

19th North Indian Ocean Hydrographic Commission

National Report
United States of America



International Hydrograph Organization
Organisation Hydrographique Internationale

North Indian Ocean Hydrographic
Commission

U.S. Hydrographic Leadership

- NOAA

- Director, Office of Coast Survey
 - **Rear Admiral Shep Smith**
- Deputy Director, Office of Coast Survey
 - **Katie Ries**



- NGA

- Senior GEOINT Authority-Maritime
 - **John Lowell**
- Director, Maritime Office
 - **Captain Richard Kennedy (replaced Brian Connon)**



- NAVY

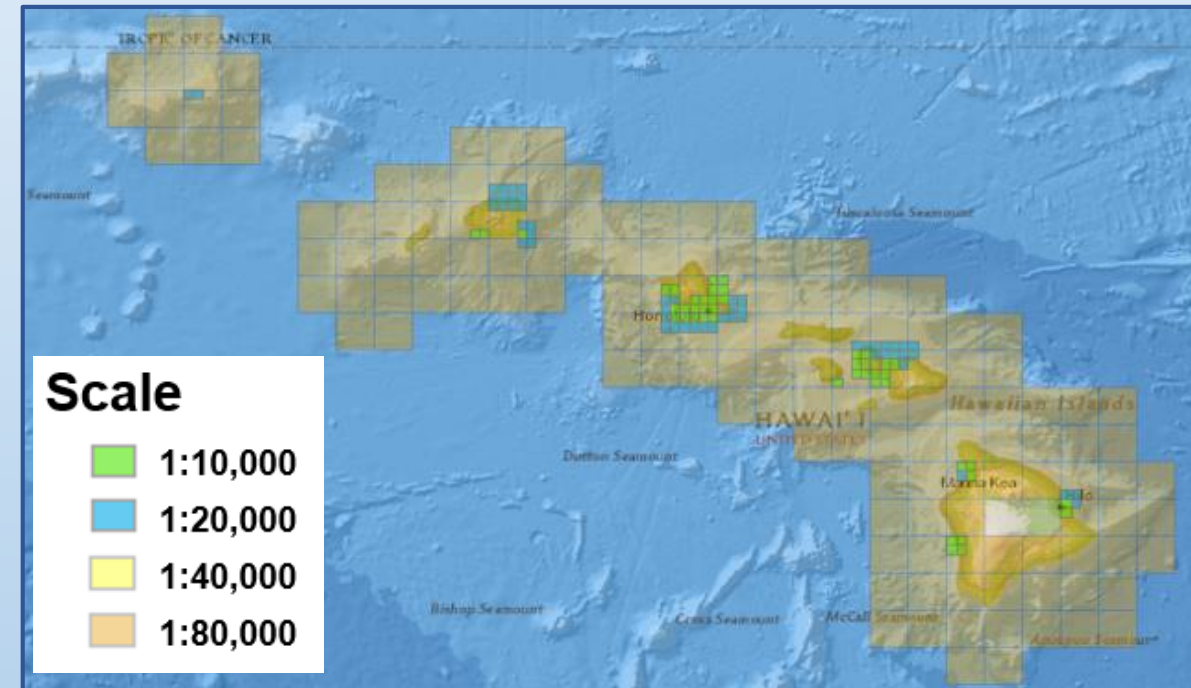
- Commander Naval Meteorological and Oceanography Command (CNMOC)
Oceanographer of the Navy, Hydrographer of the Navy, and Navigator of the Navy
 - **Rear Admiral John Okon**
- Deputy Hydrographer of the Navy
 - **Mathew Borbash (replaced Stan Harvey)**



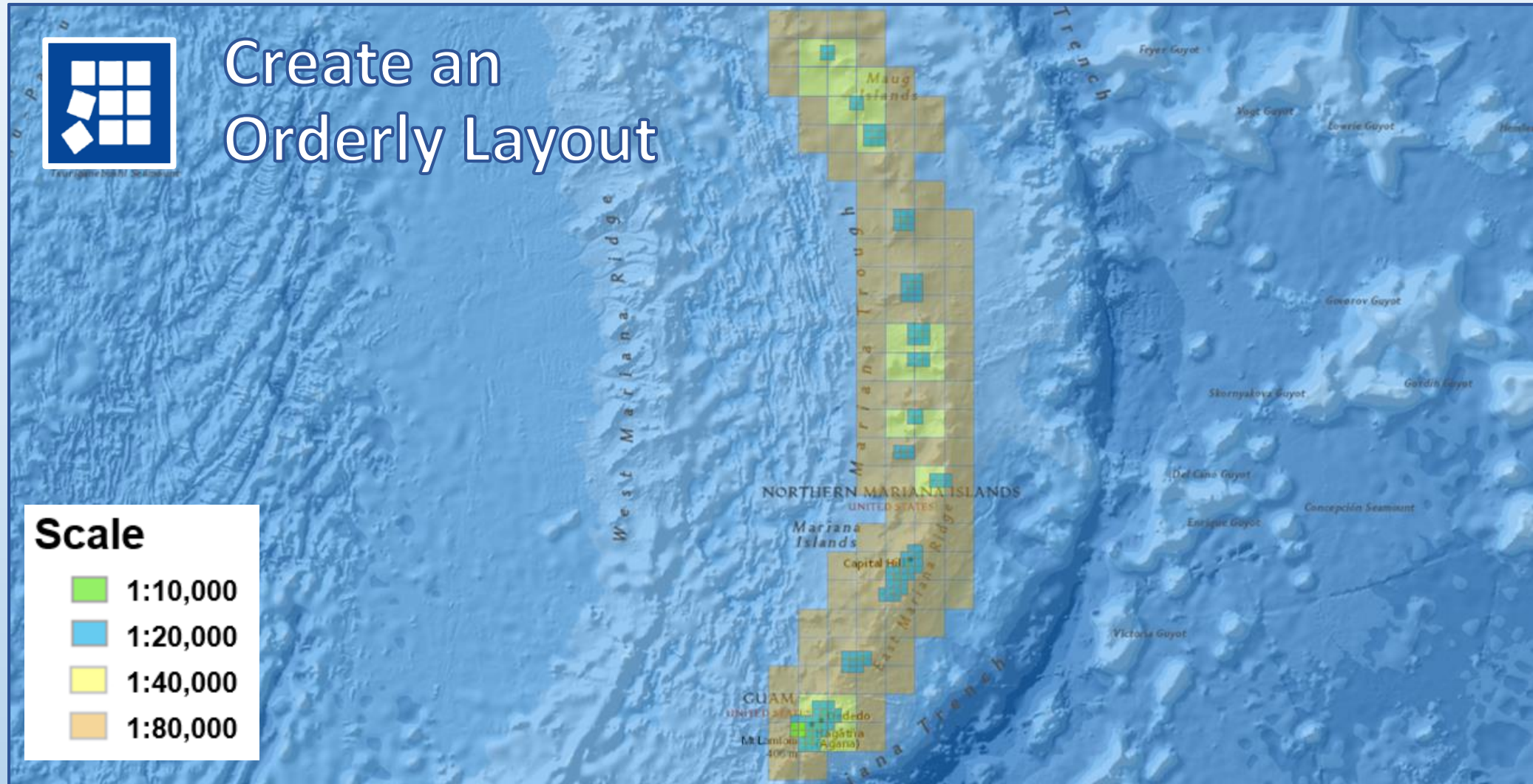
New Directions

- U.S. Charting Plan – an ENC product rationalization effort and data clean up effort to improve U.S. nautical chart products, coverage and distribution
 - Within EAHC; U.S produces complete suite of nautical products over Guam, Northern Marianas, Wake island
- U.S. produces ENCs in areas where the U.S. functions as the Primary Charting Authority
 - Within the EAHC; Palau, FSM and Marshal Islands building ENC portfolio

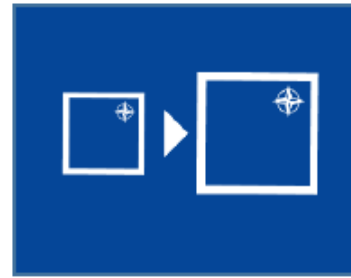
Create an
Orderly Layout



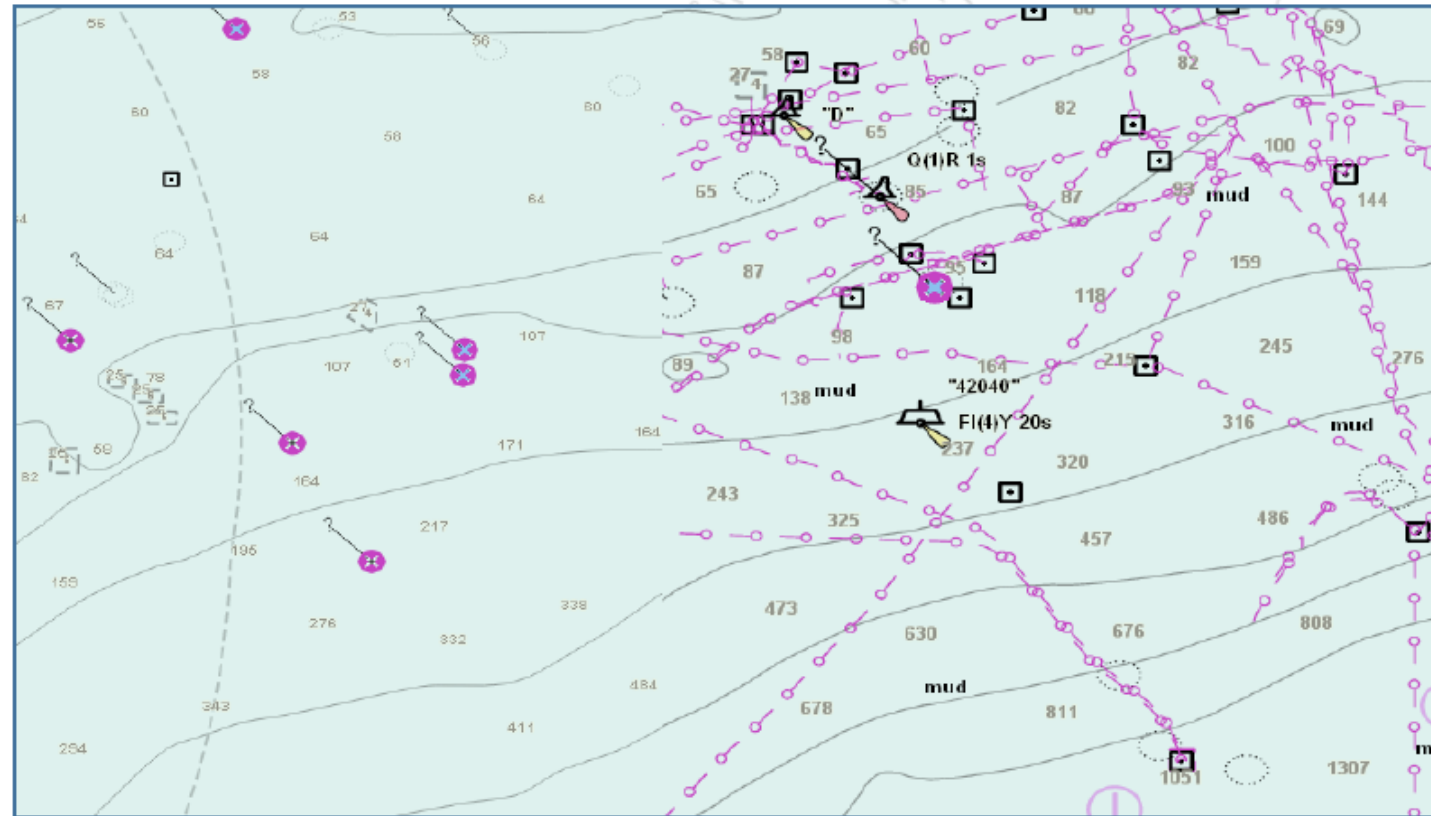
U.S. Charting Plan - Products



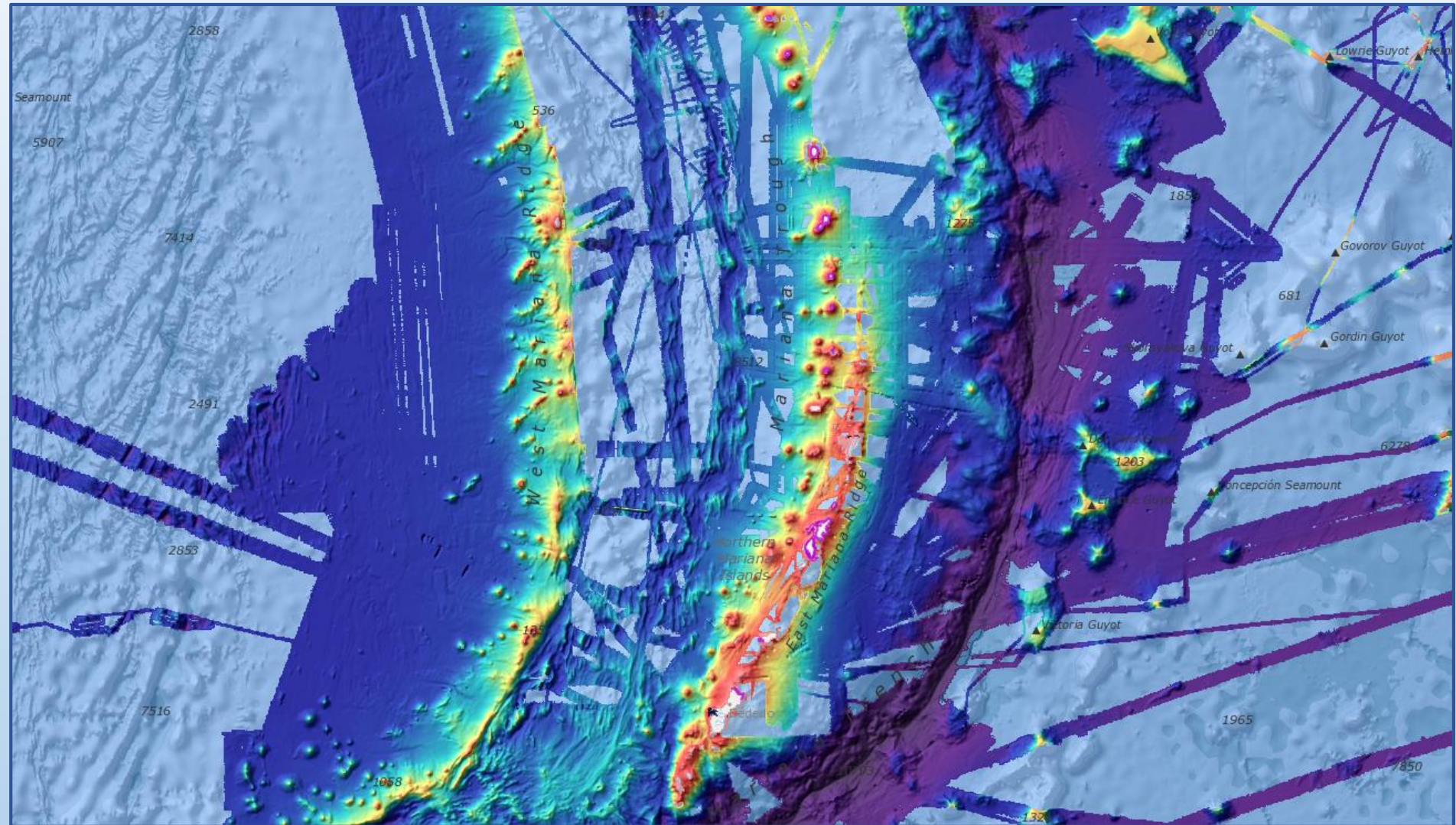
U.S. Charting Plan - Data



Standardize Scales



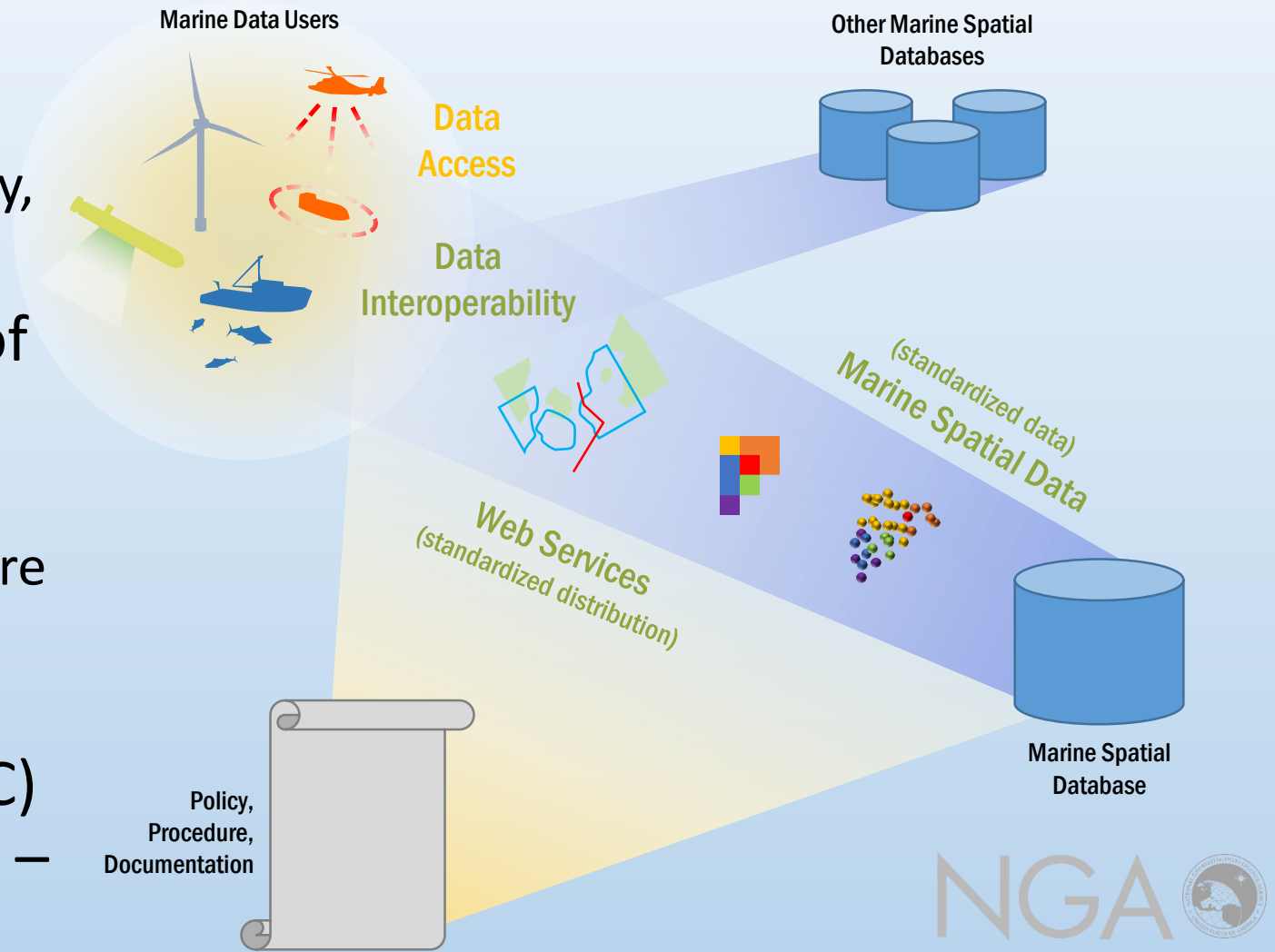
Best Available Data



Marine Spatial Data Infrastructure

UNCLASSIFIED

- U.S. Open Data Policy
 - Principles: Discoverable, Accessible, Described, Reusable, Complete, Timely, Managed Post Release
- Supporting non-traditional users of nautical chart information – ENC Direct to GIS
 - ENC and other derived theme layers are distributed via OGC Compliant Web Services
- Open Geospatial Consortium (OGC) Marine Spatial Data Infrastructure – Concept Development Study



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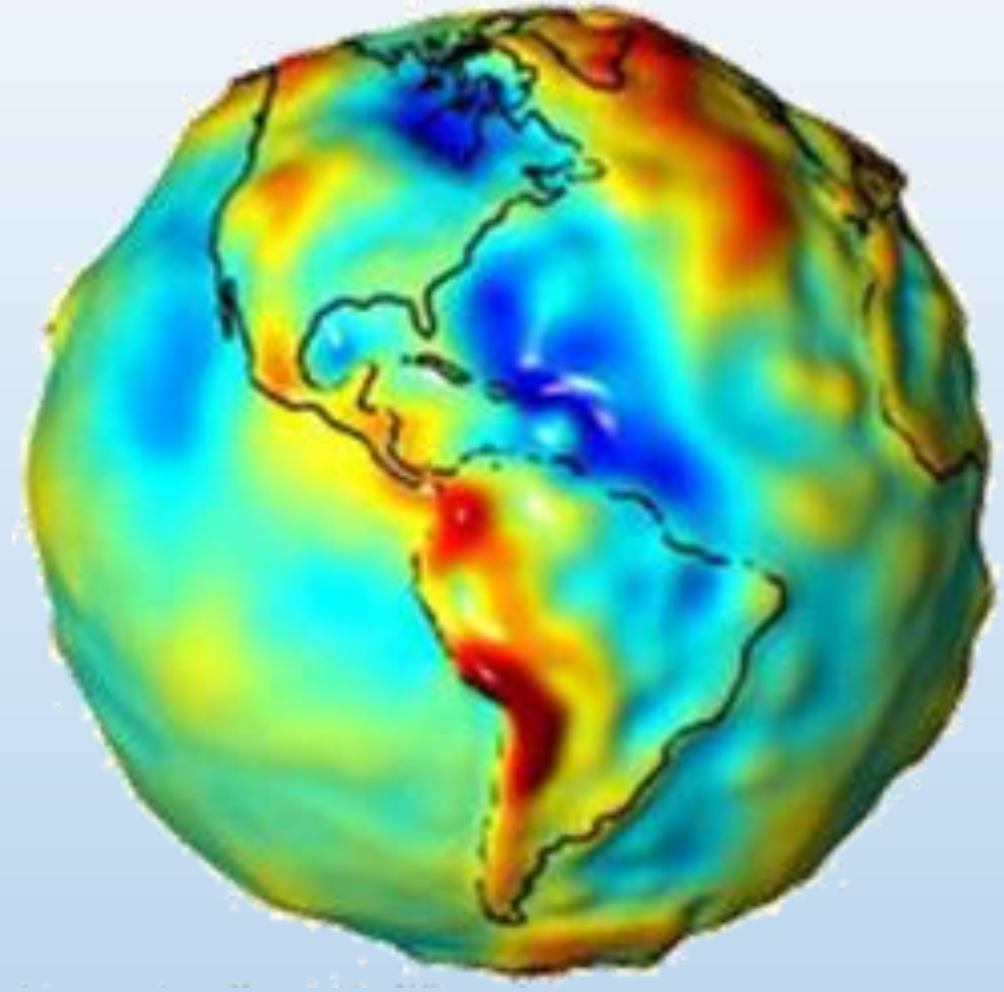
Capacity Building

- U.S. supports the IHO Maritime Safety Information training courses
 - NGA - S-8 Category-B Competence for Nautical Cartography
 - NOAA – S-8 Category-B Competence for Nautical Cartography, Chart Adequacy Workshop
 - U.S. Navy – S-5 Category-B International Hydrographic Management and engineering Program
 - S-5 Category A
 - University of Southern Mississippi
 - University of New Hampshire



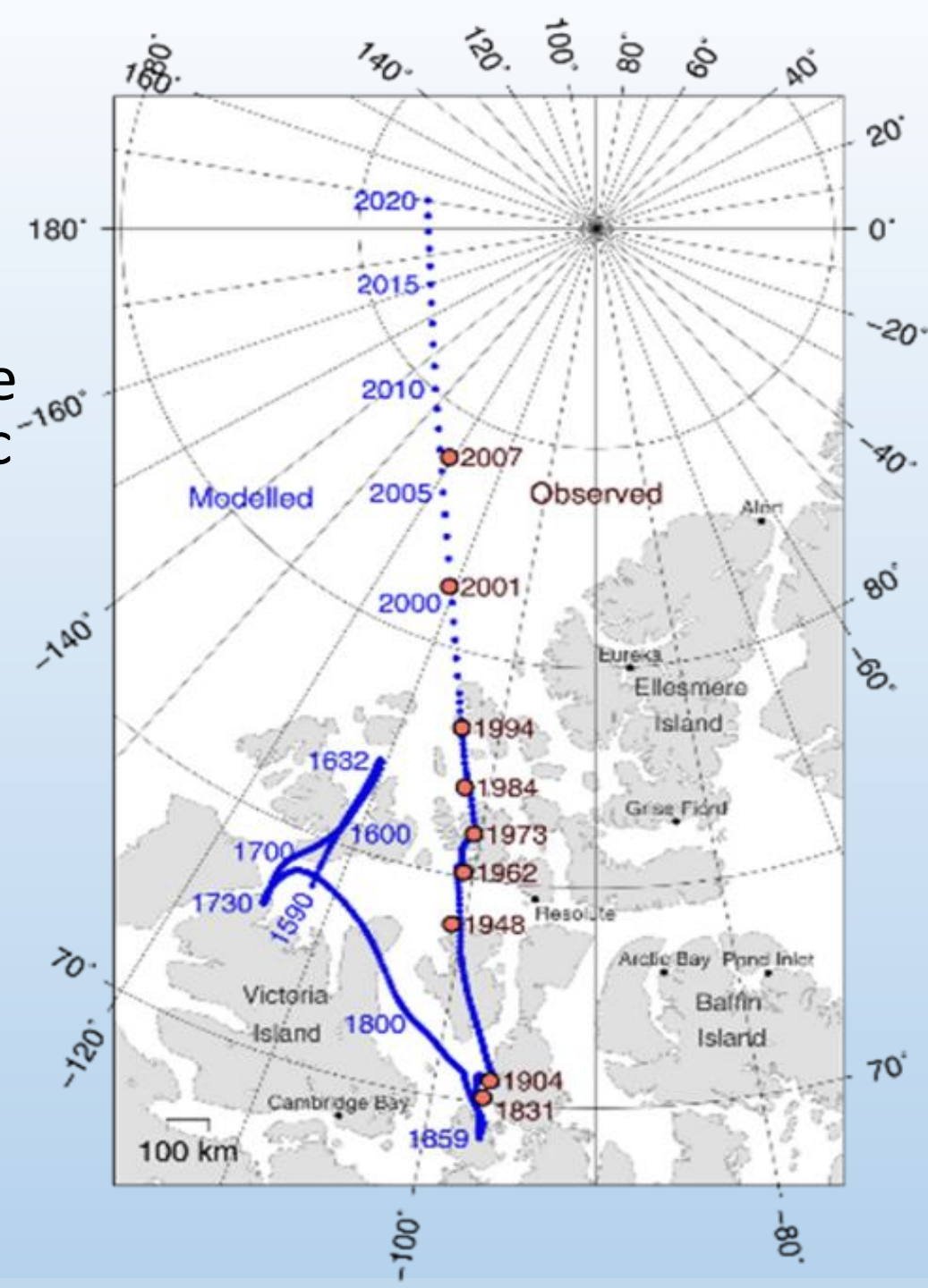
Geodesy Update

- New Earth Gravity Model (EGM)
 - in 2020, important for MSL and WGS
 - The **Earth Gravity Model** is updated to reflect the variance in gravity based on the uneven mass distributions found across the irregular shaped Earth



Geodesy Update

- The World Magnetic Model (WMM) helps define the difference between true north and magnetic north, and predicts the change over time.
- This correction is required to safely navigate across the Earth surface.
- Out of cycle version of the WWM was released in February 4, 2019 due to increasing inaccuracies
- Current plan to is to release the regular 5 year release of the WMM in 2020 on schedule



GEBCO Seabed 2030

<https://seabed2030.gebco.net/>

https://maps.ngdc.noaa.gov/viewers/iho_dcdb/

- Bring together available bathymetric data to produce the definitive map of the world ocean floor
- Encourage data collectors and data managers of governmental, academic and private entities to work together to improve the quality of publicly available data and grid of the ocean floor.
- Create partnerships and cooperation between Interested parties
- Empower sustainable ocean management

