PAG Project Development, Data Plans, and Future

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PAG defines the "**Pacific sector**"* of the Arctic as the marine area from the Northern Bering Sea into the Chukchi Sea and adjacent Seas, and extending into the deep basins of the Arctic Ocean, with model boundaries from Aleutian Island and deep Bering Sea northward to Arctic Basin

2010 DBO International Pilot Project (edit)

DBO 2010 Data Parameter Matrix (SE Chukchi Sea-SECS) and Barrow Canyon (BC)											
Cruise (DBO PI Lead)	Period	CTD*	Chl- extracts	Nutrients	Algae- Ice/Phyto- plankton: size, biomass, composition	Zooplankton: size, biomass, composition	Benthos: size, biomass, composition	Seabird surveys	Marine Mammal surveys		
	June-July (both)	x	x	x	x			x			
Sir Wilfrid Laurier (Vagle)	July (both)	х	х	x		х	×	х			
Moana Wave (Grebmeier)	July-Aug (both**)	X**	x	x	х	х	×	х	x		
Xuelong (He)	July-Aug	х	x	х	х	Х	X***				
Annika Marie (Ashjian)	August (BC)	x	x	x	Lugols samples for microplankton	X		x	x		
Alaskan Enterprise (Napp/CHAOZ)	Aug-Sept (BC)	х				х			x		
Khromov (Woodgate) (RUSALCA CS line)	Aug (SECS)	x	х	х	x	х			×		
Healy 1003 (Pickart)	Sept (BC)	х		х				x	х		
Mirai (Itoh)	Oct (BC)	Х	×	×		x (hotspot)					
Sum data sets		9	7	8	4	7	3	4	4		
 *=T, S, plus some cruises transmissivity, fluorescence (chlorophyll), CDOM, dissolved oxygen, pH **=all water column, plankton and benthic data at "hotspot" sites both areas, plus nearshore stn SECS line; seabird/marine mammal ***=3 stations per transect 											

ACTION ITEMS: Lessons Learned from 2010 and Ways Forward

- 1. Success transfer hydrographic data from one Chief Scientist to next in DBO time field Need designate group to analyze, publish, and present these results; also need coordinate biological measurement component; names:_____
- 2. Continue develop DBO on shelf and shelf-basin exchange at latitudinal hotspot and transect sites, use international ship/science collaboration: Grebmeier, Pickart, Chief Scientists?_____
- 3. Discuss need for deep Canada Basin observatory (CBO) to track ongoing dramatic sea ice retreat, hydrography, freshwater loading, biochemical and biological response, need lead person or group people: Koji Shimada et al. (coordinate)
- 4. Suggestion: Need physical, biochemical and biological international data synthesis activities leading to presentations and publications at:
 - 1. March 27 PAG/MWG-AOSB workshop, Seoul, Korea-provide interim report
 - 2. March 28 PAG/MWG-AOSB joint meeting, Seoul, Korea: updates on DBO and other plans 2011, status DBO data analyses, including publication plans
 - 3. March 29-31 ASSW2011 Science symposium: submit abstracts for DBO data presentations on focused DBO results: all components
- 5. Each country send Gillian names/contact information for people in country working with data sets to initiate joint synthesis activities (item #4 above)

DBO 2011 International DBO Project: Ship Plans

Dates (2011) /Port calls	Ship	Project	PAG contact	Chief Scientist					
July 15 (Dutch Harbor),- Aug	USCGC Healy	ICESCAPE (NASA)	Robert Pickart rpickart@whoi.edu	Kevin Arrigo <kevin.arrigo@healy.polarscience.net ></kevin.arrigo@healy.polarscience.net 					
July	Sir Wilfrid Laurier: DBO: SECS & BC	C30	Robert Fudge						
July –August (Dutch Harbor)	RV Araron (DBO-SECS)	Korean Expedition	TBD	Kyung Ho Chung (KOPRI)					
August -Sept	TBD: DBO-BC	Chukchi Acoustics, Oceanography, and Zooplankton Study (CHAOZ) (NOAA)	Jeff Napp/Sue Moore						
August	Khromov: DBO-SECS	RUSALCA	Kathy Crane						
August	Annika Marie:DBO-BC		Carin Ashjian	Carin Ashjian <cashjian@woi.edu></cashjian@woi.edu>					
September	Healy; DBO- BC		Robert Pickart	Robert Pickart rpickart@whoi.edu					

2012: Araron, Khromov, Xuelong

2013: Mirai

2014: Xuelong