

Spatial Data Quality Evaluation and Criteria

Background and Evaluation Process

MARCO's Ocean Mapping & Data Team (OMDT) will evaluate all data layers proposed for inclusion in the Mid-Atlantic Ocean Data Portal. To ensure the Mid-Atlantic Ocean Data Portal can serve as a trusted resource to support regional planning, the information presented must be of highest quality and reliability. All data must meet the criteria listed below which was developed by the Data Review Group (DRG), an interdisciplinary panel of managers and scientists. If the OMDT has questions as to the validity of including certain data layers, the data will be reviewed by the DRG.

Data are evaluated through a process that balances professional judgment and objective criteria, outlined below. Candidate data must meet Criteria 1 and 2—regarding relevance for planning and methodological rigor—without exception. Criteria 3 and 4, regarding geographic extent and currency are important, but exceptions may be made when data are particularly relevant for planning but do not cover the entire region and/or are not the most recent available.

Data Quality Criteria

- 1. Relevance for Regional Planning Spatial data should support and inform decisions related to the ocean planning priorities articulated by MARCO and the Mid-Atlantic RPB. These priorities include renewable energy development, habitat conservation, water quality, and climate change adaptation.
- 2. *Methodological Rigor* Spatial data will be the product of appropriate methods of sampling, processing, modeling and analysis. Sampling design must be rigorous enough to yield credible models with acceptable statistical power given planning objectives. When possible, data will be derived from peer reviewed sources.
- 3. Data and Metadata Standards Spatial data and metadata should conform to the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) and/or other relevant national and international standards.
- 4. *Geographic Extent* Spatial data will encompass the entire Mid-Atlantic region out to the 200 nm Exclusive Economic Zone, though exceptions may be made for data that meet Criteria 1 and 2.
- 5. Currency Spatial data will be developed using the most recent, available information.