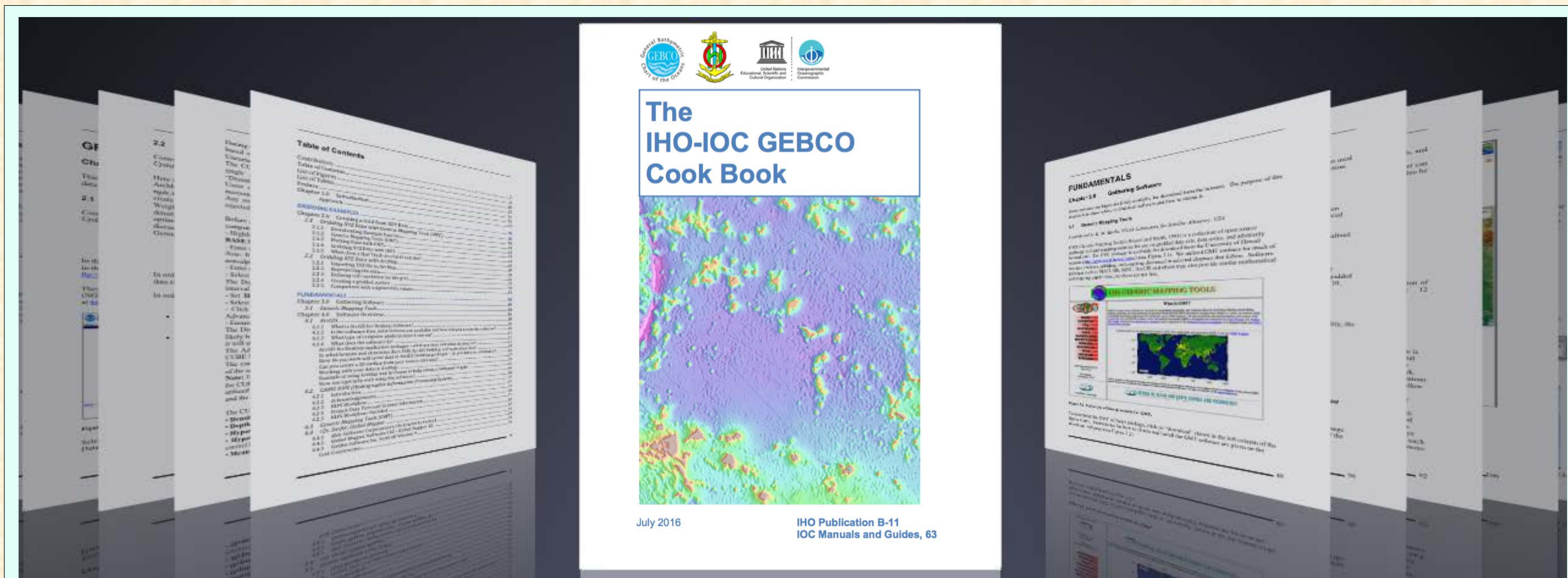


The IHO-IOC GEBCO Cook Book: 2016 Progress Report

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

What is the GEBCO IHO-IOC GEBCO Cook Book?

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 became the "IHO-IOC GEBCO Cook Book"
- Step-by-step manual enables users to create 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

- Published as:
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, v. 94 No. 9, 26 Feb. 2013, pg. 86
- Article in Hydro International (April, 2014) highlights Cook Book
- Citation established:
International Hydrographic Organization, Intergovernmental Oceanographic Commission, The IHO-IOC GEBCO Cook Book, IHO Publication B-11, Monaco, Sept. 2014, 331pp - IOC Manuals and Guides 63, France, Sept. 2014, 331pp.
- GEBCO website lists an "Update History" so users can learn what has changed in update
- The Cook Book is composed of three main sections- Gridding Examples, Fundamentals, and Advanced Topics, and is currently 461 pages long

EOS News Brief published

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During the NASA teleconference, Bill Cook, lead for the Mesoscale Environments Office at NASA's Marshall Space Flight Center in Huntsville, Ala., said that NASA has recognized that extending and modernizing "those a bigger problem than anybody anticipated a decade ago." He said that Earth intercepts about 80 tons of meteoritic material from millimeter-sized objects and that rocks the size of the Chelyabinsk meteor arrive about once every 50-100 years.

Free "Cook Book" for gridding bathymetric 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 (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 in the series to aggregate surrounding points. Gridding quality-controlled, cleaned data aids in the creation of accurate maps of bathymetry or elevation. Data in gridded form are advantageous because they can be easily viewed and analyzed on computers.

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 processing 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. 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 noted.

The manual will be continually maintained and assembled 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.

—MOM KUMAR and RAINY SKINICKI/Staff Writers

Highlighted in Hydro International article

Updating Landsat Satellite-derived Bathymetry Procedure

In the IHO-IOC GEBCO Cook Book

The IHO-IOC GEBCO Cook Book provides step-by-step instructions for creating and gridding bathymetric data. The manual is available at <http://www.gebco.net>.

The SDB procedure is only a reconnaissance tool.

The IHO-IOC GEBCO Cook Book provides step-by-step instructions for creating and gridding bathymetric data. The manual is available at <http://www.gebco.net>.

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Additional content is welcomed!

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