Pacific Arctic Group 2014 Data

Jacqueline M. Grebmeier, PAG Chair

Chesapeake Biological Laboratory
University of Maryland Center for Environmental Science, Solomons, MD, USA

PAG Meeting
April 6-7, 2014
Arctic Science Summit Week
Helsinki, Finland



http://pag.arcticportal.org

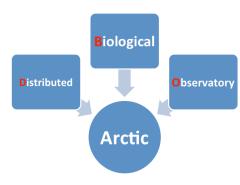
DBO 2nd Data Workshop-planning fall 2014

The 1st DBO Data Workshop (Feb 27-Mar 1, 2013) focused on 4 objectives:

- Present results from the 2010-2012 pilot study and determine a basis for multidisciplinary paper(s) to showcase the DBO international effort
- Archive metadata with either link to data set in a national archive or submitting the DBO data to common data archive
- Discuss DBO site criteria and identify NE Chukchi Sea DBO4 line and other DBO lines, and
- Determine how to plan for full implementation for the DBO

2nd DBO Data Workshop will evaluate the continued international data collections on up to 5 DBO lines seasonally, discuss the current submission of data to the DBO data sharing sites, develop publication plans, and coordinate future activities

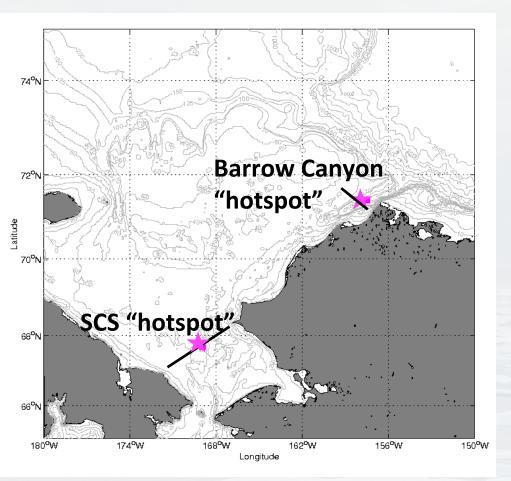




IASC

http://www.arctic.noaa.gov/dbo/

DBO Pilot Study: 2010-2013



9 to 11 cruises/year Focus on DBO 3 & 5

http://www.arctic.noaa.gov/dbo/http://pag.arcticportal.org

y. 2019	U-ZU	10
Vessel	Country	PI
Moana Wave, Healy	USA	Grebmeier
Healy	USA	Arrigo, Cooper, Grebmeier
Xuelong	China	Не
Mirai, Oshuru- Maru	Japan	Hirawake, Itoh, Kikuchi
Laurier	Canada	Vagle
Araon	Korea	Chung
Khromov, Norseman II	Russia and USA	Woodgate
Alaskan Enterprise	USA	Napp
Annika Marie	USA	Ashjian
Healy	USA	Pickart
Westward Wind	USA	Day

DBO data sets from pilot program

		DBO 3-SCS			DBO 5-BC			
		2010	2011	2012	2010	2011	2012	
	Physics	, ,	C3O, CHAOZ	C3O, CHINARE, Rusalca, Mirai, CHAOZ C3O, CHINARE, Rusalca,	C30, CHAOZ, Mirai, Anaka Marie, HLY01,03	C30, CHAOZ	Comida HS, Mirai, Chaoz, AON, (pickart, ashjian) Comida HS, Mirai, Chaoz, AON,	
T/S	CTD	C30, CHAOZ, Chinare	C3O, CHAOZ	Mirai, CHAOZ	C30, CHAOZ, Mirai	C30, CHAOZ	(Pickart, Ashjian)	
Currents	ADCP	C30, CHAOZ, Chinare?	C3O, CHAOZ	C3O, CHINARE?, Rusalca, Mirai, CHAOZ	C30, CHAOZ, Mirai, Anaka Marie, HLY01,03	C30, CHAOZ	Comida HS, Mirai, Chaoz, AON, (Pickart, Ashjian)	
Nutrients	Nutrients	C3O, CHAOZ, CHINAIRE	C3O, CHAOZ, CHINAIRE	C3O, CHAOZ, CHINAIRE	C3O, AON-Ashjian, CHAOZ	C3O, AON-CA, CHAOZ	Comida, HS, CHAOZ	
Primary production	Satellite Primary Prod	K.Frey	K.Frey, C3O(1stn)	K.Frey, Sang Lee 2, Diana 1	K.Frey	K.Frey	K.Frey	
Phytoplankton	chl	C3O	C3O	C3O	C3O	C30	C3O	
	species		C30	RUSALCA, C3O		C30	COMIDA HS	
Intermediate	microzoooplankton							
Zooplankton	standing stock	C3O, CHAOZ		C3O July, CHAOZ Aug, Greene Sept, Acoustic	C3O, CHAOZ	C3O, CHAOZ	COMIDA HS, Ashjian, CHAOZ, Greene	
	species	C3O, CHAOZ	C30	C3O July, CHAOZ Aug, Greene Sept, Acoustic	C3O, CHAOZ	C3O, CHAOZ	COMIDA HS, Ashjian, CHAOZ, Greene	
Benthos	standing stock	C3O, infauna, CHINARE	C3O	C3O, RUSALCA epi- benthos, CHINARE	C30	C3O	COMIDA HS, AKM, Jouett/Dasher	
	species	C30	C30	C30	C30	C30	C3O	
Marine mammals	survey	CHAOZ, AOOS/transist	CHAOZ	CHAOZ	CHAOZ	CHAOZ	CHAOZ	
	watch	RUSALCA mooring	C3O, RUSALCA mooring	RUSALCA mooring, Greene, Acoustic	BOWFEST	BOWFEST, Akmap-Day	COMIDA, Greene	
Seabirds	survey	Kuletz, C3O-Bentley?, AOOS/transist, Greene	Kuletz, C3O-Bentley?, AOOS/transist, Greene	Kuletz, C3O-Bentley?, AOOS/transist, Greene	Kuletz	Kuletz, AKMAP-Day	Kuletz, Greene	

Project View: AOOS DBO workspace for all participants in program



- Steamlines working access for DBO participants, but short-term password protected
- Retains continued use national data archives
- In process to develop visualization tools
- Data migrate to long-term archive

& DESIGN

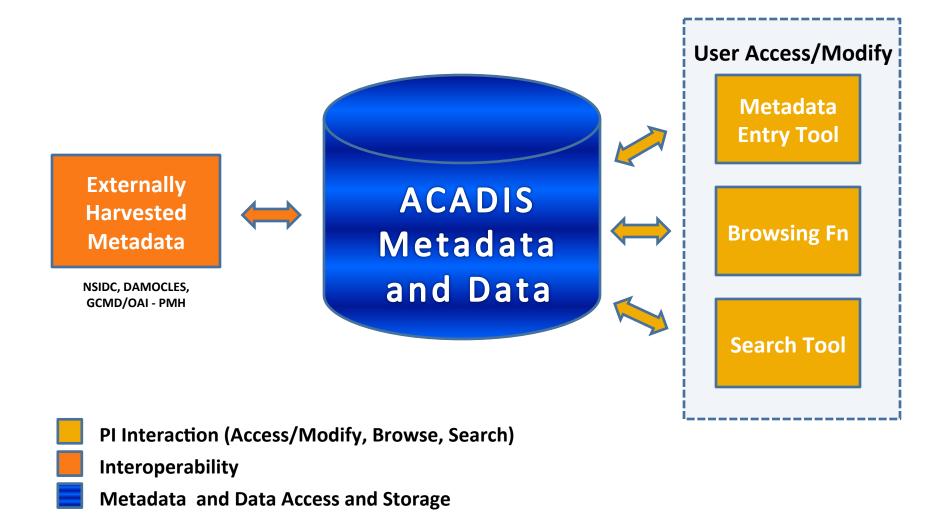


DBO Data Management Considerations (as part of UCAR/EOL/ACADIS-AON effort)

- Develop an International DBO data policy and exchange protocol (including priority measurements) to facilitate:
 - Dataset exchange and access
 - Preparation of datasets for data integration, inter-comparison and modeling studies
- □ Encourage broad access to data and metadata beyond national restrictions through scientific collaboration/cooperation
- ☐ Coordinate with other National and International Projects
- □ Consider data format and documentation guidelines to enhance international data exchange and analysis
- □ Document and standardize (if possible) data collection protocols (time, sensors, processing, parameters, units)

ACADIS Gateway Access and Flow

http://aoncadis.ucar.edu



Data Issues

- For DBO, set up web-based data submission at AOOS DBO Workspace; password protected for immediate use by all DBO participants for working space data comparison, migrate to open archive with PI approval; draft data policy
- In US, also setting up ACADIS/Earth Observing Lab, Boulder, Colorado NSF DBO project; archived data open to public anywhere; links to national sites for specific DBO data for observational analyses
- Should PAG consider develop inventory location of data archive sites for PAG activities? Possibly inventory metadata for PAG projects?
- Should PAG again review IASC data policy and agree, in principle, to follow recommended policy? Vote at fall meeting?

Data Issues (cont)

- Does PAG need a subgroup on standard data measurements, protocols or leverage activities of DBO participants
 - Note that DBO having these discussions, developing data policy
 - PAG decide if adopt IASC recommendation data and DBO data policy-finalize fall 2014 USA PAG and DBO meetings
 - Jackie has agreed to work with Lis Jørgensen (Institute of Marine Research/IMR in Tromsø) on standard protocols for both PAG DBO and a planned Norwegian DBO-like effort in the northern Barents Sea; Jackie G agreed to be on SI-Norway advisory committee at IMR