

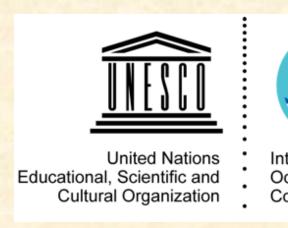


The IHO-IOC GEBCO Cook Book: 2013 Progress Report

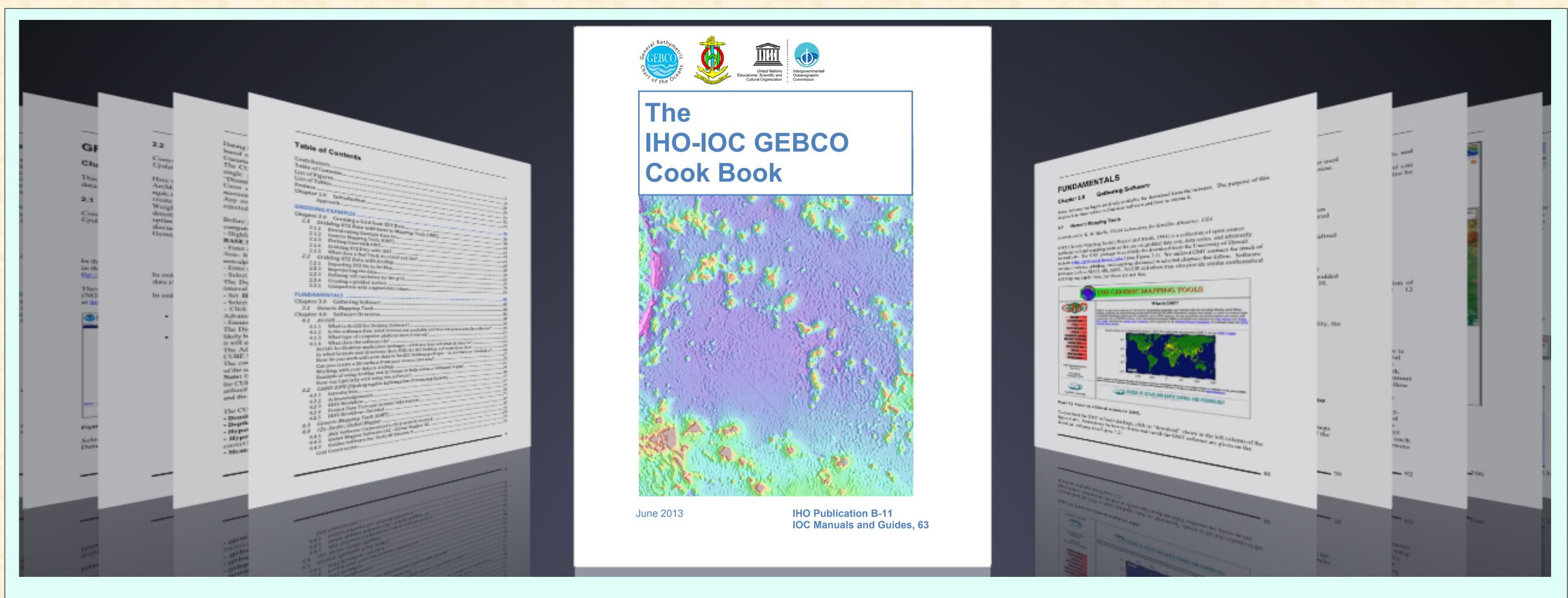
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Download from: http://www.gebco.net

At the GEBCO 25th meeting of the Technical Sub-Committee on Ocean Mapping (TSCOM) in September, 2009, a "Cookbook Working Group" was formed to write a "cookbook" to nurture and guide nascent regional mapping projects.

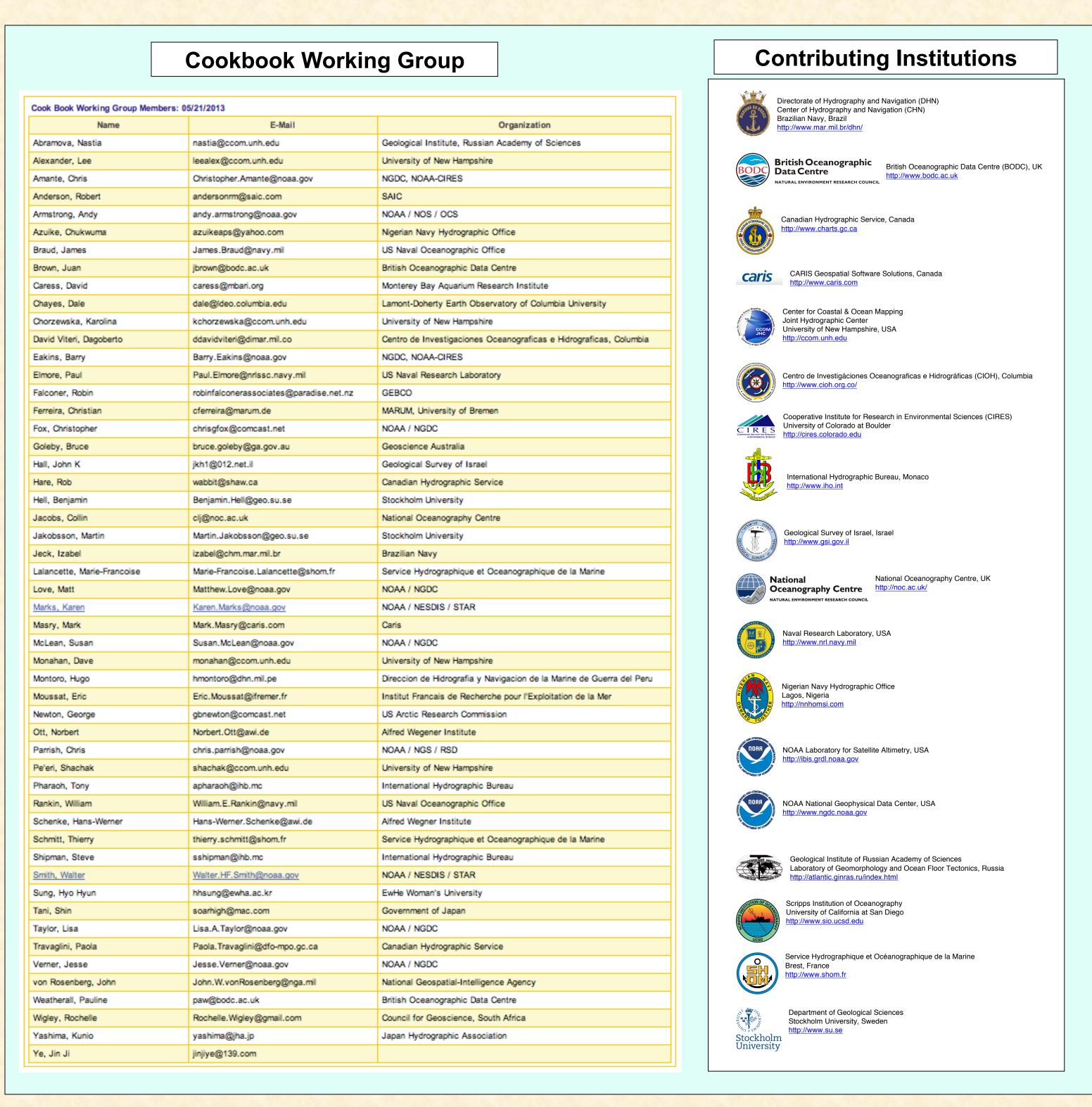
- The cookbook has become the "IHO-IOC GEBCO Cook Book"
- Step-by-step manual enables users to prepare and grid data for inclusion in GEBCO bathymetry products
- Contributors are scientific experts from international research organizations, universities, governments, and companies
- The Cook Book is a "living document-" as new contributions come in, it is updated electronically
- The Cook Book is freely available via the GEBCO website (www.gebco.net)

Progress to date

- IHO approved publication of the Cook Book as IHO Publication B-11 (April, 2012)
- IOC approved publication of the Cook Book as IOC Manuals and Guides, 63 (Oct. 2012)
- EOS "News Brief" announcing Cook Book was published in EOS Trans. AGU, v. 94 No. 9, 26 Feb. 2013, pg. 86
- GEBCO website now lists an "Update History" so users can learn what has changed in update
- Many significant new contributions have been incorporated, now 296 pages long
- The Cook Book vision and structure has matured- it is now composed of three main sections- Gridding Examples, Fundamentals, and Advanced Topics.
- Beginning users can straightaway produce grids from XYZ data by following simple steps in Gridding Examples section

Work to be done

- Obtain more contributions
- Complete chapters
- Continue to update and maintain document



EOS News Brief published

Joint Penrose/AGU Chapman Conference on Coastal Processes and Environments Under Sea-Level Registration Deadline: 28 February http://www.geosociety.org/penrose/13Texas.htm In Memoriam: Harold S. Johnston (1920-2012), p. 88 Meeting: What Is a Substorm?, p. 90

About AGU: Outstanding Student Paper Awards, p. 92 Book Review: Fields and Streams, p. 92

2012 Haida Gwaii Quake: Insight Into Cascadia's Subduction Extent The limits of Cascadia were first defined Charlotte fault system (QCF). This fault sys. How Does the QCF Accommodate Motion? contain nearly the entire margin of the tem extends northward from the Explorer Pacific Northwest, from Cape Mendocino plate, a microplate chipped off the Juan de Fuca plate, to Baranof Island, Alaska, where 1910; Schuchert and Barrell, 1914]. Since that time, the boundary of Cascadia has shrunk to become essentially synonymous it transitions into the Fairweather fault and related structures (see Figure 1). Over the past century, these fault systems have hosted

of the mapped Queen Charlotte fault at a depth of about 20 kilometers and a dominantly reverse focal mechanism, a signa-ture of convergence (Figure 1).

During the NASA teleconference, Bill of bathymetry or elevation. Data in grid-

Cooke, lead for the Meteoroid Environments Office at NASA's Marshall Space Flight Center in Huntsville, Ala., said that NASA has recognized that asteroids and meteors "pose a bigger problem than anybody anticipated a decade ago." He said that Earth intercepts about 80 tons of meteoritic material from millimeter-sized objects daily and that rocks the size of the Chelyabinsk meteor arrive about once every

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50–100 years. —RS

metric data The International Hydrographic Organization (IHO) and the General Bathymetric Chart of the Oceans (GEBCO) program of the United Nations Educational, Scientific and Cultural Organization's Intergovernmental Oceanographic Commission (UNESCO IOC) have created a free manual to help users prepare quality bathymetric grids from available data points. The new "IHO-IOC GEBCO Cook Book," released last year and available at http://www.gebco.net, provides step-by-step instructions, screenshots, command lines,

and snippets of code applied on actual data, to guide users through the process of gridding data. To "grid data" means to take all the data points on a surface within a grid cell and assign them a representative number value that serves to aggregate surrounding points. Gridding quality-controlled, cleaned

ded form are advantageous because they can easily be viewed and analyzed on

The manual's instructions are divided into three parts. "The first enables beginning users to easily produce a grid from xyz data by following provided examples," explained Karen Marks, chief editor and chairperson of the "Cook Book" working group. "The second gives a more in-depth look at topics related to preparing and pro-Free "Cook Book" for gridding bathycessing data and gridding techniques, and

the third focuses on advanced topics such

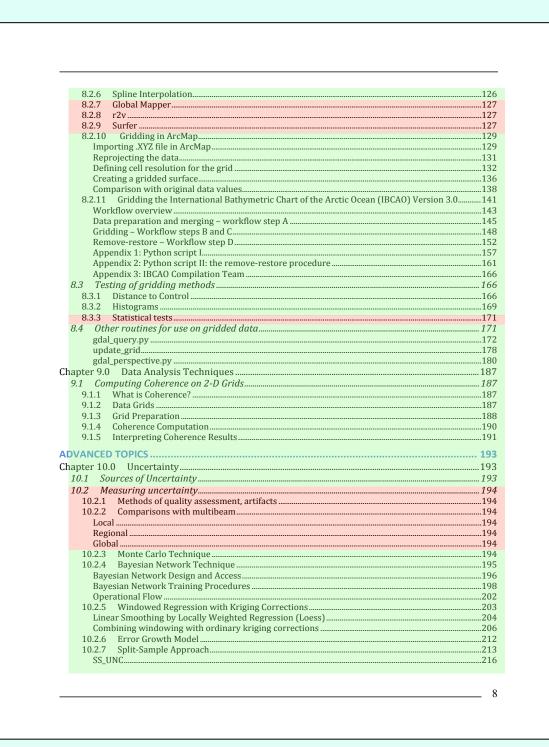
as data uncertainties and error models." Links in the appendices give Web sites from which multibeam data, which can be gridded into maps, are publicly available for download. However, "The methods described in the 'Cook Book' don't have to be limited to bathymetry—people can take any type of data and grid them however they want using this tool," Marks

The manual will be continually maintained and amended as better techniques and software are developed to meet changing user needs. Scientific contributions to the guide are encouraged, and feedback can be sent to Karen.Marks@noaa.gov.

-MOHI KUMAR and RANDY SHOWSTACK, Staff data aids in the creation of accurate maps

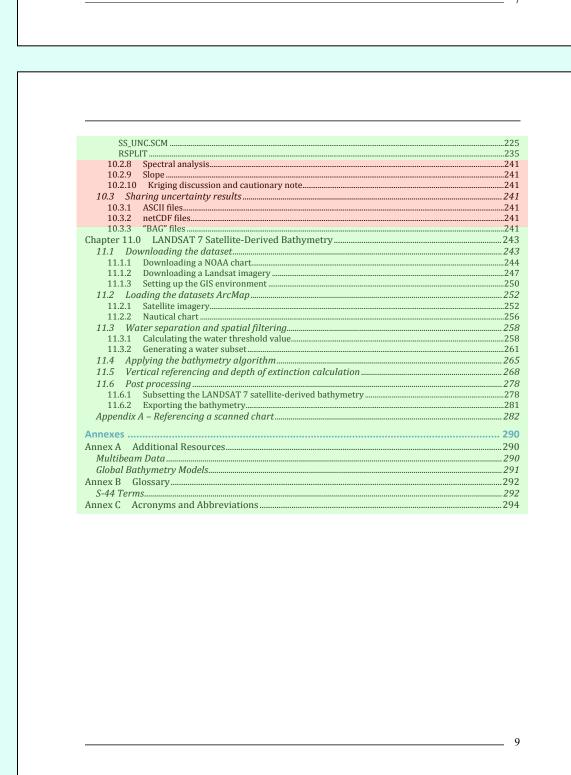
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Additional content is welcomed!



Contributed In progress Input needed

GEBCO 2013 Venice, Italy