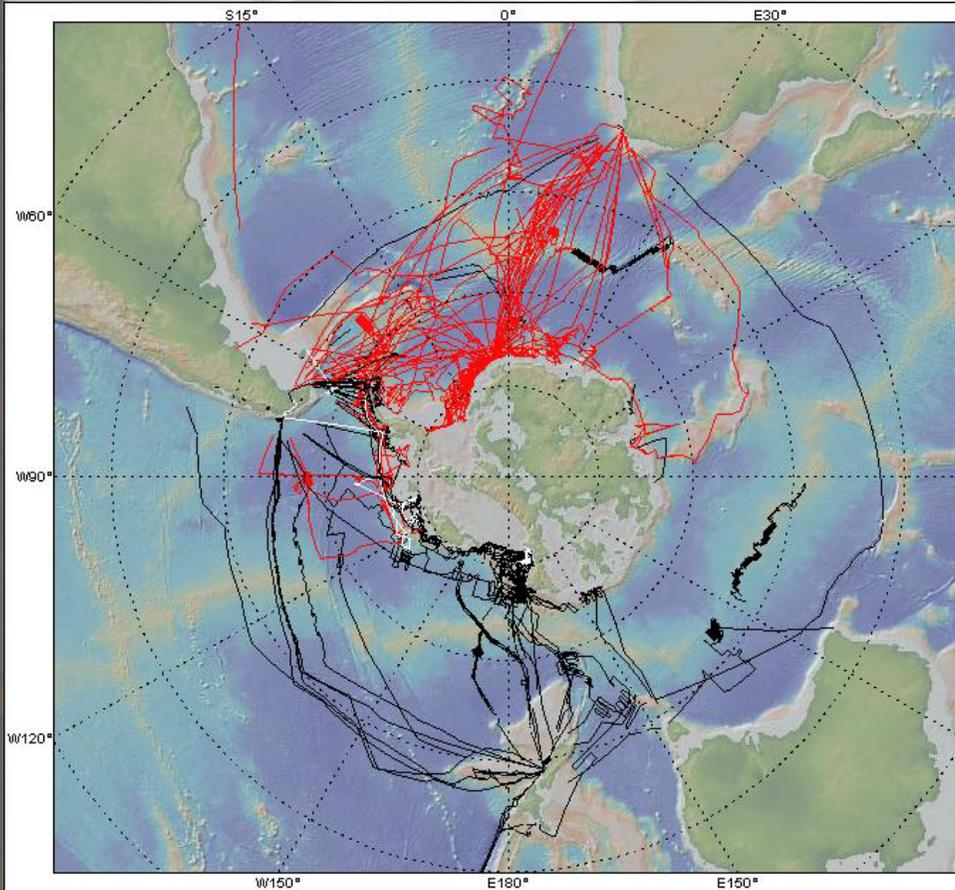
General Bathymetric Chart of the Oceans (GEBCO)

Sea and land nomenclature (SCUFN – CGA)

Gravity data from Satellite missions, etc.

will lead to SOGIS

Review of completed actions:








International Bathymetric Chart of the Southern Ocean



[Work Plan](#)

[News](#)

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[Documentation](#)

[Why IBCSO](#)

[SOGIS::Data](#)

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Work Plan and Objectives TOP

The IBCSO Expert Group will collect existing bathymetric data from archives, data centers and databases from hydrographic offices and scientific institutions. The work plan in terms of data flow and data processing for the proposed IBCSO may be summarized with the following steps:

- ◆ conceptual design and implementation of the IBCSO database 'SOGIS'
- ◆ assembling of bathymetric, topographic, geophysical and geological data
- ◆ data preprocessing including quality control, analyses, and description
- ◆ data merge and processing including data modeling for optimized visualization
- ◆ generation of services and products: printed map series, web maps, database, ship track inventories
- ◆ gridded data release via internet for use in Antarctic data centers and scientific programs

The work plan in terms of data flow depends strongly on close collaboration. To ensure continuous data transfer, the establishment of the group with an associated communication network is crucial. This includes:

- ◆ buildup the international Expert Group
- ◆ setup the group infrastructure (Editorial Board, Advisory Board, and IBCSO Board)
- ◆ implementation of the communication network
- ◆ organizing Expert Group meetings and workshops
- ◆ intensify cooperation with other Southern Ocean programs and mapping projects

The work plan and objectives of the IBCSO mapping project are introduced by a poster series with special emphasis on:

- ◆ project and data management perspectives (file size: 7 MB) 
- ◆ bathymetric patch- and network for the Southern Ocean (file size: 12.5 MB) 
- ◆ database entitled 'Southern Ocean Geographic Information System - SOGIS' (file size: 7 MB) 

Open and save PDFs for printing.

Please subscribe to the IBCSO [mailing list](#) at the NGDC.
To post a message to all the list members, send email to ibcso@mailman.ngdc.noaa.gov
To enter names on the list or to delist - please contact.

TOP

Upcoming ... TOP

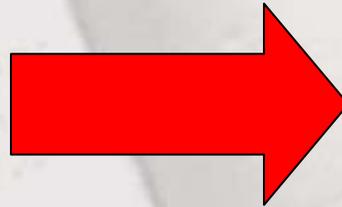


Joint SCAR / IBCSO / IHO actions

- **SCAR/SCOR Circular 768 calling international support for IBCSO**
- **SCAR Circular 770 requesting nominations for natl. representatives to IBCSO**
- **Resolution 5 of XXXI ATCM in Kiev: requesting to improve OM in Antarctic waters**

Deliverables

- **Grids**
- **Contours**
- **DTM**
- **Shape files**
- **Meta data**



SCAR/ADD
GEBCO GDA
BEDMAP
SOOS

from future IBCSO/SOGIS web portal



Meetings/Outreach

IBCSO discussed/presented at Meetings:

- 1st IBCSO Business Meeting at the IAESC**
- GEBCO/SCDB/GC Meetings (4)**
- IHO/HCA Meetings (4)**
- SCAR SC-AGI (1)**

IBCSO Publications and reports:

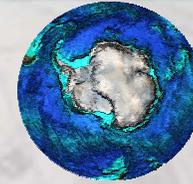
- EOS Transactions (1)**
- Hydro International (2)**
- Posters (3)**
- Talks (3)**

Next Actions

- 1. Strengthen/enlarge the IBCSO EG**
- 2. Activate the IBCSO infrastructure (EB/AB/IB)**
- 3. Implement a SOGIS communication network**
- 4. Organise intersessional EB-Meetings**
- 5. Cooperation with other SO mapping programs**



The IBCSO Network



Southern Ocean
SOGIS
Geographic Information System



– International Hydrographic Organization / HCA



– Intergovernmental Oceanographic Commission



– Scientific Committee on Antarctic Research



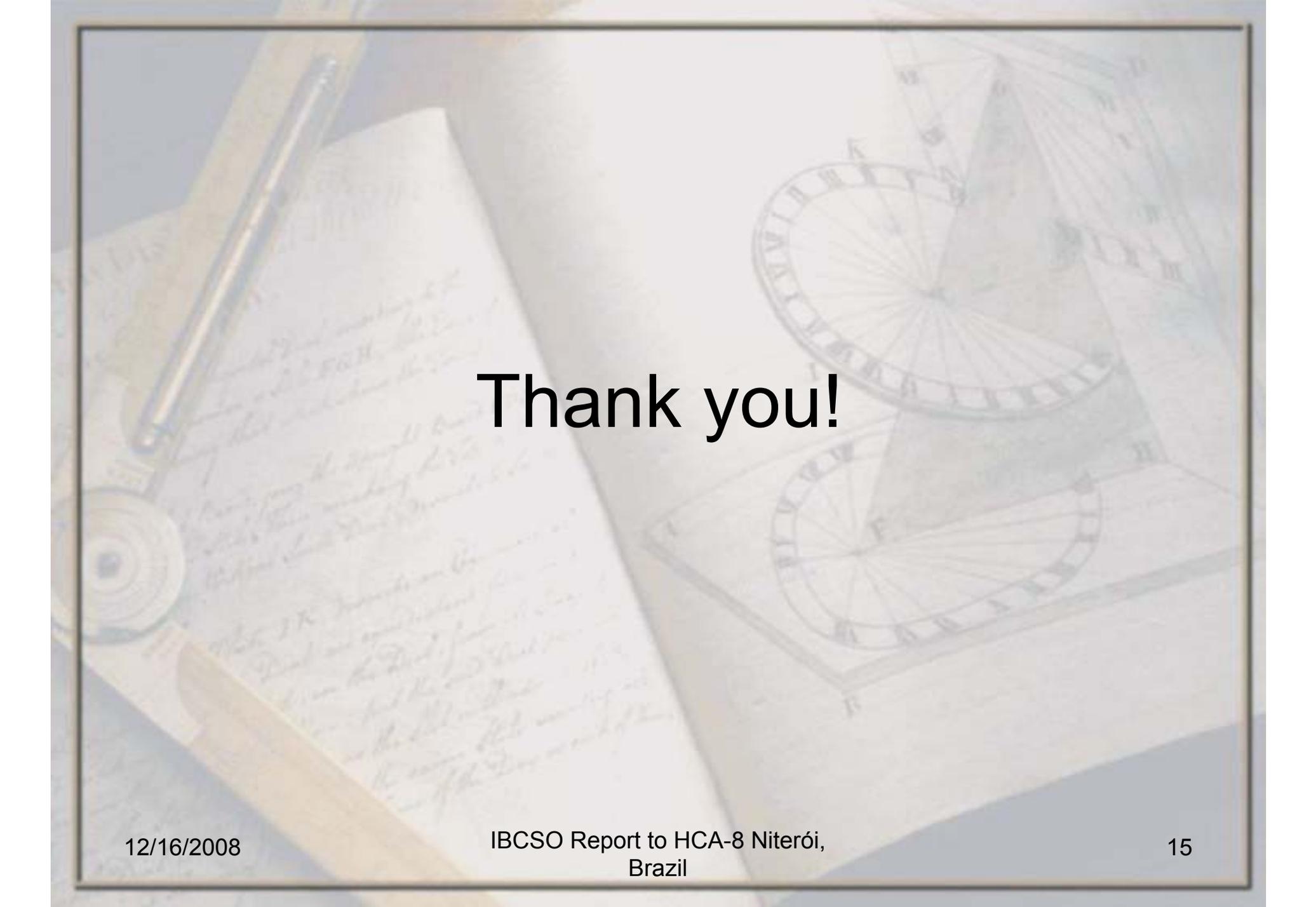
– General Bathymetric Chart of the Oceans



– IBC of the Southern Ocean

– and SCAR Member institutions





Thank you!