

White Paper on Improving Sharing, Discovery, & Access of Seafloor Data in the North Atlantic

Jennifer Jencks - NOAA/CIRES

Introduction

This white paper summarizes a vision for *improved sharing, discovery, and access to seafloor data in the North Atlantic Ocean* through the creation of a North Atlantic Data Portal. The Portal would be a one-stop-shop for planned survey and bathymetric data discovery, contribution, and download. The Atlantic Seabed Mapping Workshop, held in Dublin on the 2nd December 2014, established a Working Group to advance the recommendations and action points agreed upon at the meeting. This group met in Brussels on the 23 and 24 February 2015 to discuss and define a work plan for the group, which includes white papers to address various topics.

Background

One objective of the *Galway Statement on Atlantic Ocean Cooperation* is the identification of priority areas for seafloor mapping collaboration in the North Atlantic. A question raised at the Dublin meeting was, "How do you choose a mutually beneficial location?" One criterion for universal benefit should be that no Statement signatory already has data in that location. Our first step should therefore be to identify where bathymetric data currently exists and make that data accessible to the public. If data sharing and access can be improved, then the Working Group can better identify potential mapping targets that benefit the community.

Problem

There are many reasons why this seemingly simple suggestion is not currently in place. While certain datasets are accessible online (e.g., NOAA's NGDC, EMODnet, IHO-DCDB), many are not. In some cases, data that are publically available reside in numerous locations making it a challenge for a user to locate.

Solution: The North Atlantic Data Portal

By leveraging the IHO Data Center for Digital Bathymetry (DCDB) and GEBCO Data Store infrastructure, a new web map portal could be stood up to allow the user community to:

1. *Locate and access publicly available data* in the North Atlantic from participating agencies using a single web portal. This leverages capabilities of the IHO DCDB web infrastructure. A single portal would display all data holdings from participating institutes by integrating their existing web map services.
2. *Identify locations of proprietary data and provide contact information*, allowing further inquiry about potential data access using the same single portal.
3. *Stay informed about all proposed and planned upcoming surveys* in a given area providing the opportunity for potential collaboration. By leveraging the efforts achieved at seasketch.org, data layers could be added to the portal showing current, proposed, and planned expeditions in the area.
4. *Easily contribute data* by leveraging the GEBCO Data Store.

Conclusion

To ensure that funding is not being used to collect data in areas where data already exists, a thorough inventory of current data holdings in the North Atlantic must first take place. That inventory must then be made available to the public. We can accomplish this goal by encouraging data sharing and leveraging current infrastructures.