

# GEBCO Hi-Res Update

Vicki Ferrini



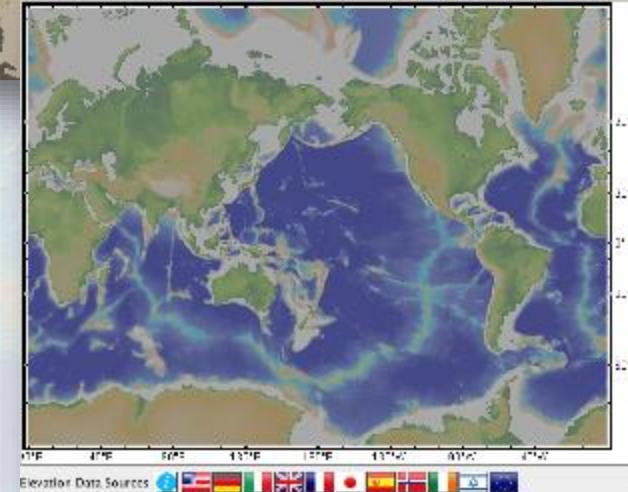
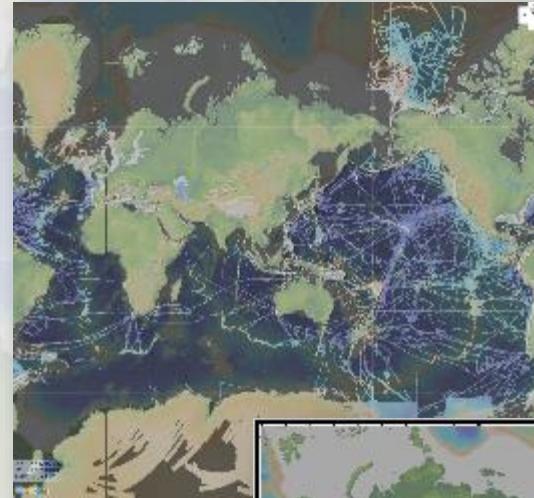
LAMONT-DOHERTY  
EARTH OBSERVATORY  
THE EARTH INSTITUTE AT COLUMBIA UNIVERSITY



MARINE GEOSCIENCE  
DATA SYSTEM  
[marine-geo.org](http://marine-geo.org)

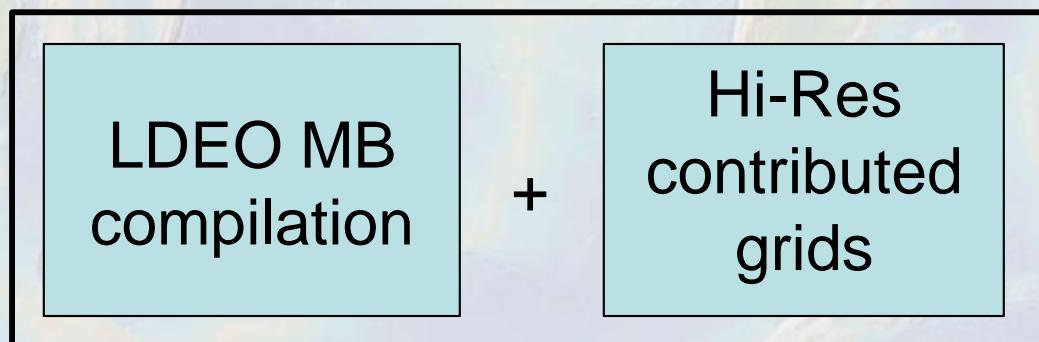
# Global Multi-Resolution Topography

- Dynamically maintained tiled synthesis
- Mercator, South Polar, North Polar
- Complementary Tile-sets
  - Images, Grids, Mask
- Comprehensive Metadata
  - Attribution
  - Access to source data
- Access via
  - Web, Java, iOS Apps
  - Web Services
  - Analytics



# GEBCO-HR Concept

- Produce a new High-Res GEBCO Product
- Leverage Technical Components of GMRT
  - Multi-resolutional data handling
  - Grids, Images, Mask
  - Access Tools and Services
  - Attribution and Provenance

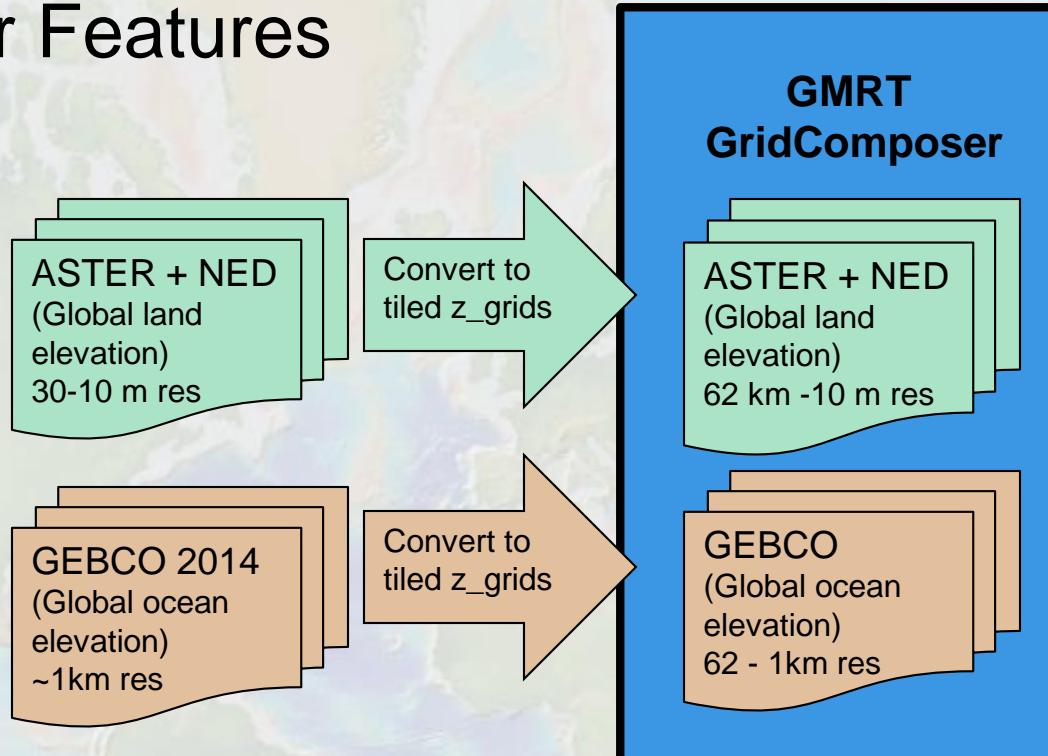


= GEBCO-HR

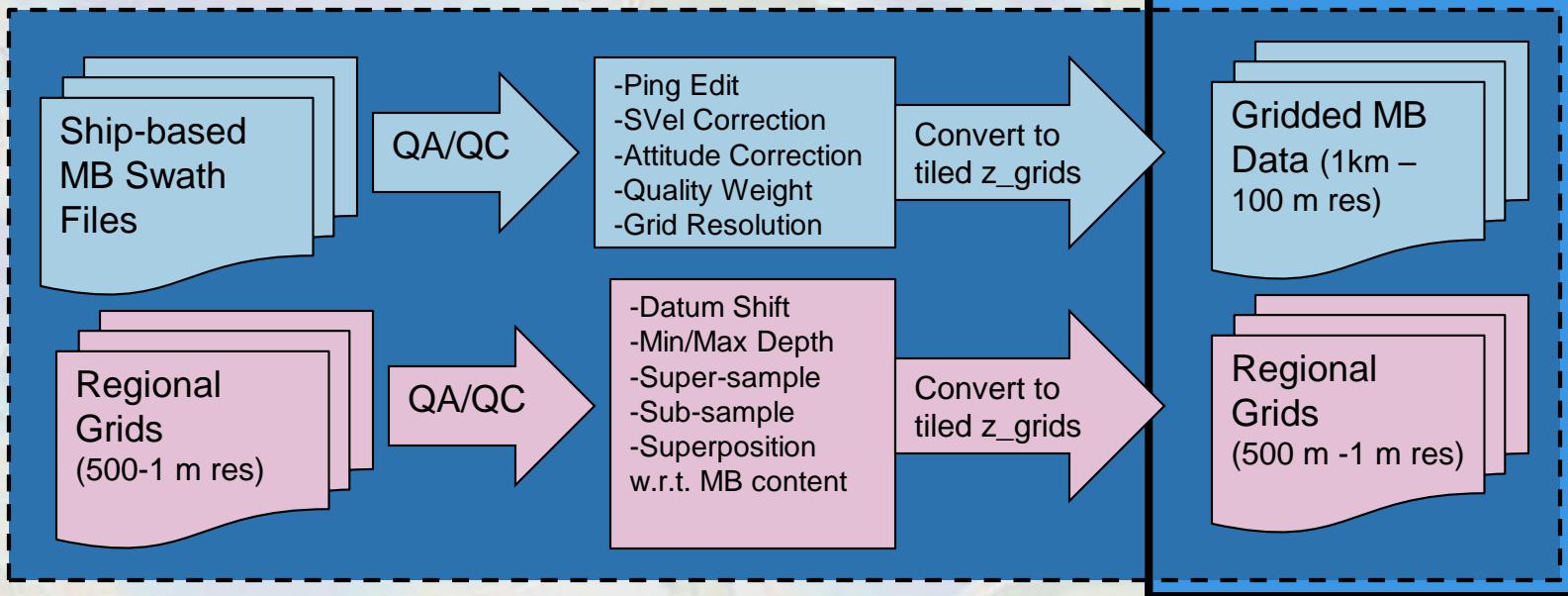
# GMRT Grid Composer Features (2014)

Merges Grid Components

- Customizable Input
- Output: gdal-compliant
- On-the-fly grid composition
  - GeoMapApp
  - GMRT Map Tool
  - GMRT Grid Service
- Pre-composes image tiles
- Pre-compose grid tiles



Data QA/QC by  
GMRT Team

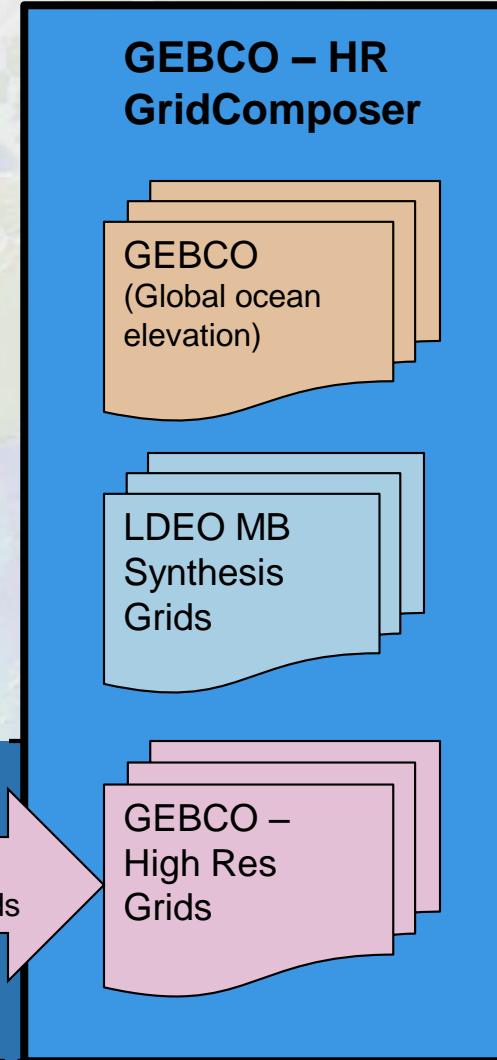
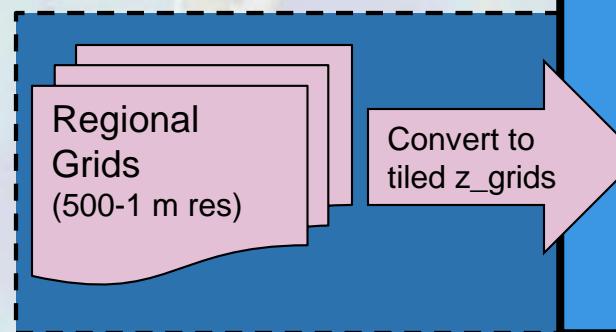


For each resolution, starting with requested resolution ↑

# GEBCO-HiRes – Technical Components

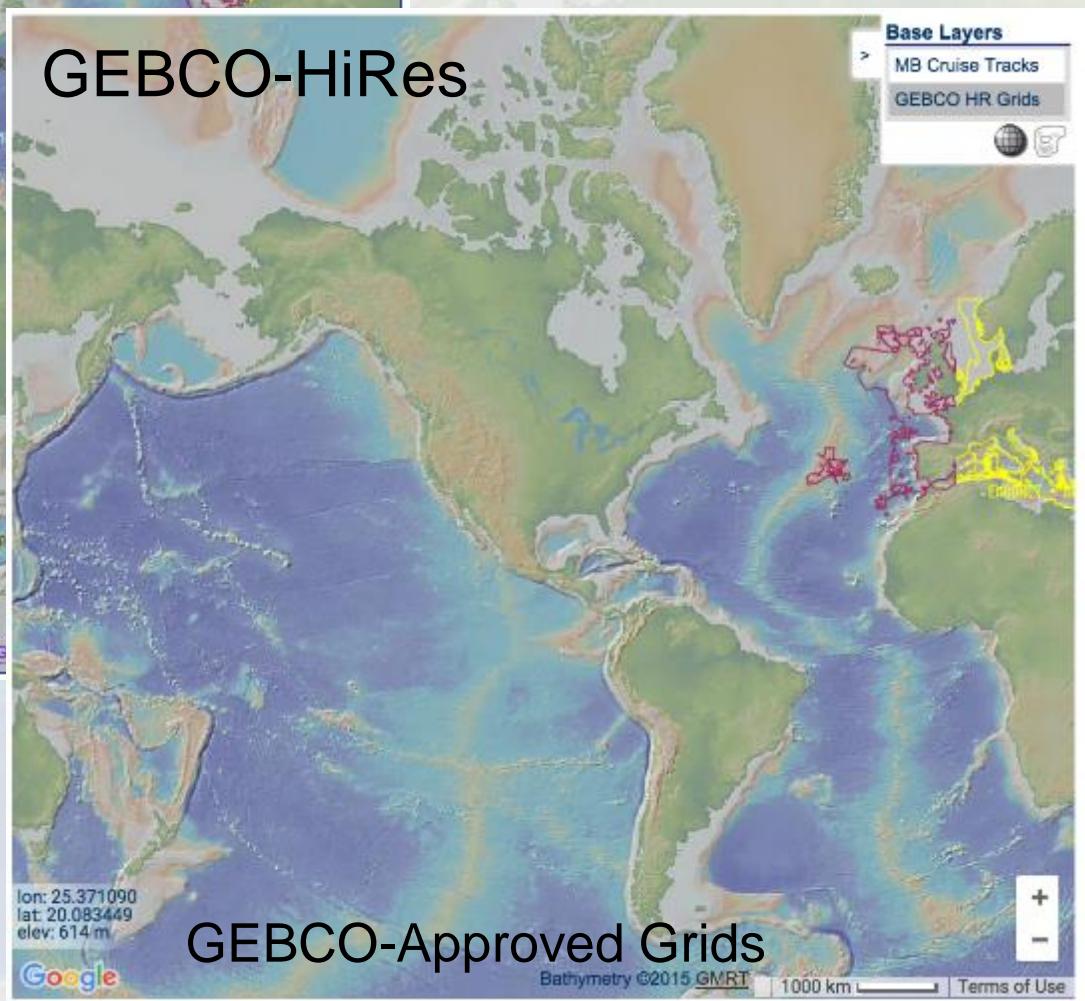
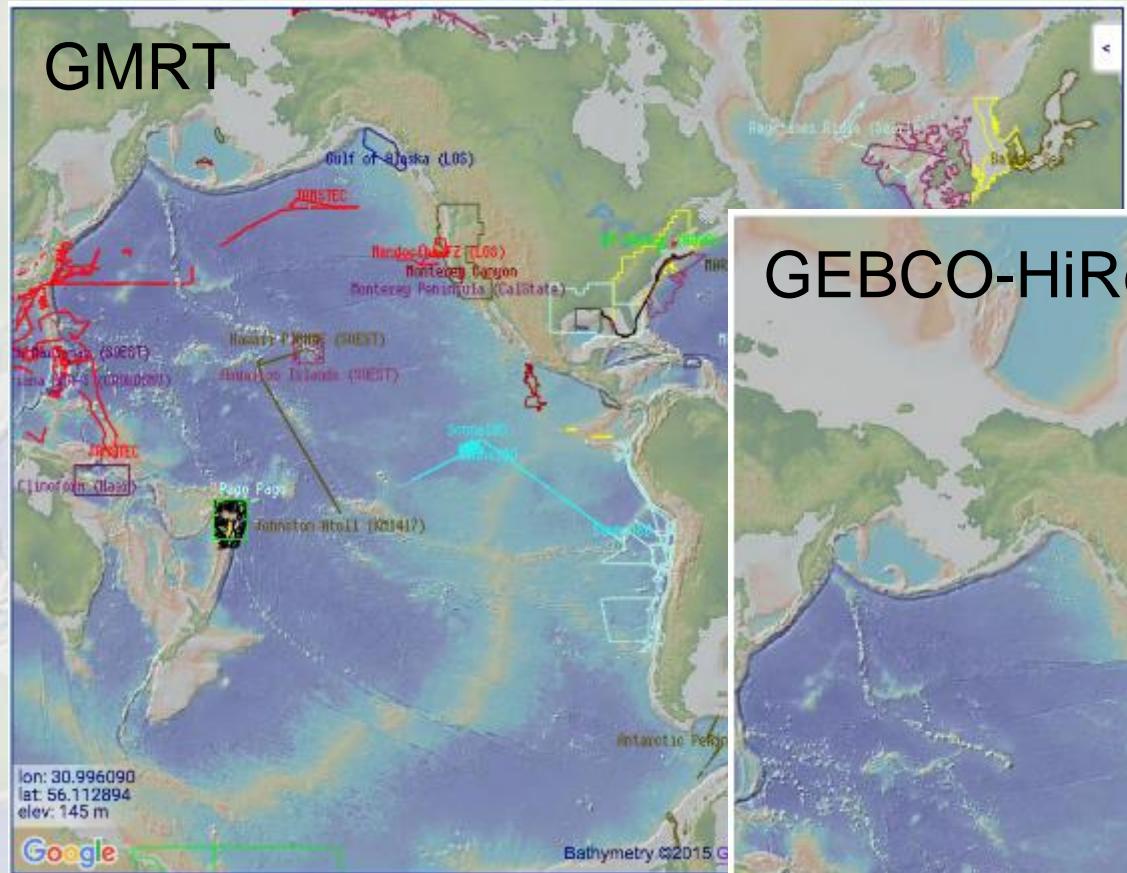
- GEBCO\_2014 basemap
- Grid Composer
- Image Creation
- Mask Layer
- Attribution Components
- Web Services
- Analytics

QA/QC by  
GEBCO HR  
Editorial



For each resolution, starting with requested resolution ↑

# Contributed Grids



# Moving from Concept to Product

- Define Feature Set
  - Access Interface
  - Access Services
  - Format(s)
- Needs of Contributors
  - Attribution
  - Analytics
- Define Workflow
  - Integration with Data Store
  - Editorial Process/Team
  - Solicit new data contributions

