

GEBCO Hi-Res Update

Vicki Ferrini



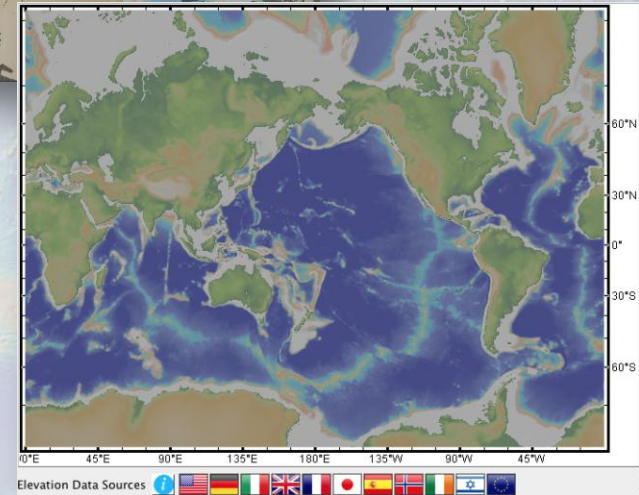
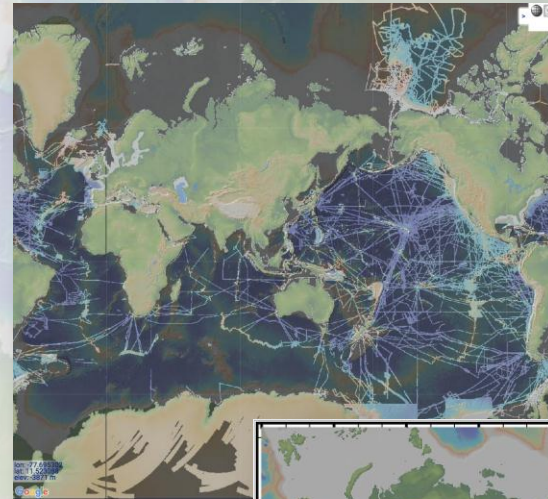
LAMONT-DOHERTY
EARTH OBSERVATORY
THE EARTH INSTITUTE AT COLUMBIA UNIVERSITY



MARINE GEOSCIENCE
DATA SYSTEM
marine-geo.org

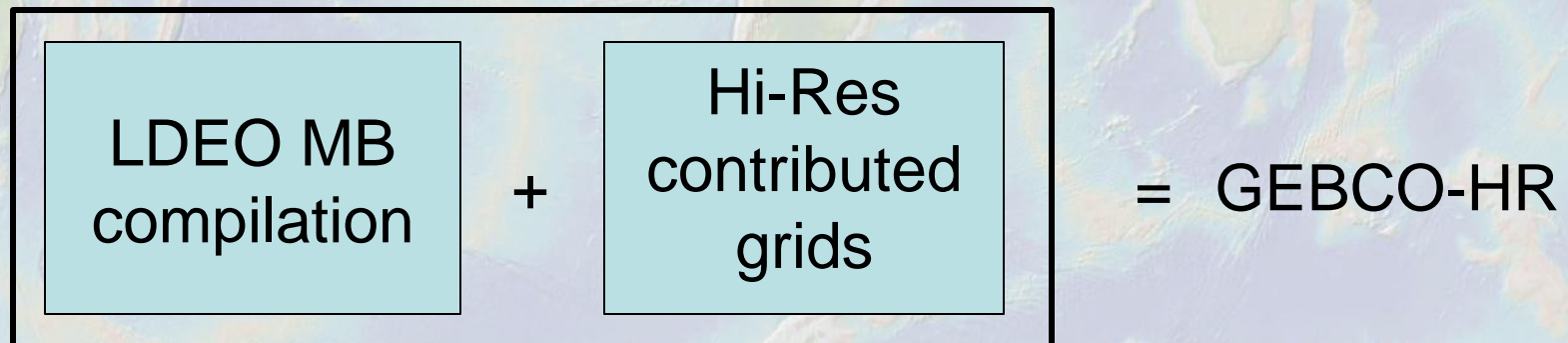
Global Multi-Resolution Topography

- 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

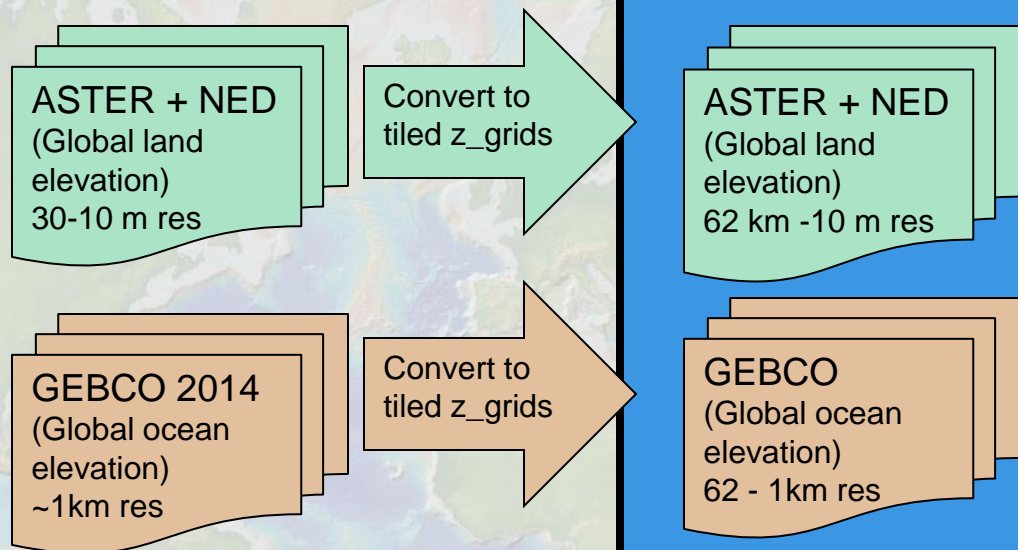
- Produce a new High-Res GEBCO Product
- Leverage Technical Components of GMRT
 - Multi-resolutional data handling
 - Grids, Images, Mask
 - Access Tools and Services
 - Attribution and Provenance



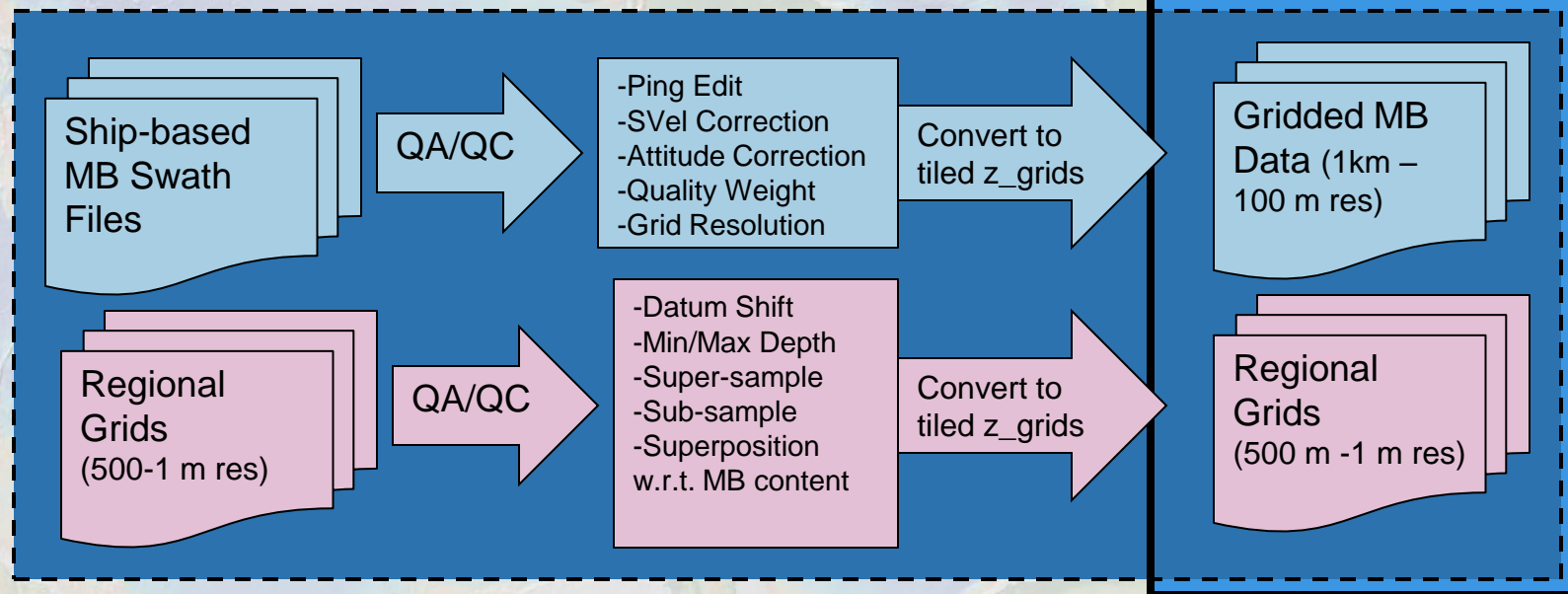
GMRT Grid Composer Features

(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



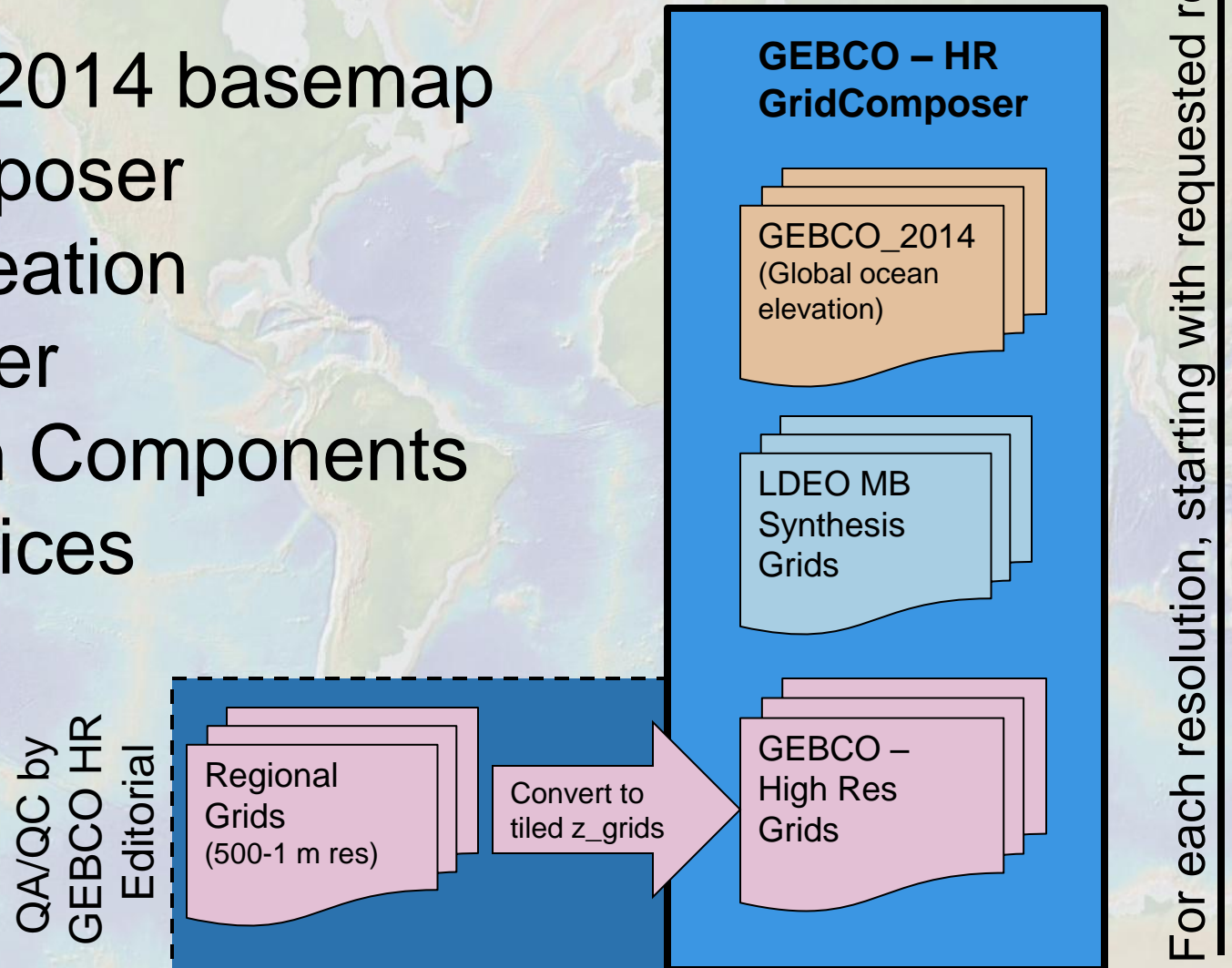
Data QA/QC by
GMRT Team



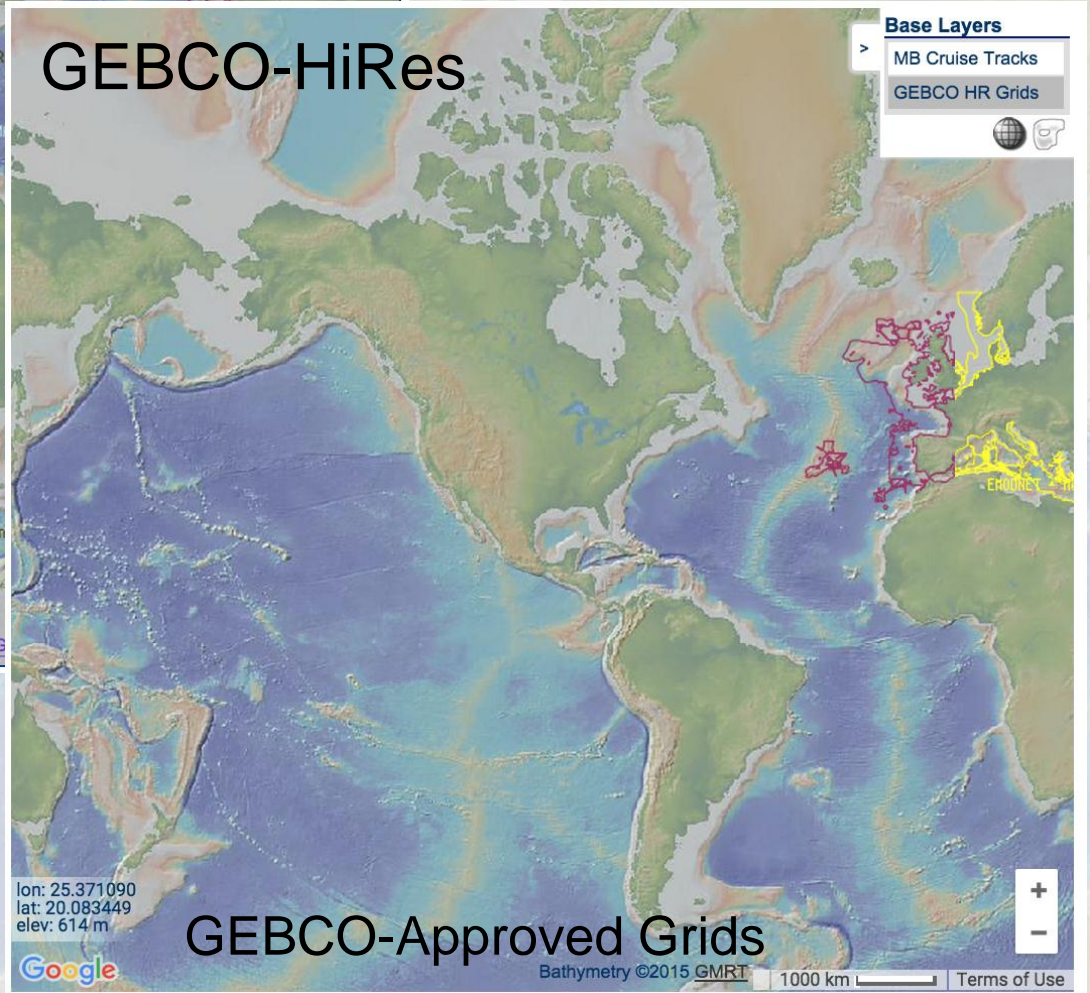
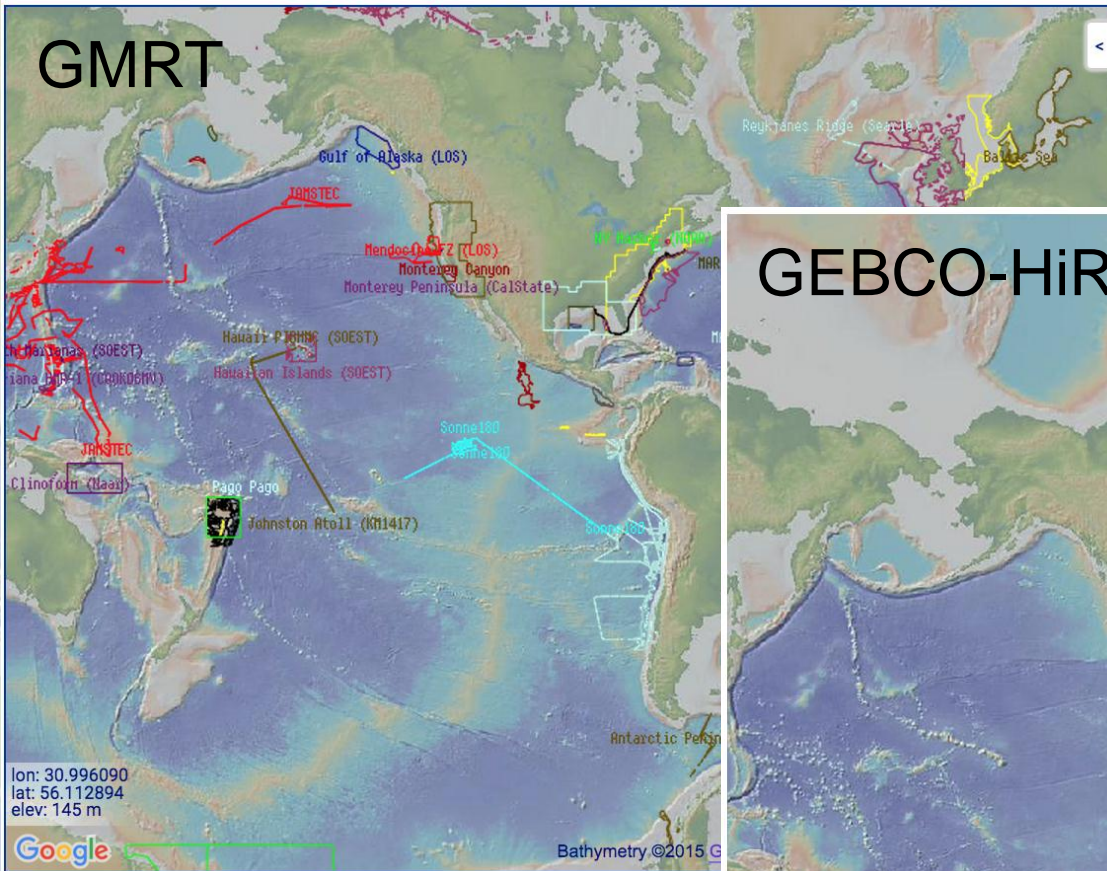
For each resolution, starting with requested resolution

GEBCO-HiRes – Technical Components

- GEBCO_2014 basemap
- Grid Composer
- Image Creation
- Mask Layer
- Attribution Components
- Web Services
- Analytics



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 data contributions



