QARTOD – IOOS DMAC Relationship

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QARTOD III
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Overview

- DMAC
  - Representation
  - Expert Teams and Caucuses
- DMAC current business
- Relationship to QARTOD activities
  - Demo Project lessons learned
  - Standards process
- Parting Thoughts

IOOS Data Management and Communications (DMAC)

DMAC Steering Team

- Chair: Lee Dantzler; Deputy Director for Data Management and Communications

- Approximately 20 - 25 team members

- Expertise in various science disciplines, data management activities and products

- *At least 3 members noting expertise in real-time data

IOOS Data Management and Communications (DMAC)

DMAC Expert Teams and Community Engagement Caucuses

- Metadata and Data Discovery Expert Team
- Transport and Access Expert Team
- Archive Expert Team
- Standards Process Expert Team
- Private Sector Caucus
- International Caucus
- Modeling Caucus
- System Engineering/Enterprise Architecture Working Group

DMAC Current Business

DMAC Steering Team – Meeting Nov. 1-3, 2005

- Participants include Steering Team, Expert Team and Regional Association representatives

- Reviewing the proposed draft work plans and member nominations for expert teams and community engagement caucuses

- Breakout sessions focused on developing project plans emphasizing regional and strategic collaborations; including cross-connections among teams and caucuses

- Reviewing lessons learned and results from relevant IOOS community activities

  – MMI Workshop on Advancing Domain Vocabularies

  – CSC Salinity Workshop

  – NOAA/Navy Sponsored Interoperability Demonstration

  – Others as submitted

Relevance to QARTOD

NOAA/NAVY Interoperability Demonstrations
- 2 projects
  - Boeing
  - Northrup-Grumman
- End-to-end demonstrations
  - Real-time data discovery, access, transport and integration
- Decision support products
  - NOAA - Marine Mammal Avoidance
  - Navy - Sea Basing

Relevance to QARTOD

NOAA/NAVY Demonstrations
- DMAC-related interoperability issues
  - Quality Control: the capability to achieve common levels of quality control across the heterogeneous sources of data that ensures a maximum utilization of available data.
- Key findings and recommendations as they relate specifically to DMAC issues
  - There is a general lack of community-endorsed Quality Assurance (QA) and Quality Control processes. This requires users to perform their own QA/QC, a time-consuming process.

Relevance to QARTOD

Standards Process Expert Team Draft SOW

"Defining data standards is a slow, consensus-building, and often expensive process. … Therefore, DMAC development cannot be based upon a systematic redesign of marine data standards to achieve the required level of interoperability. Rather, the focus of the DMAC Plan is on the use of protocols and translators that can achieve an acceptable level of interoperability building upon standards that exist today."

"… The level of interoperability that can be achieved among differing standards is often limited by mismatches in the information content of the standards, or differences in the semantic data models that underlie them. In the long term, achieving the desired level of data interoperability will require that the community develop and use fewer standards that are of greater breadth."

Relevance to QARTOD

Standards Process Expert Team Draft SOW

"... To be fully successful, IOOS must foster the adoption of community standards that encompass quality control, scientific analysis, data-set versioning, metadata, products and services, data discovery, network data transport, file formats, and data archiving."

Parting Thoughts

DMAC recognizes and supports the efforts of QARTOD

During QARTOD
  – Consider the elements of the DMAC Plan
    • Metadata
    • Data Discovery
    • Transport
    • Online browse, visualization
    • Archive

Parting Shots

Is your data archived?

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