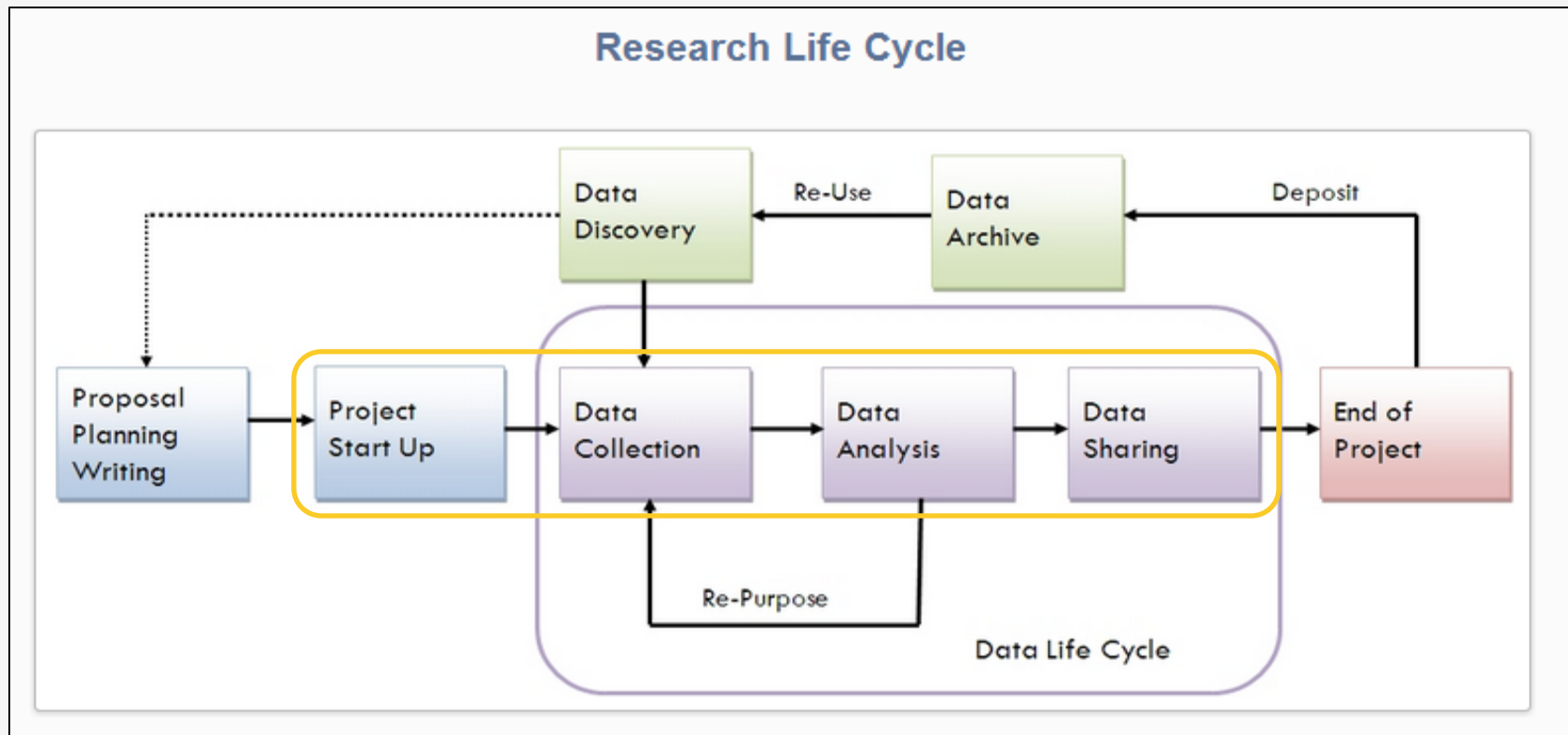


The Research Workspace for the DBO

Chris Turner
Axiom/AOOS

The Workspace (workspace.aooos.org)

...is a web-based collaborative data management solution for storing and sharing data during the active, pre-publication phase of the research lifecycle.



Storing, Sharing, & Organizing Data

▶ Storage

- ▶ 1.1 Pb RAID storage
- ▶ Version control
- ▶ Easy drag and drop uploading

▶ Securely share with collaborators

- ▶ Access to groups requires invitation from administrators
- ▶ File read/write permissions easily controlled within projects
- ▶ Monitor progress of data delivery, processing, analysis, and documentation

▶ Organization

- ▶ Group > Project > Folder > File



DBO Findings and Challenges

- ▶ Immediate sharing of data is advantageous
 - ▶ Provides context to help interpretation of individual studies
 - ▶ Allows data types shared amongst DBO cruises to be aggregated and analyzed first-order via cluster analysis

- ▶ ...But it isn't easy
 - ▶ Requires coordination and commitment
 - ▶ Data quality and processing time are issues
 - ▶ Gear and analytical capabilities aren't standardized
 - ▶ Resolution and scale issues

Project View

The screenshot shows a web browser window displaying the AOS Workspace GOAIERP Project View. The browser address bar shows the URL <https://workspace.aos.org/group/2416/projects>. The page header includes the AOS logo, "GOAIERP", a search bar, and the user name "Chris Turner".

Left Sidebar: A navigation menu with a hamburger icon and a list of project categories: ALL (45), MY PROJECTS 0, 2010 2, 2011 11, 2012 4, ADMIN 6, CRUISE 17, LOWER TROPIC LEVEL 14, MIDDLE TROPIC LEVEL 7, MODELING 2, RETROSPECTIVE 9, and UPPER TROPIC LEVEL 5.

Main Content Area: A list of project cards, each with a title, date, and tags. The projects are:

- 2013 Fieldwork Planning** (Apr 12): 2 items, tags: Olav, ADMIN
- DisMELS test distribution** (Feb 05): 6 items, tag: WILLIAM, MODELING
- East Amatuli Colony Seabird Studies** (Mar 20): 1 item, tags: LESLIE, UPPER TROPIC LEVEL, RETROSPECTIVE
- F/V Aquila, November 5 to November 14, 2011 (1AQ11)** (Mar 21): 1 item, tags: 2011, CRUISE, LOWER TROPIC LEVEL
- F/V Harmony, March 16 to March 21, 2011: Deployment of a mooring in Southeast Alaska** (Feb 15): 1 item, tags: 2011, CRUISE, LOWER TROPIC LEVEL
- F/V Northwest Explorer, April, 2010 (NWE Leg 1/1NW10)** (Feb 15): 4 items, tags: CRUISE, 2010
- F/V Northwest Explorer, August, 2012 (NWE Leg 2/2NW12)** (May 31): 4 items, tags: 2012, CRUISE
- F/V Northwest Explorer, July, 2010 (NWE Leg 2/2NW10)** (Feb 15): 1 item, tags: CRUISE, 2010

Right Sidebar: Latest activity

- 2 days ago:** Sterling added a file. M/V Tiglax, April 26 to May 11, 2011 (ITX11): Moorings & surveys WGOA, Seward Line & PWS. Seward Line 2011 - n...
- 4 days ago:** Peggy added a file. PMEL Drifters. EcoFOCI_drifter0507...
- 5 days ago:** Danielle added 3 files. Program Coordination/Administration. utl_prog_rpt_april201..., model_prog_rpt_april..., retro_prog_rpt_april2...
- 12 days ago:** Mark added 2 files. UTL: Habitat. PD_3D_revised.zip, Barren_3D_revised.avi
- 18 days ago:** Carol added a file. Program Coordination/Administration. GOAIERP_PI Phone...

Folders & Files

The screenshot shows a web browser window displaying the Axiom Testing workspace. The address bar shows the URL: <https://workspace.aos.org/group/2226/project/4728/folder/23313/csvs>. The page title is "Walrus and Arctic Ice Sea Loss". The interface includes a search bar, a user profile for "Chris Turner", and a sidebar with navigation options: "Text Files" (4), "Images" (3), and "CSVs" (4). The "CSVs" folder is highlighted in green. Below the sidebar, there are buttons for "Add folder" and "Delete folder". The main content area displays a table of files with columns for Name, Size, Uploaded By, and Updated. The table contains four rows of CSV files, all uploaded by "Admin User" on "Jun 08, 2012".

| Name | Size | Uploaded By | Updated |
|-------------------------------------|--------|-------------|--------------|
| migration dates.xlsx | 8.7 kB | Admin User | Jun 08, 2012 |
| Fischbach Walrus Release Points.csv | 9.3 kB | Admin User | Jun 08, 2012 |
| USGS.csv | 68 B | Admin User | Jun 08, 2012 |
| potter.csv | 1.3 kB | Admin User | Jun 08, 2012 |

Drag and Drop uploading

The screenshot shows a web browser window displaying the AOS Ocean Workspace interface. The browser's address bar shows the URL: <https://workspace.aos.org/group/2226/project/4728/folder/23322/new-folc>. The browser's bookmark bar includes items like "daily notes", "Google Keep", "tools", "vocabularies and on...", "Databib | Research D...", "Axiom Wiki", "NOAA DM Wiki", and "Other bookmarks".

The workspace interface has a dark theme. At the top, it says "AOS Ocean Workspace" and "Axiom Testing". A search bar is visible. The user's name, "Chris Turner", is in the top right. The main heading is "Walruses and Arctic Ice Sea Loss".

On the left, there is a sidebar with a menu icon and a list of items: "Reports and A..." (4), "Observation P..." (3), "CSVs" (4), and "New Folder" (highlighted in green). Below this is an "Add folder" button.

The main content area has a toolbar with "Add files", "Delete", and "Move to" buttons. Below the toolbar is a table with columns: "Name", "Size", "Uploaded By", and "Updated". The table is currently empty, displaying "No files.".

In the center of the workspace, there is a large white text area that says "Drop files here to upload". A mouse cursor is hovering over a file icon labeled "Ideas & questions.txt" with a "+ Copy" button next to it.

Security: Editing Project Permissions

AOOS Ocean Workspace Axiom Demonstrations Search... Chris Turner

Edit

Name
Axiom Demo Project

Tags
* AXIOM DEMO [Clear All](#)

Editable by
Anyone
Anyone
Myself
Specific people

Save Cancel Delete

Latest activity

25 days ago
 Rob created a project.
My test

about a month ago
 James joined the group.

2 months ago
 Nadine added a file.
Axiom Demo Project
 img_0506.jpg

2 months ago
 David joined the group.

AOOS Ocean Workspace Axiom Demonstrations Search... Chris Turner

Edit

Name
Axiom Demo Project

Tags
* AXIOM DEMO [Clear All](#)

Editable by
Specific people

Rob Bochenek x

Chris

Save Cancel Delete

Latest activity

25 days ago
 Rob created a project.
My test

about a month ago
 James joined the group.

2 months ago
 Nadine added a file.
Axiom Demo Project
 img_0506.jpg

2 months ago
 David joined the group.

2 months ago
 Nadine joined the group.

Project Metadata

AOOS Ocean Workspace **GOAIERP** Search... Chris Turner

Create a project

Edit

ALL (45)

MY PROJECTS 0

2010 2

2011 11

2012 4

ADMIN 6

CRUISE 17

LOWER TROPIC LEVEL 14

MIDDLE TROPIC LEVEL 7

MODELING 2

RETROSPECTIVE 9

UPPER TROPIC LEVEL 5

2013 Fieldwork Planning Apr 12
2 files Olav **ADMIN** Metadata

DisMELS test distribution Feb 05
6 files William **MODELING**

East Amatuli Colony Seabird Studies Mar 20
Leslie **UPPER TROPIC LEVEL** **RETROSPECTIVE**

F/V Aquila, November 5 to November 14, 2011 (1AQ11) Mar 21
1 file 2011 **CRUISE** **LOWER TROPIC LEVEL**

F/V Harmony, March 16 to March 21, 2011: Deployment of a mooring in Southeast Alaska Feb 15
2011 **CRUISE** **LOWER TROPIC LEVEL**

Latest activity

2 days ago
Sterling added a file.
M/V Tiglax, April 26 to May 11, 2011 (1TX11): Moorings & surveys WGOA, Seward Line & PWS
Seward Line 2011 - n...

4 days ago
Peggy added a file.
PMEL Drifters
EcoFOCI_drifter0507...

5 days ago
Danielle added 3 files
Program
Coordination/Administration
utl_prog_rpt_april201...
model_prog_rpt_april...
retro_prog_rpt_april2...

Metadata Editor

Project Metadata

AOOS Ocean Workspace GOAIERP Search... Chris Turner

Description [Edit](#)

Abstract

Purpose

Supplemental Information

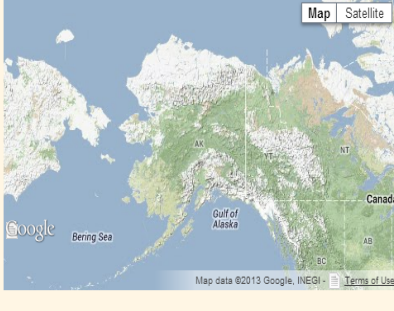
Time Period

Online Links

Contacts [Edit](#)

Add a contact

Geographic Coverage [Edit](#)



Keywords [Edit](#)

Taxonomy [Edit](#)

Constraints [Edit](#)

Access

Use

File metadata

AOOS Ocean Workspace Axiom Demonstrations Search... Chris Turner

Nearshore fish sampling near Prudhoe Bay

Files [Add files](#) [Delete](#) [Move to](#) Filter:

| Name | Size | Uploaded By | Updated |
|------------------------|---------|-------------|--------------|
| BP historic database | 1 | | |
| Species Comp 81-10.xls | 59.9 kB | Cathy Coon | Jun 14, 2012 |

File Name [Edit](#)

Species Comp 81-10.xls

Title [Edit](#)

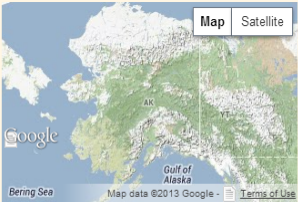
Abstract

Purpose

Supplemental Information

Time Period

Online Links



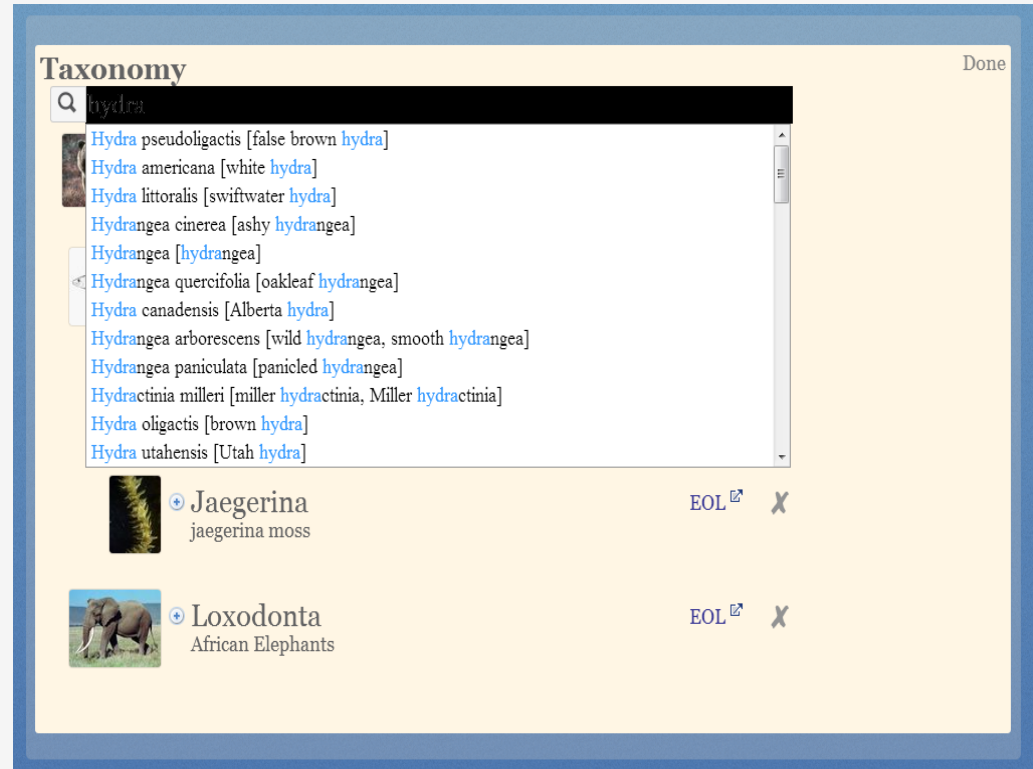
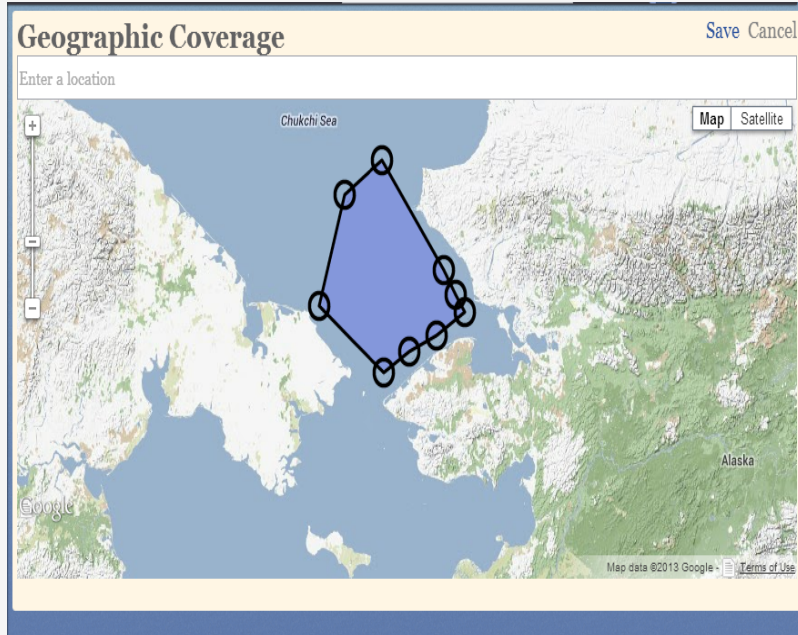
Contacts [Edit](#)

Cathy Coon

Add a contact

Delete folder

Metadata: Custom Tools



Coming Soon

- ▶ **Spatial Data Visualization Tool**
 - ▶ Visualize, style, and explore standard GIS and gridded data formats
- ▶ **Hierarchical Folder Structures**
- ▶ **Improved Metadata Editors**
 - ▶ More fields
 - ▶ Modules for describing different aspects of the data or research effort (lineage, instrumentation, representation, etc.)
 - ▶ Templates for describing different data types or collection methods (Cruises, CTD data with instrument description, Satellite Imagery, etc.)
 - ▶ Import/Export tools for submitting data and metadata to archives



Next Steps

- ▶ Create list of DBO Workspace users (name, email)
- ▶ Think about preliminary DBO Workspace structure
- ▶ Contact me with further questions or to set up a Workspace training webinar.

Email: chris@axiomalaska.com

References

- ▶ Sallans, A. (2013). University of Virginia Library: Data Management Consulting Group. Retrieved June 1, 2013 from <http://dmconsult.library.virginia.edu>.
- ▶ Distributed Biological Observatory. (2012). Cruise data. Retrieved June 1, 2013 from <http://www.arctic.noaa.gov/dbo/findings.html>.

