

Report by the Chairman of the GEBCO  
interim Sub-Committee of Regional  
Undersea Mapping (iSCRUM)

Prof. Martin Jakobsson



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Report given at the 28<sup>th</sup> GEBCO Guiding Committee meeting  
Held at Scripps Institution of Oceanography, La Jolla, California, USA  
7<sup>th</sup> October 2011



**interim Sub-Committee of  
Regional Undersea Mapping  
(iSCRUM)**

# Summary Report



- Proposal for a Indian Ocean GEBCO/Nippon Foundation Bathymetric Compilation (in fact approved in Lima), but now further developed
- GEBCO/iSCRUM presentations at ARHC (Denmark) and BSRHC (Sweden)
- Arctic-Antarctic Seafloor Mapping Meeting, May 3-5, Stockholm University
- IBCAO and IBCSO presentations at the AGU Fall Meeting, San Francisco
- IBCAO Version 3.0, 500x500 m grid to be released beginning of 2012
- IBCSO proposal (GIS specialist/Nippon Scholar involvement)
- GEBCO San Diego
  - Efforts to inspire collaboration between IBCEP and IBCCA
  - Idea of a training package for regional compilations
  - New compilations to be incorporated in GEBCO: e.g. EMODnet



# Proposal for a Indian Ocean GEBCO Nippon Foundation Bathymetric Compilation

*“....The project will be undertaken by a combination of Nippon Foundation Scholars and senior GEBCO members, guided by an Editorial Board. Operations will be directed by a Project Director located at the project data center at the University of New Hampshire (UNH). Other researchers and data specialists in various countries will participate....”*



## **GEBCO/iSCRUM presentations at ARHC and BSRHC**

Presentations emphasized that GEBCO hope for a:

1. close cooperation and liaison with RHCs
2. bathymetric data exchange or..
3. RHCs contributions to GEBCO of high resolution gridded bathymetric data sets for continental shelf areas

# Swedish Desktop Study: Needs regarding bathymetric data



SJÖFARTSVERKET



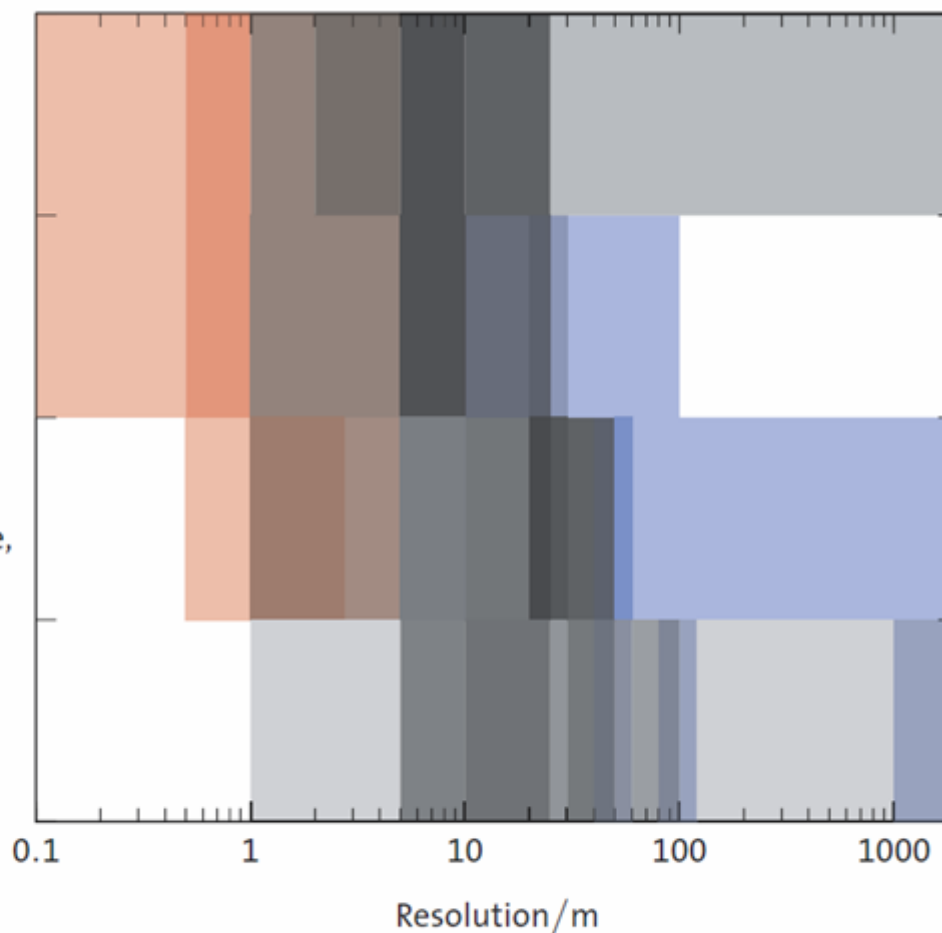
Stockholm  
University

Areas within the base line  
and archipelagos

Areas within the ca. 10 m  
isobath, within a line  
max. 3 nmi beyond the  
base line, protected areas

Areas shallower than  
40 m, within a line about  
6 nmi beyond the base line,  
shipping routes

Remaining deeper areas,  
Swedish EEZ





Stockholms universitet

AMBIO  
DOI 10.1007/s13280-011-0192-y

REVIEW PAPER

# The Use of Bathymetric Data in Society and Science: A Review from the Baltic Sea

Benjamin Hell, Barry Broman, Lars Jakobsson,  
Martin Jakobsson, Åke Magnusson, Patrik Wiberg

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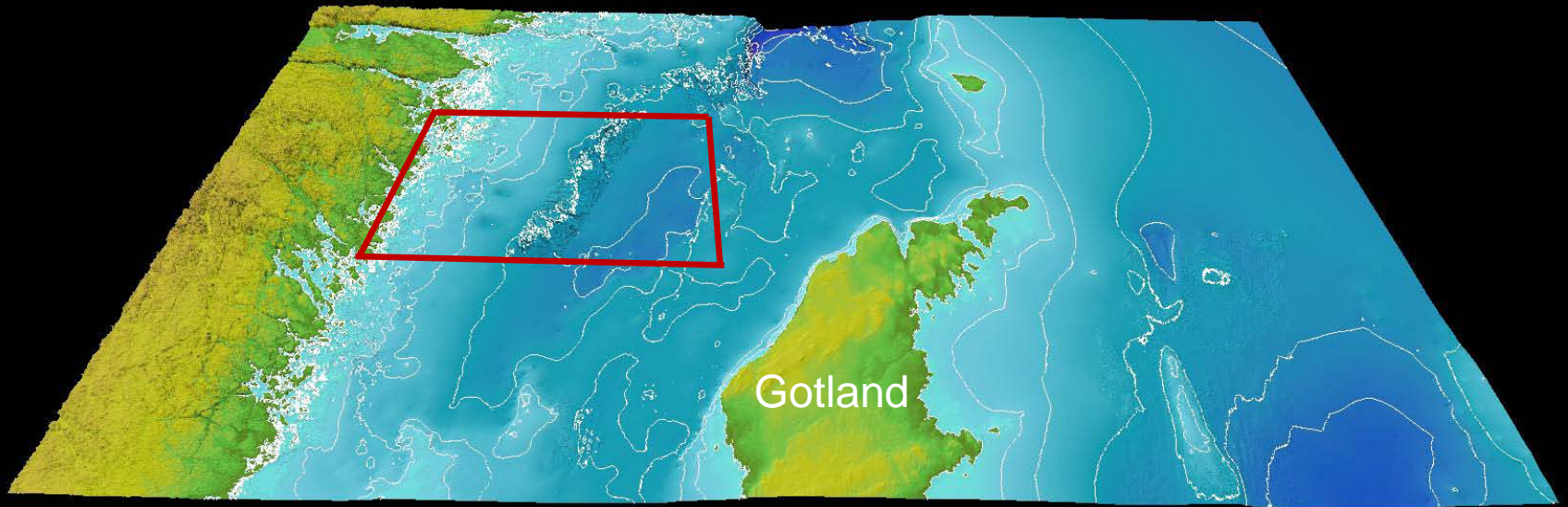
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**Abstract** Bathymetry, the underwater topography, is a fundamental property of oceans, seas, and lakes. As such it is important for a wide range of applications, like physical oceanography, marine geology, geophysics and biology or the administration of marine resources. The exact requirements users may have regarding bathymetric data are, however, unclear. Here, the results of a questionnaire survey and a literature review are presented, concerning the use of Baltic Sea bathymetric data in research and for societal needs. It is demonstrated that there is a great need for detailed bathymetric data. Despite the abundance of high-quality bathymetric data that are produced for safety of navigation purposes, the digital bathymetric models pub-

include the International Bathymetric Chart (IBC) projects, endorsed by the Intergovernmental Oceanographic Commission (IOC), or the General Bathymetric Chart of the Oceans (Hall 2006). In the shallow waters and coastal areas of specific states, however, other societal needs are at the forefront: safety of vessel navigation is here the most prioritized rationale for bathymetric mapping close to the coast, around shoals and along shipping routes. This mapping is the basis for the production of nautical charts. In most countries, hydrographic surveying lies within the responsibility of national hydrographic offices or the navies. The detailed bathymetric measurements used for chart production are in some

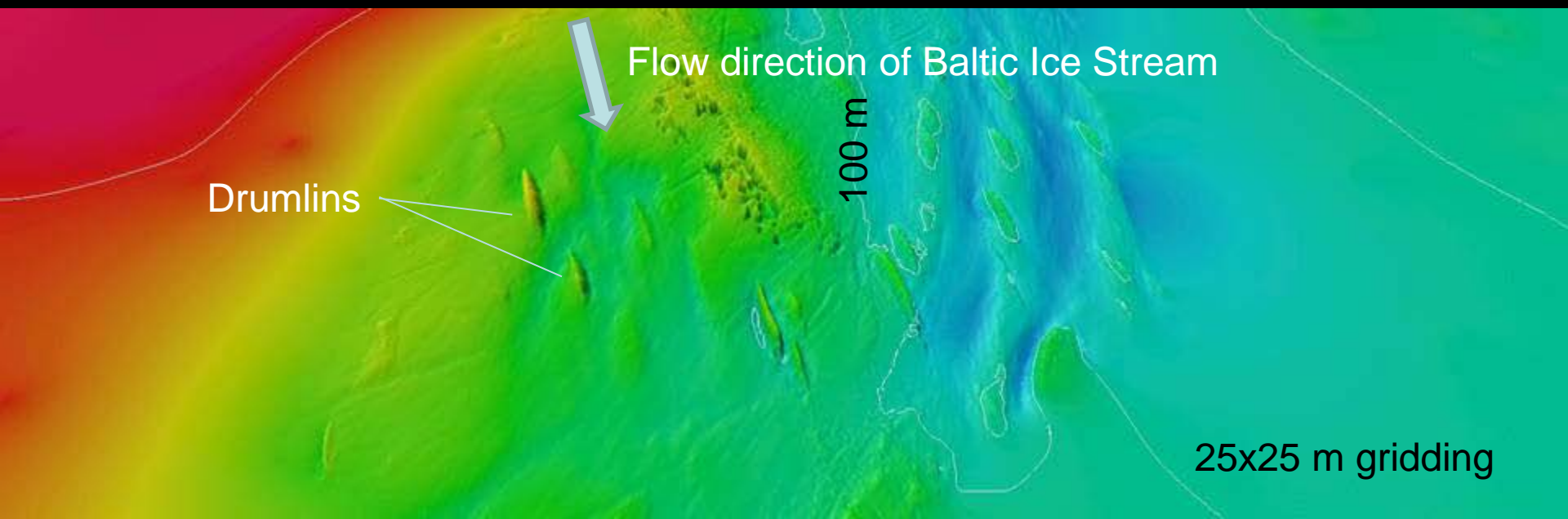
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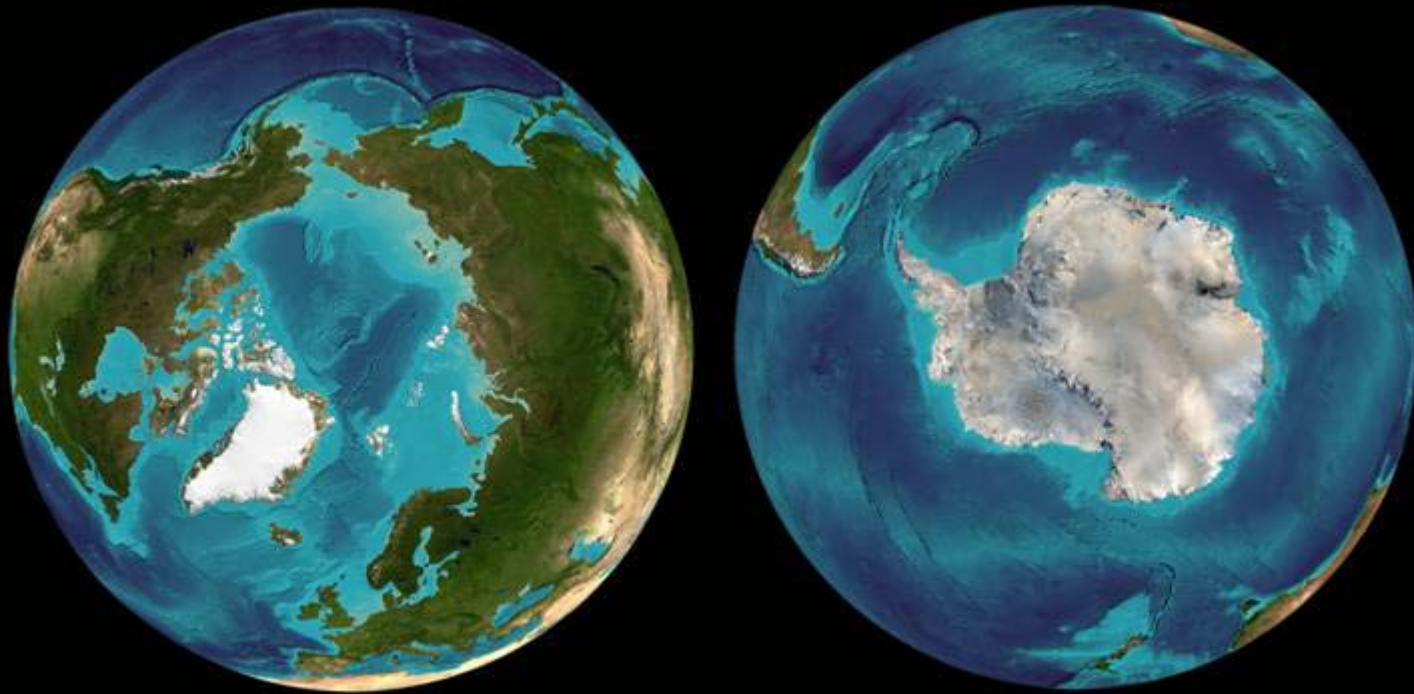
# Pilot test grid





# Pilot test grid





## **Arctic-Antarctic Seafloor Mapping Meeting 2011**

Stockholm May 3-5

*Opening keynote by IOC Executive Secretary Dr Wendy Watson-Wright  
Participants from 15 countries  
Included GEBCO Scholars to coach management of regional mapping*



# Arctic-Antarctic Seafloor Mapping Meeting 2011

Proposal: Alaska Sealife Center, Seward, Alaska



# Questions and Pending Actions

- Establishment of Indian Ocean regional project and planning for a first kick-off meeting 2012
- Should we encourage scholars to also participate in the next Arctic-Antarctic Mapping Meeting?
- Guiding committee decision regarding proposed bathymetric compilation training setup?
- Assign GEBCO contact persons to RHC (done....) and place it on the GEBCO web and circulate the information through IHO
- Formulate data request from RHC that can be circulated through IHO
- Further develop the GEBCO datastore concept