

IOOS 2011 RA DMAC Workshop Briefing Guidance Document

NANOOS Briefing

Emilio Mayorga (APL-UW)

Steve Uczekaj (Boeing)

IOOS RA Data Management Priorities - 1

List priorities for next 12 months

Serving regional assets via IOOS data standards & services

- **SOS:** Extension, current CMOP offerings (in IOOS Catalog) to NVS assets
- **THREDDS:** Observations time series (CMOP now, others later); irregular-grid CMOP model once IOOS has established a standard solution
- **WMS:** Current diverse support – GeoServer, MapServer, ERDDAP

NANOOS Visualization System (NVS)

- Continued enhancement of user functionality, asset maintenance, handling of new data types (e.g., depth profiles, gliders, GIS, bio and acoustic data)
- Expand interface user-customization capabilities (launched Mar 2011)
- New Tsunami evacuation portal application based on NVS components
- Enhancement and formalization of NVS light-weight web services
- Improvement & deployment, asset inventory tools & status feeds
- Data harvesting overhauls: move NOS/COOPS harvester to SOS service; rewiring of CMOP, VENUS and NERRS harvesters

IOOS RA Data Management Priorities - 2

Other Data Access & Visualization Tools

- **Mobile Apps:** (Boeing) 1, NVS apps (catch up with web application functionality); 2, App corresponding to new NVS Tsunami portal
- Initial **ERDDAP** deployment
- **Data Exploration Tool** (CMOP) using NVS web services

GIS-CMSP capabilities

- Distribution of regional GIS datasets
- Deployment of geospatial services via GeoServer; possibly CSW

System Monitoring Tools and Usage Assessments

- Exploit and expand tools (APL-UW, etc) and capabilities already in place (web portal, NVS, and IOOS services)
- Ongoing hardware and software monitoring, maintenance, upgrade

Continue successful, close collaboration among committees: DMAC, User Products, Outreach & Edu.

IOOS RA Data Management Challenges

What are the challenges to implementing IOOS DMAC data standards, services, and functions?

- Lack of usable client tools (programmatic & user software) to exploit investment implementing IOOS services

This often leads to the situation where the services we set up are not used in the region, not even by ourselves

- Lack of clearly identified, well described tools for validation of our services, and to identify and resolve problems
- Shifting targets for data standards and services

Although recent changes have often been for the better, such as move to CF variable names, CSV SOS data encoding

How can the IOOS Office Assist your RA?

List 3 ways that IOOS Office could help facilitate DMAC advances in your RA?

- Help us overcome the challenges listed above!
- Help develop and disseminate tools and code that facilitate use of data directly from these services

Client software and API's/libraries, etc

- Deploy IOOS Catalog web services

So we can query data from it programmatically and therefore have an incentive for actively using it