

TITLE: Readme File - "**PacMARS Bottom water temperature and salinity (2000-2012)_CBL_README.doc**"

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ORIGINAL AWARD TITLE: Pacific Marine Arctic Regional Synthesis (PacMARS)

DATA ARCHIVE: PacMARS EOL data archive <http://pacmars.eol.ucar.edu>

DATASET OVERVIEW:

Extracted summary bottom water data from CTD casts conducted in the northern Bering, Chukchi, and southern Beaufort Seas from 2000-2012. One record per cast. Each data point is associated with a cruise identification, station number, station name, date and year of collection, latitude, longitude, station depth, bottom water temperature and salinity. These data are from the period 2000-2012 and from the northern Bering Sea, Chukchi Sea, and southern Beaufort Sea (between latitudes 63°N and 74°N). The list of cruises is provided in Table 1 at the end of this README file.

INSTRUMENT DESCRIPTION:

All samples were collected with a calibrated Seabird CTD sensor or equivalent sensor system.

DATA COLLECTION AND PROCESSING

For many, if not most casts, the bottom sample is from the deepest value acquired a few meters above the bottom.

DATA FORMAT

Data File Structure:

File Names (Formats): "**PacMARS Bottom water temperature and salinity (2000-2012)_CBL.xls**"

Data Parameters

- CruiseID=Cruise number or other identifier (e.g. HLY0601 (HLY: "Healy", USCG Icebreaker WAGB-20; 06: year, 2006; xx: cruise number for the ship for that year); see list of cruise acronyms in the caption for Table 1.
- StationNum= equals station number from beginning to end of cruise
StationNme=Station Name – based on transect name, see cruise reports
- DataDate=yyyymmdd
- DataYear=year of collection
- Latitude=in decimal degrees
- Longitude=in decimal degrees
- Depth=meters
- Temp=Celsius

- Salinity=psu

Data Version Number and Date: Version 1, 12/31/14

REFERENCES (see citations in Table 1 below)

Table 1. Research cruises by year, month, ship, cruise title, region, and associated references/data archives for benthic macrofaunal and coincident environmental data used for associated maps produced in the northern Bering and Chukchi Seas for the SOAR benthic synthesis. Abbreviations: BEST=Bering Sea Ecosystem Study, BSEO=Bering Strait Environmental Observatory, BS=Beaufort Sea, CCGS=Canadian Coast Guard Ship, CS=Chukchi Sea, CSESP=Chukchi Sea Environmental Studies Program, ESS=East Siberian Sea, HLY=Healy, MV=Marine Vessel, NBS=Northern Bering Sea, PacMARS=Pacific Marine Arctic Regional Synthesis, PSea=Polar Sea, RUSALCA=Russian-American Long-term Census of Marine Life project, SBI=Shelf-Basin Interactions, SLIPP=St. Lawrence Island Polynya Project, SWL=Sir Wilfrid Laurier; USCGC=US Coast Guard Cutter, , RV=Research Vessel, WWW=RV Westward Wind. Weblinks to data archives listed in table: ¹CITAO, Chemical and Isotopic Tracers from the Arctic Ocean, <http://data.eol.ucar.edu/codiac/dss/id=106.ARCSS079>; ²PacMARS, <http://pacmars.eol.ucar.edu>; ³SBI, <http://www.eol.ucar.edu/projects/sbi/>; ⁴BEST, <https://www.eol.ucar.edu/projects/best/>; ⁵CSESP, <http://www.fairweatherscience.com>; ⁶COMIDA CAB, <http://www.comidacab.org/>; ⁷COMIDA Hanna Shoal (HS), <http://www.comidacab.org/hannashoal/index.html>.

Year	Month	Ship	Cruise Title	Region	References/Data archives
2000	July	CCGS SWL 2000	SWL2000= BSEO-2000	NBS, CS, BS	Grebmeier and Barry, 2007; Grebmeier et al., 2006a; ¹ CITAO, ² PacMARS
2001	March- April	USCGC Polar Star	Polar Star01= SLIPP-2001	NBS	Simpkins et al., 2003; ² PacMARS
2001	July	CCGS SWL	SWL2001= BSEO-2001	NBS, CS	Grebmeier and Barry, 2007; Grebmeier et al., 2006a; ² PacMARS
2002	May-June	USCGC HLY	HLY0201= SBI spring	CS, BS	Cooper et al., 2005b; Grebmeier et al., 2006a; Grebmeier and Barry 2007; ³ SBI
2002	July-Aug.	USCGC HLY CCGS SWL	HLY0203= SBI summer SWL 2002 =BSEO-2002	CS, BS	Cooper et al. 2005b, Grebmeier and Barry 2007; Grebmeier et al., 2006a; ² PacMARS, ³ SBI
2003	July	CCGS SWL	SWL 2003 =BSEO-03	NBS, CS	Grebmeier and Barry, 2007; Grebmeier et al., 2006a; ² PacMARS
2004	May-June July July-Aug August	USCGC HLY CCGS SWL USCGC HLY RV Khromov	HLY0402 =SBI spring SWL 2004 =BSEO-04 HLY0403 =SBI summer RUSALCA04	CS, BS, NBS, CS CS, BS CS	Grebmeier and Barry 2007; Grebmeier et al. 2006a; ³ SBI ² PacMARS ² PacMARS; ³ SBI, ² PacMARS
2005	July	CCGS SWL	SWL2005	NBS, CS	² PacMARS
2006	May-June July	USCGC Healy CCGS SWL	HLY0601 SWL2006	CS NBS, CS	Cooper et al., 2012; ⁴ BEST ² PacMARS
2007	May-June July	UCCGC HLY CCGS SWL	HLY0702 SWL2007	NBS NBS, CS	Cooper et al., 2012; ⁴ BEST ² PacMARS

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Year	Month	Ship	Cruise Title	Region	References/Data archives
2008	Mar-April	USCGC HLY	HLY0801	NBS	Cooper et al., 2013; Grebmeier, 2012; ² PacMARS, ⁴ BEST
	July	CCGS SWL	SWL2008	NBS, CS	² PacMARS
	Aug-Sept	RV Norseman II	SHELL08	CS	⁵ CESP
2009	Mar-April	USCGC Healy	HLY0901	NBS, CS	Cooper et al. 2013; Grebmeier, 2012; ³ BEST and ² PacMARS
	Aug-Sept	RV Alpha Helix	COMIDA09	CS	⁶ COMIDA CAB
	Aug-Sept	RV Khromov	RUSALCA09	CS, ESS	Grebmeier 2012; ² PacMARS
	Aug-Sept	RV Westward Wind	CESP09	CS	⁵ CESP, Blanchard et al. 2013a
2010	Mar-April	USCGC Polar Sea	PSea2010	NBS	Cooper et al. 2013; Grebmeier, 2012; ² PacMARS, ³ BEST,
	July	CCGS SWL	SWL10	NBS, CS	⁶ COMIDA CAB
	Aug-Sept	RV Moana Wave	COMIDA10	CS	⁵ CESP, Blanchard et al. 2013a
	Aug-Sept	RV Westward Wind	CESP10	CS	
2011	July	CCGS SWL	SWL11	NBS, CS	Grebmeier, 2012; ² PacMARS
	Aug-Sept	RV Westward Wind	CESP11	CESP11	⁵ CESP
2012	July	CCGS SWL	SWL12	NBS, CS	Grebmeier 2012; ¹ PacMARS
	Aug-Sept	HLY1201	COMIDA-HS	CS	⁷ COMIDA HS
	Aug	RV Westward Wind	CESP12	CS	⁵ CESP; ² PacMARS