



# **NOAA Rolling Deck to Repository (R2R)**

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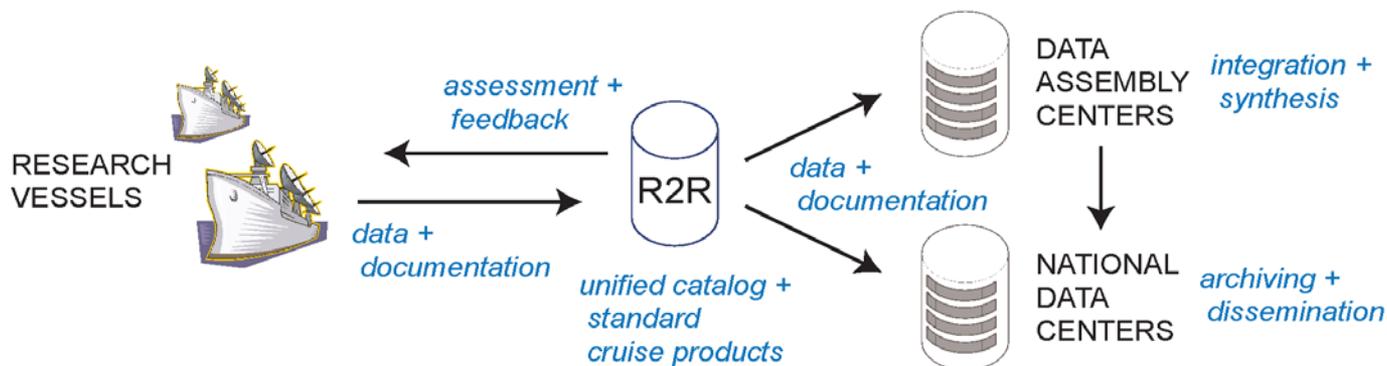
**17 October 2012**



# 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.

- 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



# Key Benefits

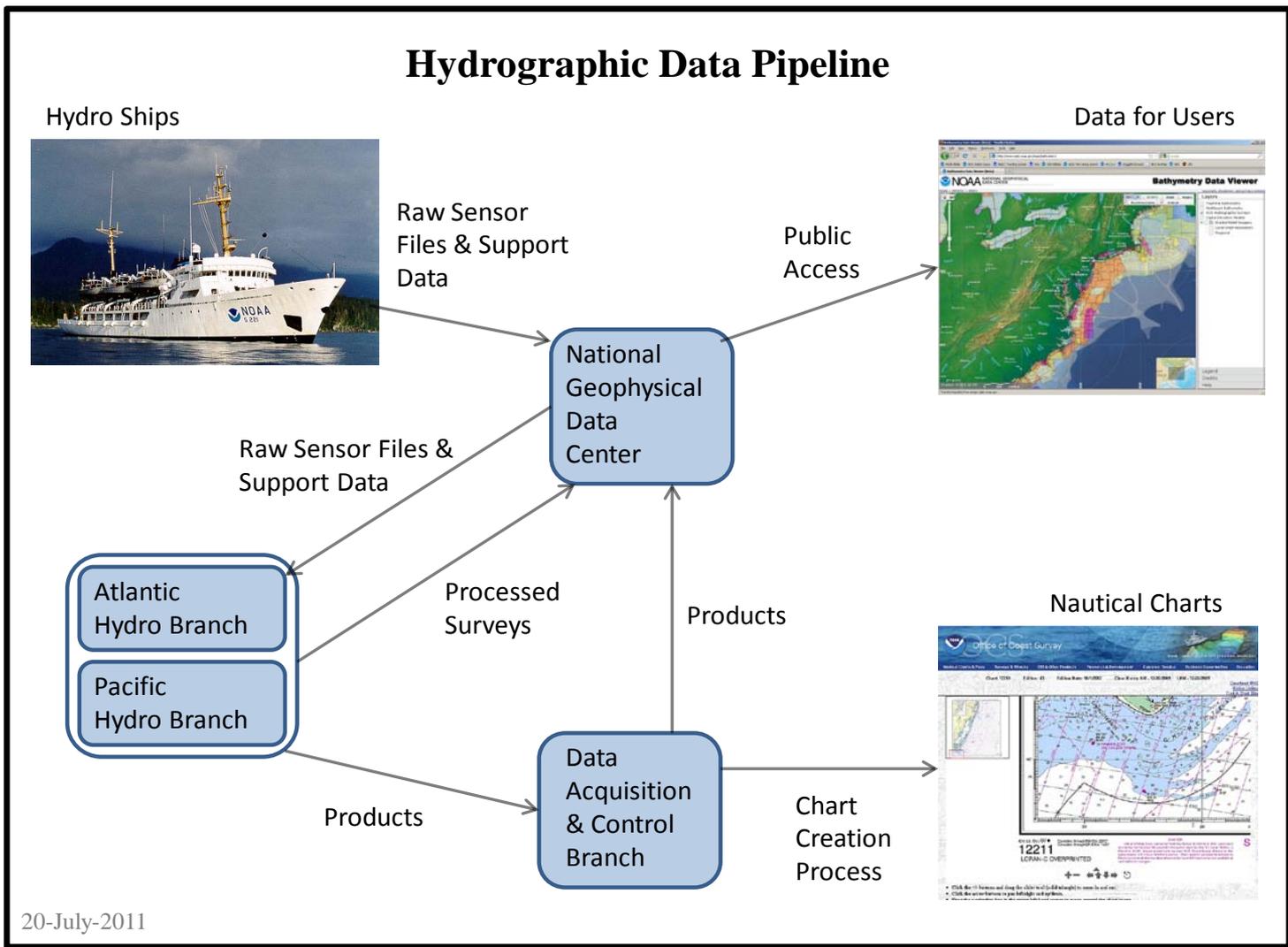
- 5 Standard Products
  - Cruise Metadata Record
  - Scientific Sampling Event Log
  - Quality-controlled Ship Track
  - Real-time quality-controlled MET and TSG data
  - Operations Report (Formatted document containing standard products & appendices)
- Data Documentation and Delivery
  - Data Catalog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



# Current Status

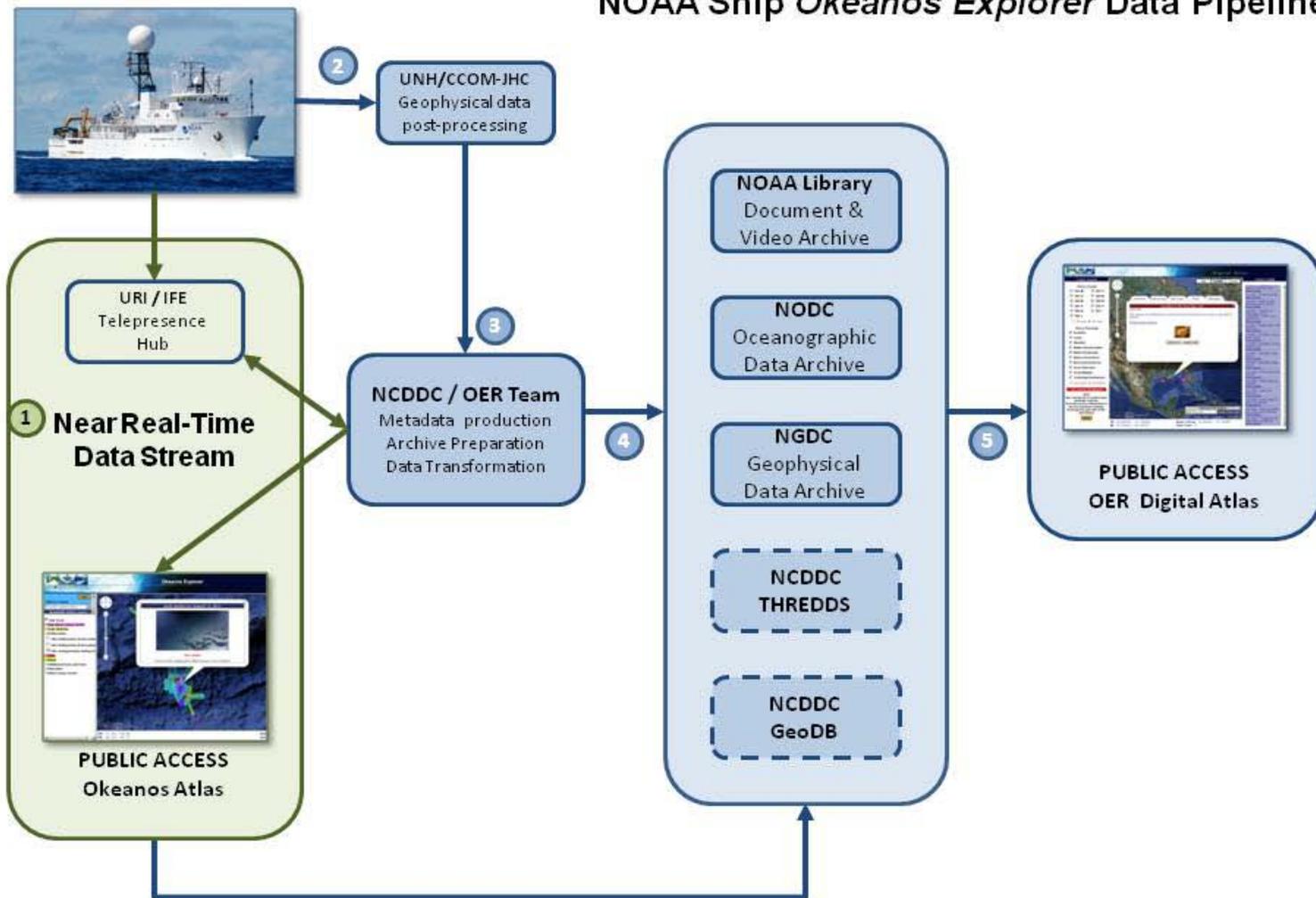
- Existing pipelines (components):
  - NOS hydro survey
  - Ocean Exploration
  - SAMOS: Scientific Computer System (SCS) Dataset
- Identified Gaps
  - Complete Project SCS Dataset
  - NMFS data (biologics, acoustic, video)
  - Metadata, data integrity
  - Standardization & tracking

# NOS Hydro Survey Pipeline



# Ocean Exploration Pipeline

## NOAA Ship *Okeanos Explorer* Data Pipeline





# Next Steps, 1

- Create an OMAO Data Management Policy
  - Formalizing responsibly as it pertains to lifecycle data management and data quality
    - Place responsibility for ship sensor data with vessel operators, not science party
- Formalization of SCS data pipeline
  - Provide for Full SCS dataset
  - Metadata, acquisition, packaging, submission, archive, access
- Work with NODC & SAMOS to develop a cruise catalog
- Automate Data tracking and formalize Data submissions for Geospatial data on non hydrographic ships.
  - Inclusion of data stewardship policies in cruise instructions and communicate and formalize Data Management SOPS per vessel



# Next Steps, 2



- Train Survey Techs and ET's to populate and maintain the SCS sensor configuration editor with metadata attributes such as calibration history, photos, and other identification/location attributes.

**Physical Device**

Warning - calibration date is more than one year old or is not set.

1 Image. [Images](#)

Name: Rel Humidity sensor

Manufacturer: RM Young

Model No.: Hygro Flex

Serial No.:

CD No.:

Type:  [Clear](#)

Comment: old Location: deck of flying bridge.was replaced by 41382v combo temp/hum sensor located on port yardam

Gen. Location:  [Clear](#)

Survey Location

Measurement Reference: Gyro Room Survey Mark [Select/View](#)

X:  Y:  Z:

Latest Calibration

Cannot be calibrated [Upload](#) [View](#)

File:

Select Date: 6/20/2012 12:01:35 [>](#) Date:  [History](#)

[Delete](#)

Latest Test

Select Date: 6/20/2012 12:01:35 [>](#) Date:  [History](#)

[Add New](#)

Tested By:  [Delete](#)

Results:

Not installed.



# Next Steps, 3

- Address Lifecycle Data Management of Non-Ship Sensors
  - Require data management plans indicating repository of Science party equipment
- Data Centers
  - Issue ingesting MB (ME-70) data
- Develop data submission agreements
  - Identify funding needs for participating programs



Questions?