

BCO-DMO & GEOLINK: IMPROVING DATA DISCOVERY AND ACCESS FOR OCEAN SCIENCE RESEARCH RESULTS



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Established in late 2006, the Biological and Chemical Oceanography Office (BCO-DMO) is funded by the NSF Division of Ocean Sciences (OCE) and Division of Polar Programs (PLR) to improve data availability and discovery, and to enable subsequent data integration and accurate use. BCO-DMO staff members work closely with investigators to ensure that data generated during research funded by those NSF programs are documented, stored, freely available, and protected long after the research is completed. Efforts at BCO-DMO focus on comprehensive data management activities that span the full data life cycle from "proposal through preservation", ultimately ensuring that data resulting from marine research projects are archived at the appropriate US National Data Center.

In addition to managing and serving ocean biogeochemistry and marine ecosystem data from NSF OCE and PLR funded research projects, BCO-DMO staff members work on several synergistic research projects, the results of which will enhance BCO-DMO data discoverability and access. BCO-DMO is one of the partners in GeoLink, an NSF funded EarthCube Building Block project. Using extensible GeoLink methodologies BCO-DMO has integrated Semantic Web technologies, including Linked Open Data and Ontology Design Patterns, to enhance the BCO-DMO data system architecture and to connect BCO-DMO managed data with complementary data and resources in other repositories. BCO-DMO endeavors to be one node in a comprehensive cyberinfrastructure for Geoscience that enables open, transparent, interoperable access to data and information.



Biological & Chemical Oceanography Data Management Office

LINKS to BCO-DMO for final, processed, marine ecosystem research data, and BCO-DMO harvests related data from the GeoLink knowledge hub

Project: Eddies Dynamics, Mixing, Export, and Species composition
Acronym/Short Name: EDDIES
Project URL: Project Web Site
Start Date: 2004-06
End Date: 2005-09
Geolocation: Sargasso Sea

Database Statistics:
Programs: 33
Projects: 620
Deployments: 2118
Datasets: 7521
Instruments: 375
Parameters: 1350
People: 1814
Affiliations: 430
Funding: 68
Awards: 1117

Publications:
McGillicuddy, D.J., et al. "Eddy/Wind Interactions Stimulate Extraordinary Mid-Ocean Plankton Blooms." Science, v.316, 2007, p. 1021.
McGillicuddy, D.J., Ledwell, J.R., and Anderson, L.A. "Response to Comment on 'Eddy/Wind Interactions Stimulate Extraordinary Mid-Ocean Plankton Bloom'." Science, v.320, 2008.
McGillicuddy, D.J., Ledwell, J.R., Anderson, L.A. "Response to Comment on 'Eddy/Wind Interactions Stimulate Extraordinary Mid-Ocean Plankton Bloom'." Science, v.320, 2008.

Project Coordinators

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