TSCOM Activities and Preoccupations

Preliminary report
10-11 October 2016

Hosted by the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA)
Viña del Mar, Chile

TSCOM Mission and Objectives

- Maintain and improve GEBCO products
- Monitor developments and data availability
- Provide scientific and technical advice on bathymetric topics
- Encourage acquisition and exchange of bathymetric data

TSCOM Membership

Committee Members

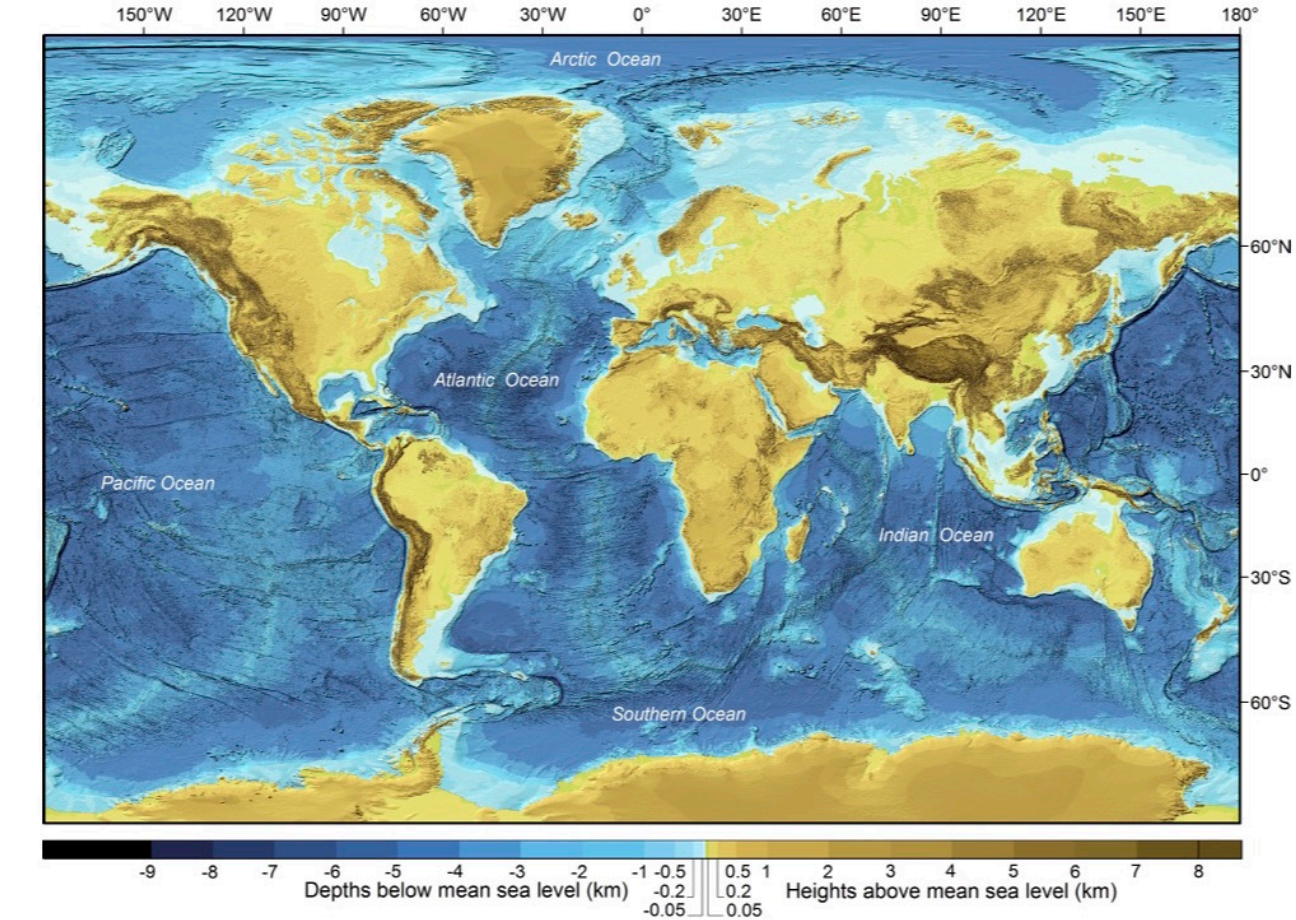
Jenifer Austin – Google Earth, USA
Vicki Ferrini – LDEO, USA
John Hall – Geological Survey of Israel
Timothy Kearns – OneOcean Corporation, USA
Karen Marks – NOAA, USA (Chair)
Marzia Rovere – Istituto di Scienze Marine, Consiglio Nazional delle Ricerche, Italy
Thierry Schmitt – SHOM, France (Vice Chair)
Walter Smith – NOAA, USA
Shin Tani – Hydrographic and Oceanographic, Coast Guard, Japan
Pauline Weatherall – British Oceanographic Data Center, UK

Scientific Advisors

Paul Elmore, NRL, USA
Tony Pharoah, IHO, Monaco
Martin Jakobsson, Stockholm University, Sweden
David Sandwell, Scripps Institution of Oceanography, USA

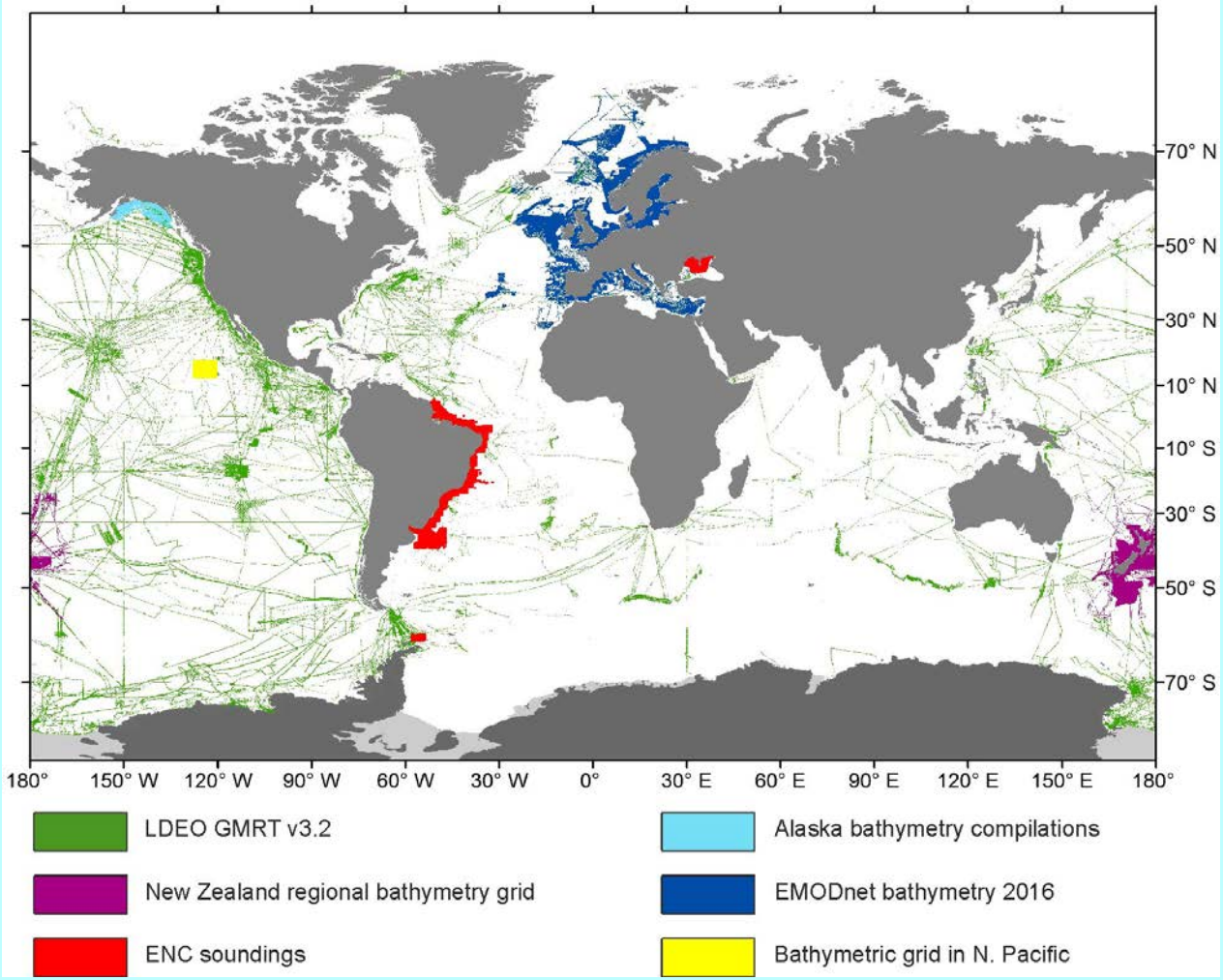
There are many more active in TSCOM work

GEBCO_2014



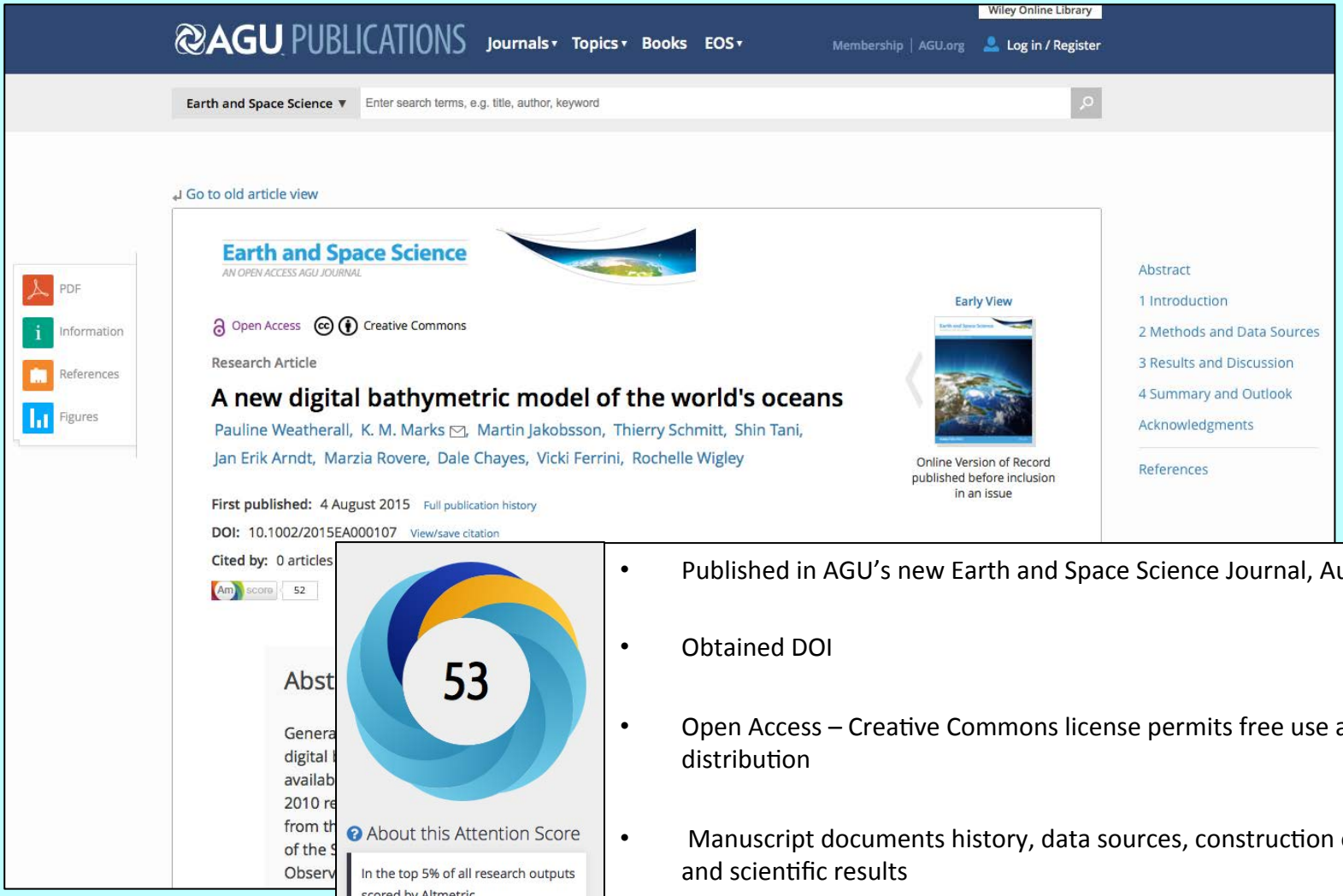
- New data contributed, update planned early 2017
- Download from http://www.gebco.net

New Data



- New data to be included in 2017 GEBCO grid update

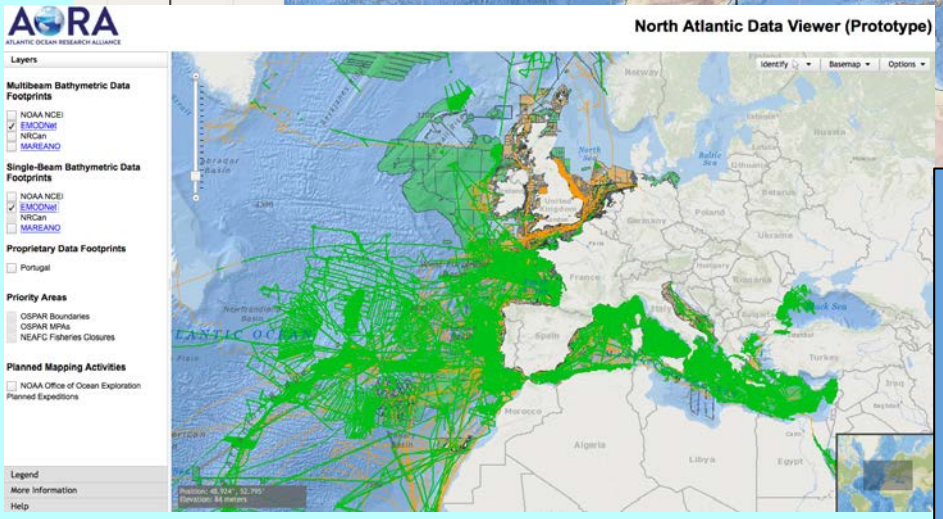
GEBCO_2014 Release Paper



- Published in AGU's new Earth and Space Science Journal, Aug. 2015
- Obtained DOI
- Open Access – Creative Commons license permits free use and distribution
- Manuscript documents history, data sources, construction of grid, and scientific results

http://onlinelibrary.wiley.com/doi/10.1002/2015EA000107/full

EMODNet Update



- Ingested into GEBCO grid
- New 250 m resolution version
- Included in North Atlantic Data Viewer of NOAA
- Portal demonstration

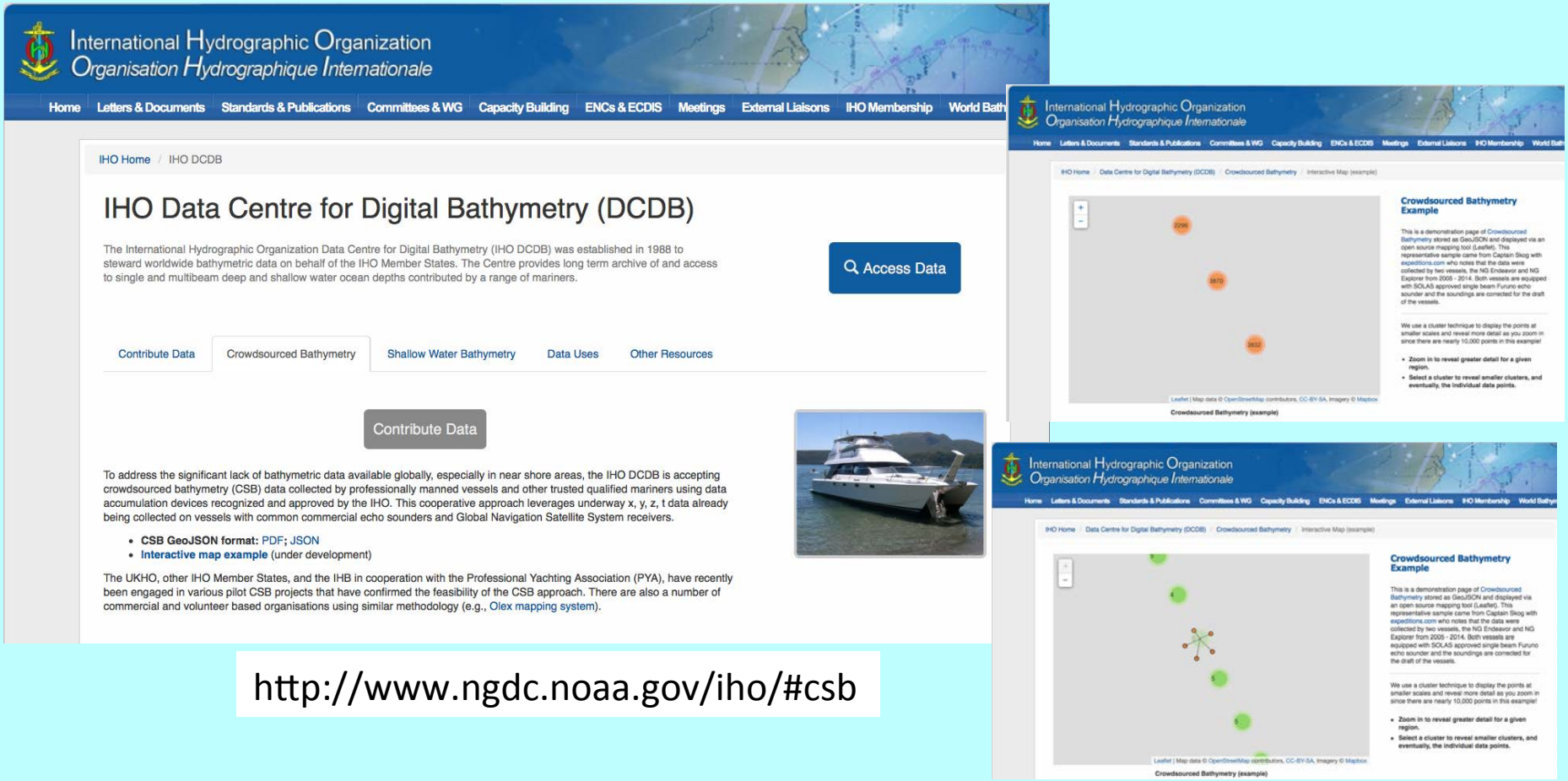
Release of new version soon
Covers European waters
Source data referencing system (CDI)
Strong linkage with GEBCO
Hi-res DTM prototypes
Details in EMODNet status report

Thierry Schmitt, SHOM

Crowd-Sourced Bathymetry WG

- Crowd-Sourced Bathymetry Working Group (CSBWG) established by the IHO IRCC in 2015
- Lisa Taylor is Chair, Correspondence Groups focus on data format and metadata, uncertainty, systems and hardware, and trusted node collection models
- Develop a guidance document to guide mariners in collecting and contributing crowd-sourced bathymetric data
- Enhance the IHO Data Center for Digital Bathymetry (DCDB) to serve as a data portal for crowd-sourced bathymetry
- Held meetings in Kuala Lumpur and Boulder. Next meeting is scheduled in Rostock, Germany

Crowd-Sourced Bathymetry WG



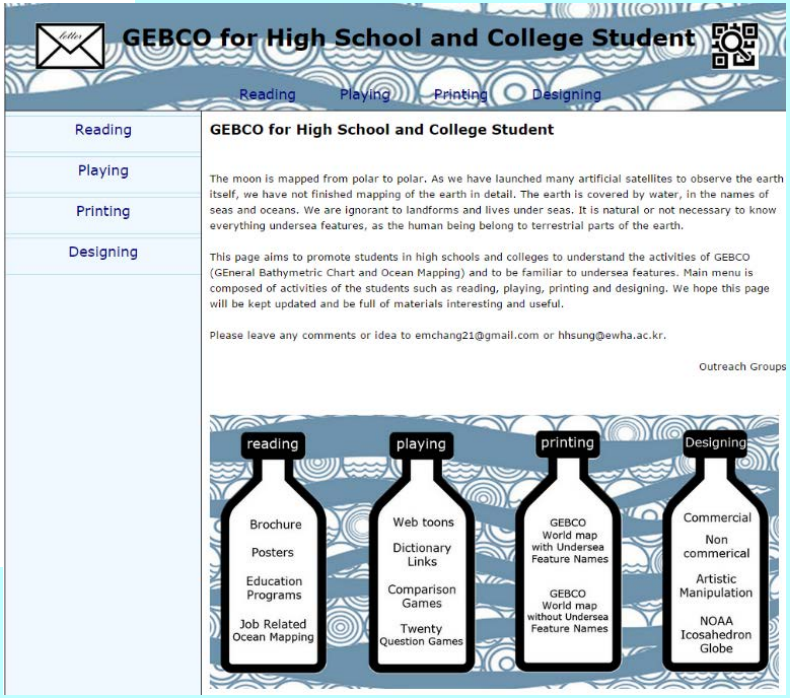
http://www.ngdc.noaa.gov/iho/#csb

- Prototype of data portal for crowd-sourced bathymetry

Outreach Working Group

Eunmi Chang, Hyo Hyun Sung, Pauline Weatherall

- Outreach Roadmap, Strategy, Survey results, and Activities
- Subpage for Secondary School Students
  - Reading
  - Playing
  - Printing
  - Designing
- Break-out session scheduled



Outreach Working Group

Vicki Ferrini, Rochelle Wigley

GEBCO project and community video

News and events – March 2016

GEBCO is an international community of seafloor mapping experts who work toward the common goal of building a global map of the seafloor.

View video clip to find out about GEBCO's work and community.

Learn more about GEBCO and our data sets and products.

Video credits

Executive Producers: Vicki Ferrini, Rochelle Wigley
Videography: Vincent DeLuca
Producers: Erin Higgins, Ashely McInerney
Post-production: Zlatka Creative, LLC

GEBCO Hi-Res Product Update

Global Multi-Resolution Topography (GMRT) v3.2 June 2016

- Technical Components from GMRT
  - Integration with GEBCO_2014
  - Grid Composition
  - Image Creation
  - Attribution
  - Web Services
- Needs of Contributors
  - Attribution
  - Analytics
- Workflow
  - Extent of Coverage
  - Editorial Process

http://gmrt.marine-geo.org

Vicki Ferrini, LDEO

IHO-IOC GEBCO Cook Book

At the 2009 GEBCO 25th Meeting of TSCOM, the "Cook Book Working Group" was formed to "create a manual that enables users to prepare and grid data for inclusion in GEBCO products," resulting in:

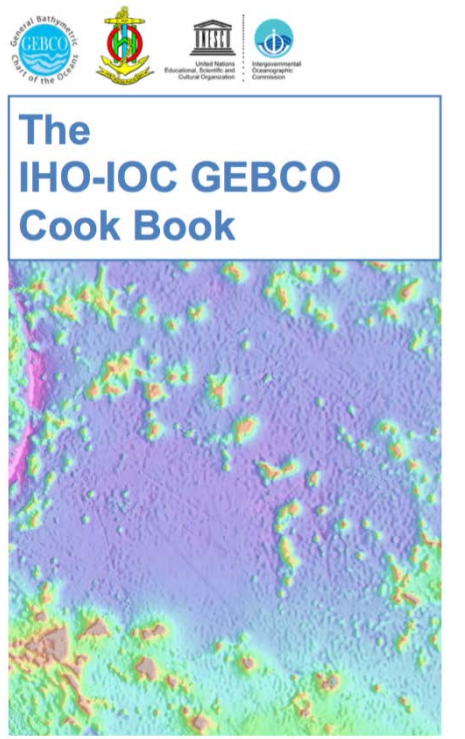
- IHO-IOC GEBCO Cook Book:
  - IHO Publication B-11 (April, 2012)
  - IOC Manuals and Guides, 63 (Oct. 2012)
  - EOS "News Brief" announcing Cook Book was published in EOS Trans. AGU, Feb. 2013
  - Article in Hydro Int'l (April, 2014) highlighted Cook Book

- Used as educational resource, including:
  - UNH CCOM/JHC Ocean Mapping classes
  - Texas A&M University
  - Workshops
  - Used internationally

- Available for Download: http://www.gebco.net

- Citation format is published on GEBCO website

- **Updated Dec. 2015 and July 2016, seeking new materials**



New Updates to Cook Book

- Chapter 8, Section 8.2.11, References updated *(P. Doucette)*
- Chapter 11, "LANDSAT 8 Satellite-Derived Bathymetry" has been replaced with an updated version *(S. Pe'eri, B. Madore, L. Alexander, A. Klemm, A. Armstrong, C. Parrish, C. Azuike, and E. Tetteh)*
- Chapter 13.0 Mosaics in CARIS *(Lt. Commander Gustavo Adolfo Gomez-Pimpollo Crespo)*
- Chapter 14.0 Nautical Chart *Adequacy* *(A. Klemm, J. Nyberg, S. Pe'eri, R. Wigley, L. Gur-Arieh, Y. Kamaruddin, A. Kimeli, H. Kurita, I. B. Prasetyawan, J. Roperez, N. Samarakoon, M. Vallee, J-Y Roh, and J. Sydenham)*
- Chapter 15.0 Map Digitizer Program Version 2.1.0 *(C. Keller and J. Hall)*

11th Annual GEBCO Science Day

- SHOA Naval Club Conference Room, Oct. 12, 2016
- Tim Kearns and Jaya Roperez, Conveners
- 9 oral and 6 poster presentations
- Attendees from all over the world

Nautical Chart Adequacy Workshop

- Workshop developed and hosted by NOAA Coast Survey and UNH/CCOM
- Trained hydrographers on procedures to assess adequacy of nautical charts using public information
- Used Chapter 11 “Nautical Chart Adequacy Procedure” of Cook Book

Shachak Pe’eri and Rochelle Wigley, UNH/CCOM

Workshop- July 2016

Break-out Sessions

- Outreach Working Group
- Update the GEBCO_2014 grid – Regional compilations and base grid
- Seabed 2030

END OF PRESENTATION