

Data Management for OCB Projects

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Discussion Points

- OCB project data management options
- next steps for OCB data management
- What's new at BCO-DMO?

OCB project data management options

- Data management solutions for OCB PIs and projects will be determined according to research funding source.
- Identifying data management partners for OCB Projects is a work in progress ...

NSF OCE Biology or Chemistry



- Program Managers:
Dave Garrison or Don Rice
- contact BCO-DMO
as your data management partner
- no additional cost to your project

NASA Ocean Biology and Biogeochemistry Program

- Program Manager: Paula Bontempi
- contact SeaBASS
- see the 'NSF-OCE and NASA OB&B biogeochemical data submission milepost' document linked from the BCO-DMO resources page 'How to Contribute Data'



bco-dmo.org



NOAA Global Carbon Cycle program



- Your data management strategy will be described in the Data Management and Communications Plan section of your proposal, and will involve the appropriate national data center NODC / NCDC / NCDDC / NGDC.

Transition Phase

- In cases where there is no clear funding mandate for data management, then the current recommendation is to contact the OCB Project Office for assistance. Then Heather and Cyndy would discuss options.



Data Availability

- Regardless of funding source and data management solution, investigators are encouraged to make data available early to colleagues (with temporary restricted access if desired) to encourage data quality review by community members.
- In addition to improved data quality, early access to project data can stimulate productive workshops and discussions and contribute to increased publication opportunities.

Challenges . . .

- Data of interest to the OCB community will continue to be available from distributed systems as opposed to being available from a single data repository.

and Strategies . . .

- community development of shared, common vocabularies and ontologies
- community agreement on common exchange protocols
- standards adoption and compliance



Grand Challenge

- to design an interface that is at least as intuitive, reliable, efficient and productive as today's most popular data interface . . .



to be successful, the new interface must yield even better results.

Future plans

■ OCB data management subcommittee

- Scott Doney and Heather Benway are researching formation of a subcommittee
- with membership representing
 - ❖ SSC
 - ❖ Someone external to OCB
 - ❖ BCO-DMO representative
 - ❖ Representatives from other data centers
- Dave Glover and Heather Benway will draft a charge for the subcommittee

Future Plans

- Data management should be a topic of discussion at the scoping workshops.

- BCO-DMO will continue to design for interoperability with other data management centers (e.g. NACP, DOE/WDC CDIAC, NASA SeaBASS)
 - supporting metadata standards
 - standard data exchange protocols (e.g. OPeNDAP, Web Services)

What's New at BCO-DMO?

- BCO-DMO was formed by combining the previously independent DMOs associated with US JGOFS and US GLOBEC research programs.
- As of last week, BCO-DMO is located down in Shiverick House on WHOI's Village Campus ~ *closer to the action ... and the good coffee!*



BCO-DMO


■ BCO-DMO provides data management for investigators funded by NSF Biological and Chemical Oceanography Sections

- Capture and record supporting documentation (metadata)
 - ❖ “Data Management Guidelines Manual”
 - ❖ bco-dmo.org => Resources
- Make data and metadata available online
 - ❖ Restricted or public access as appropriate
- Ensure final archive of data in appropriate center (e.g. NODC); contribute to special repositories (CDIAC)



please visit the [BCO-DMO poster garden](#)

BCO-DMO Data System Interfaces

- text-based interface that searches the metadata database and displays links to data sets available from the BCO-DMO data system <http://osprey.bcodmo.org/>
database query results are categorized by: Program, Project, Cruise ID, PI name (all recorded metadata)
- MapServer geospatial interface 
<http://mapservice.bco-dmo.org/maps-bin/global/map>

MapServer geospatial interface

<http://mapservice.bco-dmo.org/maps-bin/global/map>

It is possible to locate data sets if you know the Program, Project, Cruise ID or PI name and can query the data catalog, or . . .



but if you are looking for pigment data from the Arabian Sea or productivity estimates from the Southern Ocean and don't know any of the other metadata . . . a geospatial interface is an advantage.



Biological and Chemical Oceanography Data Collection



Welcome to the MapServer Geospatial Interface.

Available Data

Simple search

Advanced search

Select Program(s):

CoML
FeSyn
NACP
NEC

Select Project(s):

NACP Coastal Synthesis
U.S. GEOTRACES Atlantic Section
AESOPS
Ant2006

Select Deployment(s):

58B
61TG_3052
AB_63_1
AB_63_2
AB_63_3
AB_63_4A
AB_63_A

Show selected

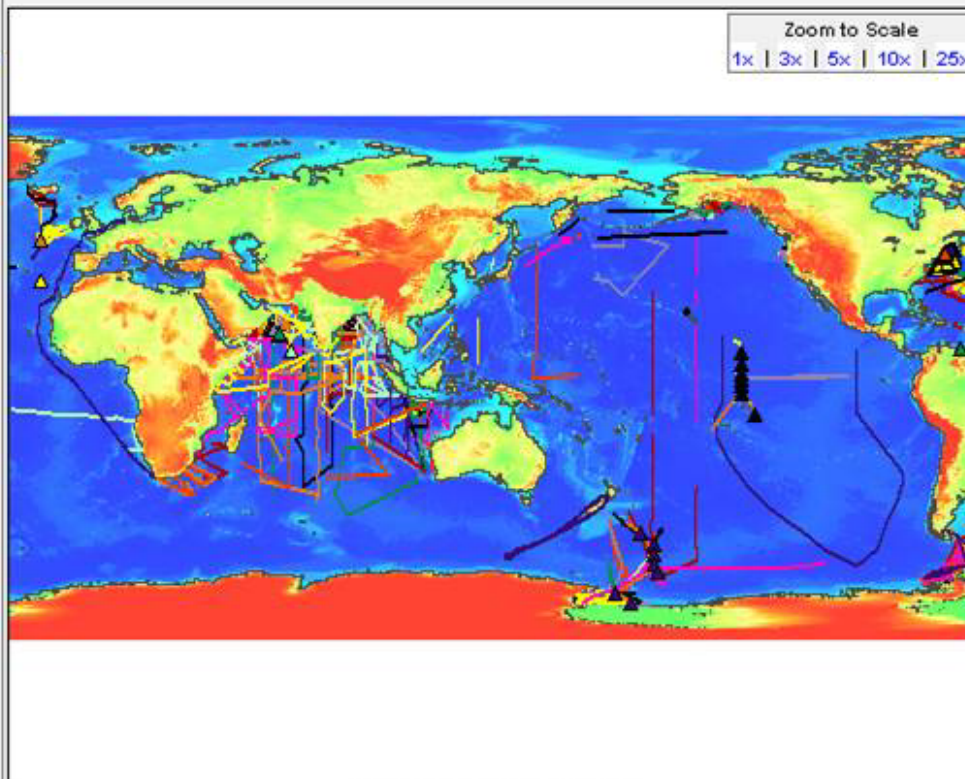
Show and zoom

- OR -

Show all

Show Data

Interactive Map



85°45'37" S 113°00'56" W

Scale-it legend 1 - 2 3 - 10 11 - 100 101 - 1000 above 1000

Map Controls

- Zoom in
- Zoom out
- Original zoom
- Pan map

Data Layers

- Show bathy?
- Show grid?

Map Size

- Small
- Medium
- Large

Map Focus

- Atlantic
- Pacific

OGC Info

[Get Capabilities](#)
[Map WMS](#)
Show Data WFS
[Show Command Log](#)

Version 0.304

Metadata

[Clear](#)

Show Data Results

Click **Show Data** to list selected data sets.

Contacts

Lead Investigators

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Co-Managers

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BCO-DMO Web Site
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Data Managers:
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Dicky Allison

Thank you

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OSPREY

Online System with the Potential to Record Everything for You

- Facilitates access to data sets categorized in a variety of ways: Program, Project, Cruise ID, PI name
- A data system interface powered by metadata



Julie Allen, WHOI CIS