

IOOS[®] Regional DMAC Benchmark Survey Results

IOOS[®] Regional DMAC Workshop
April 27 - 28, 2011

Benchmark Survey Overview

- The intent of the survey was to capture current state of regional DMAC capabilities
- Questions based on the *Guidance for implementation of the Integrated Ocean Observing System (IOOS[®]) Data Management and Communications (DMAC) Subsystem* (March 12, 2010)
- 35 questions were asked about DMAC functional capabilities (i.e. Data Access Services, Data formats, Metadata, Archiving, Catalog Registration)

Summary of the *Guidance for implementation* Document

- The overall objectives for IOOS Partners is to develop and maintain DMAC capabilities.
- IOOS Partners must address DMAC specific objectives:
 - Standards based foundation for DMAC capabilities
 - Exposure of and access to coastal ocean observations
 - Certification and governance of IOOS data and products
- IOOS Partners must demonstrate how DMAC subsystem will be implemented and sustained based on the following principles:
 - Open Data Sharing;
 - Service Orientated Architecture;
 - Recommended Data Access Services;
 - etc.

Which of the following functions do you currently perform?

	Assemble data	Perform QA or QC	Make data accessible over the internet	Transmit data to another center for distribution	Transmit data to WMO GTS	Transmit data to long-term archive	Ensure complete metadata are available
AOOS	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>			
CaRA			<input checked="" type="radio"/>			<input checked="" type="radio"/>	<input checked="" type="radio"/>
CeNCOOS			<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>
GCOOS	<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		
GLOS	<input checked="" type="radio"/>		<input checked="" type="radio"/>				
MACOORA	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>			
NANOOS	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>			<input checked="" type="radio"/>
NERACOOS	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
PacIOOS	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>
SECOORA	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>				
SCCOOS	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>			<input checked="" type="radio"/>
Total	9 of 11	3 of 11	11 of 11	7 of 11	2 of 11	4 of 11	6 of 11

What type of data access services do you offer (IOOS Recommended)?

	SOS	WCS	WMS	DAP
AOOS	 52 N SOS	 Unidata TDS	 OSGeo Geoserver	 Unidata TDS
CaRA				 Unknown
CeNCOOS	 NDBC			 ERDDAP
GCOOS	 NDBC OOSTethys or Python)	 Unidata TDS	 Unidata TDS	 TDS and OPeNDAP (Predates Hyrax)
GLOS	 NDBC	 Unidata TDS	 Unidata TDS	 Unidata TDS
MACOORA	 OOSTethys (CGI Perl)	 Unidata TDS	 NcWMS (built into TDS)	 Unidata TDS
NANOOS	 OOSTethys PySOS	 OSGeo Geoserver	 OSGeo Geoserver	
NERACOOS	 OOSTethys NetCDF SOS		 TDS ncWMS Mapserver	 Unidata TDS
PacIOOS	 OOSTethys	 Unidata TDS	 Unidata TDS	 Unidata TDS
SCCOOS		 Unidata TDS	 Unidata TDS	 Unidata TDS
SECOORA	 Custom-based on NDBC & OOSTethys		 OSGeo Mapserver	 Older OPeNDAP
Total:	9 of 11	7 of 11	9 of 11	10 of 11



What type of data access services do you offer (Other)?

	SOAP	REST	JMBL	ERDDAP	ArcGIS	FTP	Webpage	Other
AOOS								
CaRA								
CeNCOOS								
GCOOS								
GLOS								
MACOORA								EDS
NANOOS								
NERACOOS								
PacIOOS								
SCCOOS								Java Script API
SECOORA								
Total	1 of 11	7 of 11	0 of 11	2 of 11	2 of 11	6 of 11	11 of 11	2 of 11



What metadata formats do you use?

	ISO 19115	SensorML	FGDC	NetCDF ACDD
AOOS				
CaRA				
CeNCOOS				
GCOOS				
GLOS				
MACOORA				
NANOOS				
NERACOOS				
PacIOOS				
SCCOOS				
SECOORA				
Total	5 of 11	3 of 11	6 of 11	2 of 11

What public registry (catalog) have your registered your services/data with?

	IOOS DATA CATALOG	Other (GCMD, FGDC, GeoConnections Discovery Portal)
AOOS		
CaRA		
CeNCOOS		
GCOOS		
GLOS		
MACOORA		
NANOOS		
NERACOOS		
PacIOOS		
SCCOOS		
SECOORA		
Total	8 of 11	3 of 11

What is your approach to long-term data preservation?

	Local Back-Up	Offsite Back-Up		IOOS act as intermediary	Plan to establish Agreement with Data Center	Existing Agreement with NOAA DAC	Agreement with other National DAC	Data identified	No Agreement In Process
		Cloud	Offline						
AOOS									
CaRA									
CeNCOOS									
GCOOS									
GLOS									
MACOORA									
NANOOS									
NERACOOS									
PacIOOS									
SCCOOS									
SECOORA									
Total	11 of 11	8 of 11		1 of 11	4 of 11	1 of 11	1 of 11	1 of 11	4 of 11

In what formats is your data available?

	ASCII CSV	ASCII TSV	WQX	SWE Common	KML	IOOS GML	NetCDF - 3 with CF	NetCDF 4 with CF	Shapefiles	JSON	NetCDF 4 with Groups
AOOS	<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>				
CaRA	<input checked="" type="radio"/>				<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		
CeNCOOS	<input checked="" type="radio"/>	<input checked="" type="radio"/>			<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>	
GCOOS	<input checked="" type="radio"/>			<input checked="" type="radio"/>							
GLOS	<input checked="" type="radio"/>						<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>	
MACOORA					<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>			
NANOOS	<input checked="" type="radio"/>				<input checked="" type="radio"/>				<input checked="" type="radio"/>	<input checked="" type="radio"/>	
NERACOOS	<input checked="" type="radio"/>		<input checked="" type="radio"/>								
PacIOOS		<input checked="" type="radio"/>			<input checked="" type="radio"/>		<input checked="" type="radio"/>				
SCCOOS	<input checked="" type="radio"/>	<input checked="" type="radio"/>			<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
SECOORA	<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Total	9 of 11	4 of 11	2 of 11	3 of 11	10 of 11	4 of 11	9 of 11	6 of 11	7 of 11	6 of 11	1 of 11

Questions and Discussion
