



NOAA Rolling Deck to Repository (R2R) project

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R2R

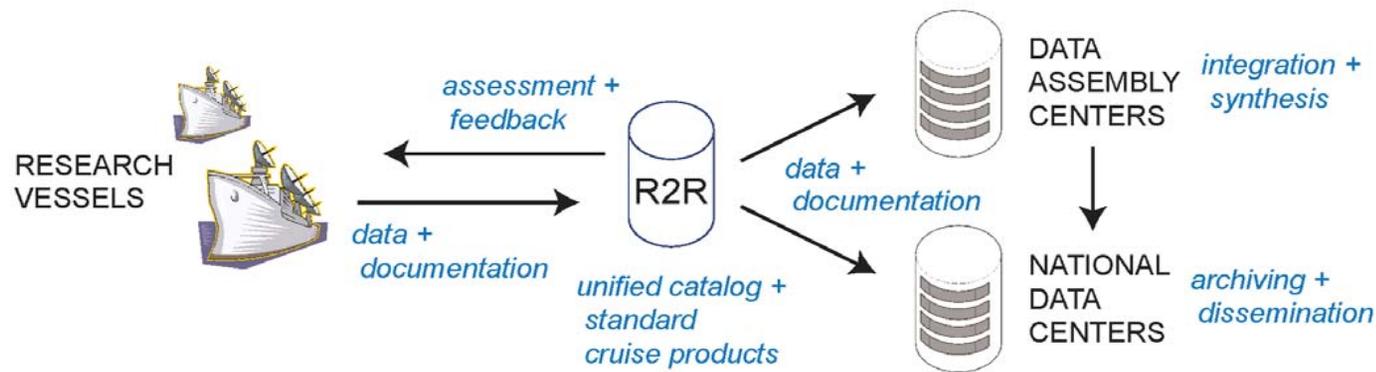
Background



- Project Initiated in 2010:
 - Modeled after the UNOLS R2R project.
 - Project Lead: NOAA's Integrated Ocean and Coastal Mapping program.
- Goals:
 - Providing a “direct pipeline” for routine underway cruise data and documentation to a central repository.
 - Ensure that data collected about NOAA ships is documented, preserved, and available for access for the long-term.



UNOLS R2R System Model



- Migrate all routine “underway” data to long-term repositories
- Create catalog of cruises and standard products
- Assess data quality and provide timely feedback to operators



R2R

Key Benefits



- 5 Standard Products
 - Cruise Metadata Record
 - Scientific Sampling Event Log
 - Quality-controlled Ship Track
 - Real-time quality-controlled MET and TSG data
 - Operations Report (Formatted document containing standard products & appendices)
- Data Documentation and Delivery
 - Data Catalog (dataset, and file level metadata)
 - Routine and consistent data delivery to NDCs
 - Accessibility for public reuse

R2R

Cruise Catalog

Rolling Deck to Repository (R2R)

Home About R2R Cruise Catalog News Contact Us Internal

Statistics Status
 (In Service) Vessels: 26
 Cruises: 2092
 Archived Files: 7088868
 Nov 28, 2011

Search

News

- R2R in UNOLS 2011 Newsletter 04/01/2011
- R2R CY10 Q4 Quarterly Report 01/19/2011
- R2R at 2010 Fall AGU Meeting 12/13/2010

Home

Cruise Catalog

Click here for vessel details. (data submitted to UNOLS-R2R) (data submitted to USAP)

UNOLS has 32 Participating Vessels

✓2,000 cruises catalog
 ✓7+ million files archived

Home

Cruise Catalog: Blue Heron



Operator: University of Minnesota Duluth

Cruise ID	Start Date	Start Port	End Date	End Port
Details				
BH10-25 Inventory	2010-10-16	Duluth	2010-10-16	Duluth
Project: Student Cruise Chief: Johnson, Thomas (UMD)				
BH10-24 Inventory	2010-10-13	Duluth	2010-10-13	Duluth
Project: Student Cruise Chief: Gallup, Chrstina (UMD)				
BH10-23 Inventory	2010-10-12	Duluth	2010-10-12	Duluth
Project: Student Cruise Chief: Colman, Steven (UMD)				
BH10-22 Inventory	2010-10-05	Duluth	2010-10-07	Duluth
Project: Stoichiometrically Imbalanced Nitrate in the Laurentian Great Lakes Chief: Stemer, Robert (UMTC)				

(25 cruises)



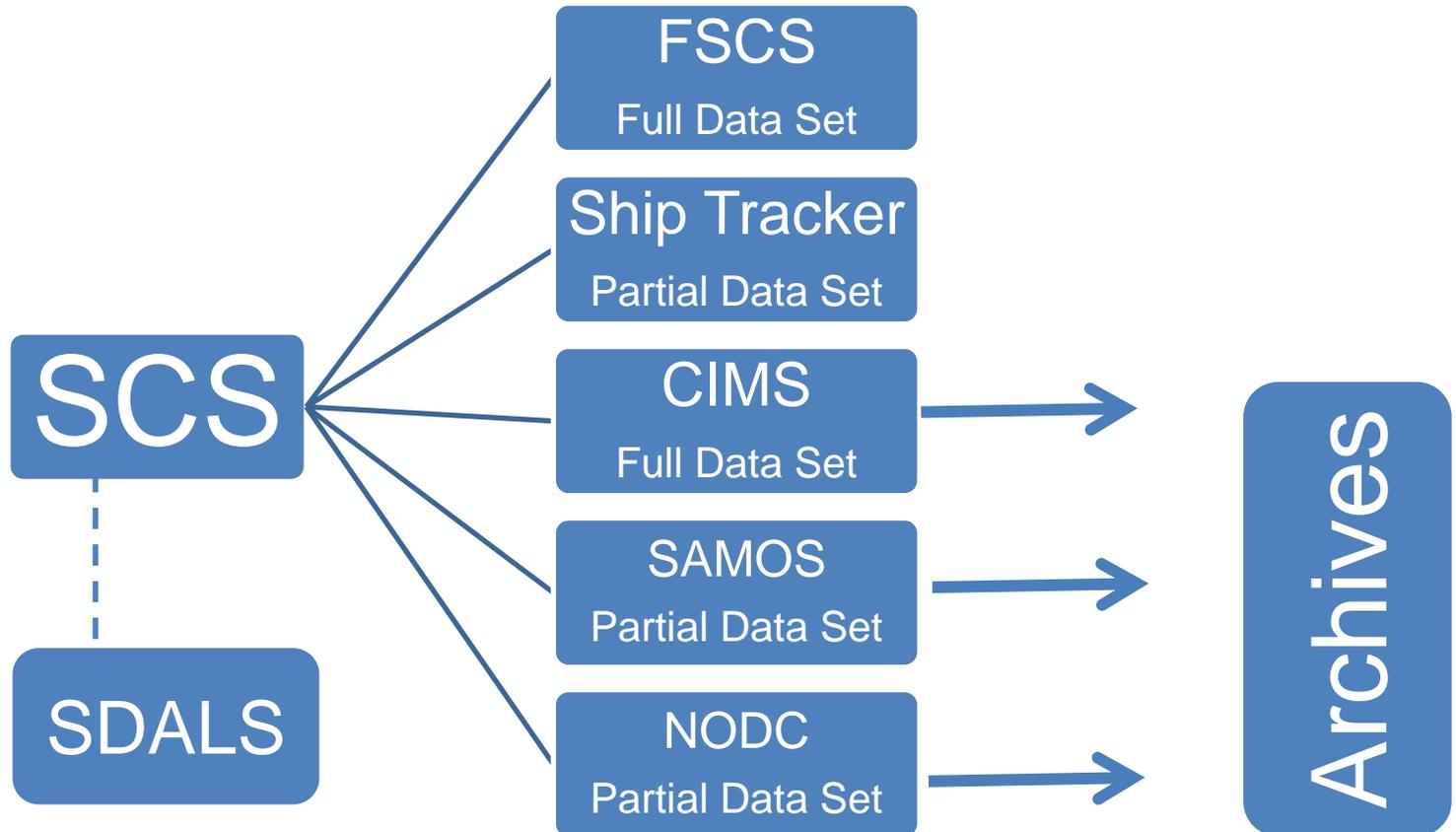
OMAO Data *Agreements*



- Project Instructions
- NODC MOU – Signed by RADM Stubblefield (February 4, 1999)
- Shipboard Geophysical Data Stewardship- Signed by RDML Kenul (January 18, 2011)
- SAMOS – SCS direct data transmission (2008)



Current Ship Data Management





NOAA R2R Next Steps



- Create a formal submission agreement between OMAO and the National Oceanographic Data Center (NODC) for SCS data.
- Develop an OMAO Data Management Policy and plans.
- Improve delivery of SCS data submissions to NODC from the fleet.
- Initiate a project to develop an enterprise solution to facilitate coordinated access to project data and platform capabilities (Common Environment Tool)



Common Environment Tool *Concept*



- The Common Environment Tool is a proposed NOAA enterprise solution to facilitate coordinated access to project data and platform capabilities for NOAA and non NOAA researchers.
- This Tool will provide a standard pipeline in which project data and documentation are submitted by vessel operators directly to a central repository;
 - inventoried in a unified fleet-wide catalog;
 - organized into discrete data sets with persistent unique identifiers;
 - associated with essential cruise-level metadata (based on ISO 19115);
 - and delivered to the appropriate national data center for archiving and dissemination.



Common Environment Tool

Key Benefits



- Increase the degree of standardization, interoperability and end-to end service delivery
- Integrated system which allows for accurate, timely, and ease of access to relevant data regarding ship/aircraft/UXS capability
- Increase data integrity, control, and records management.
- Increase data transparency and accessibility with tools that show project boundaries and real-time data geographically.
- Implement a flexible, extensible system that allows for future development



Questions?



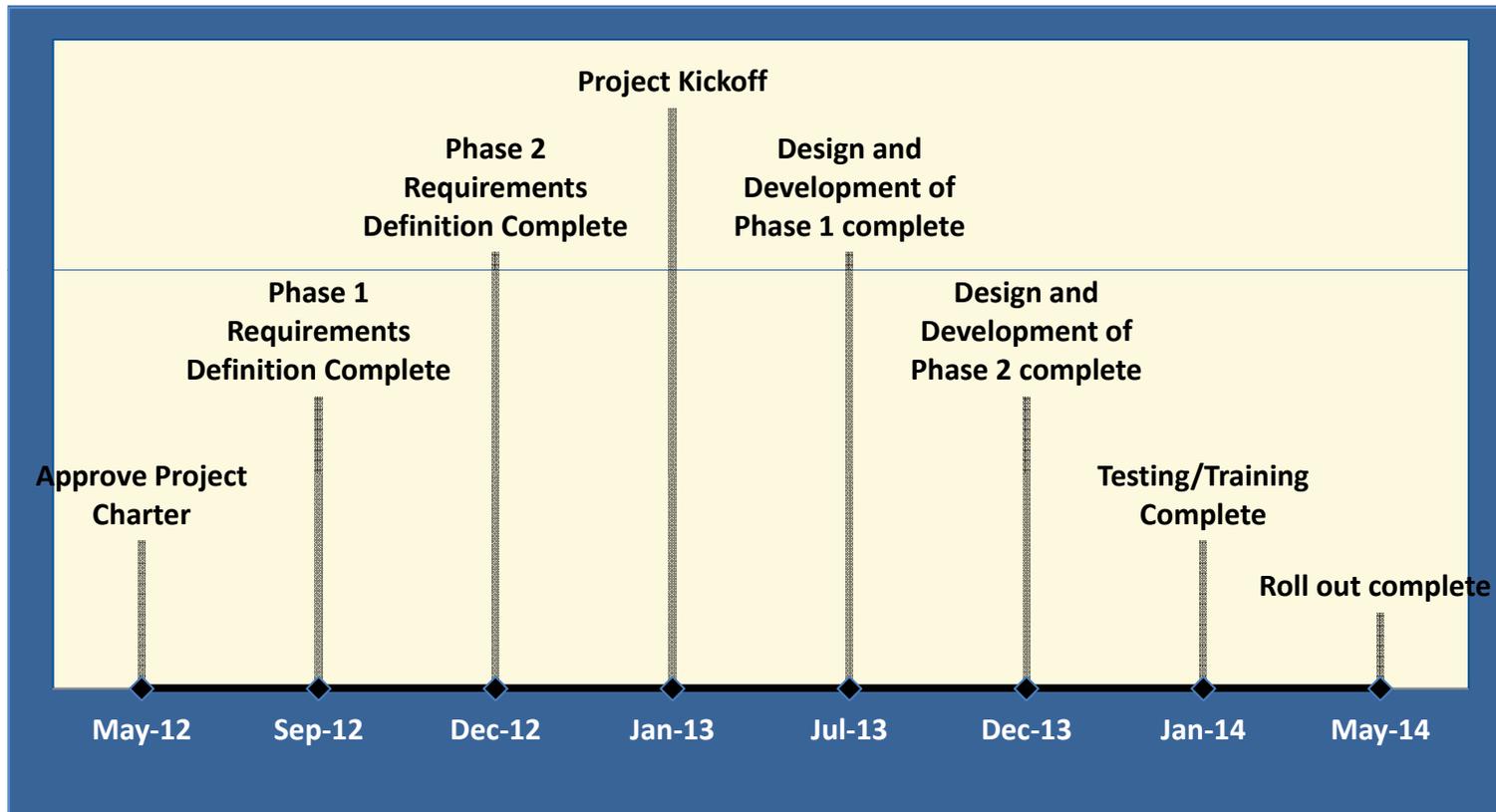
Backup





Next Steps

Notional Timeline





Potential GIS Tools





Common Ship Scheduling Portal

	10/01/2012 - 10/01/2013		
	October - 2012	November - 2012	December - 2012
McArthur II			
Delaware II	Ecosystem Research of the Northeast U.S. Shelf		
Okeanos Explorer	EX1301 - Ship and Mission Shakedown		
Fairweather	← * Sumner Strait & Affleck Canal, AK (OPR-Oxxx-FA)*		
Ferdinand R. Hassler			
Gordon Gunter			
Henry B. Bigelow	NEFSC Bottom Trawl Survey Autumn 2013		
	MOCE- Marine Optical Characterization Experiment		
	Education Cruise		
Hi'lalakai			



Potential Fleet Monitor with pop up to show shipboard sensor information real time



Air temp 75.0 F
Bar Pr 30.0 in
Dew Point 41.5 F
Water Temp 68.6 F