USA Country Report

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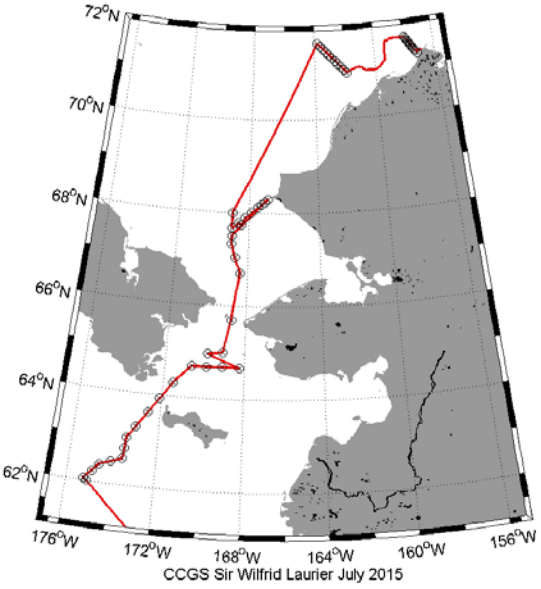
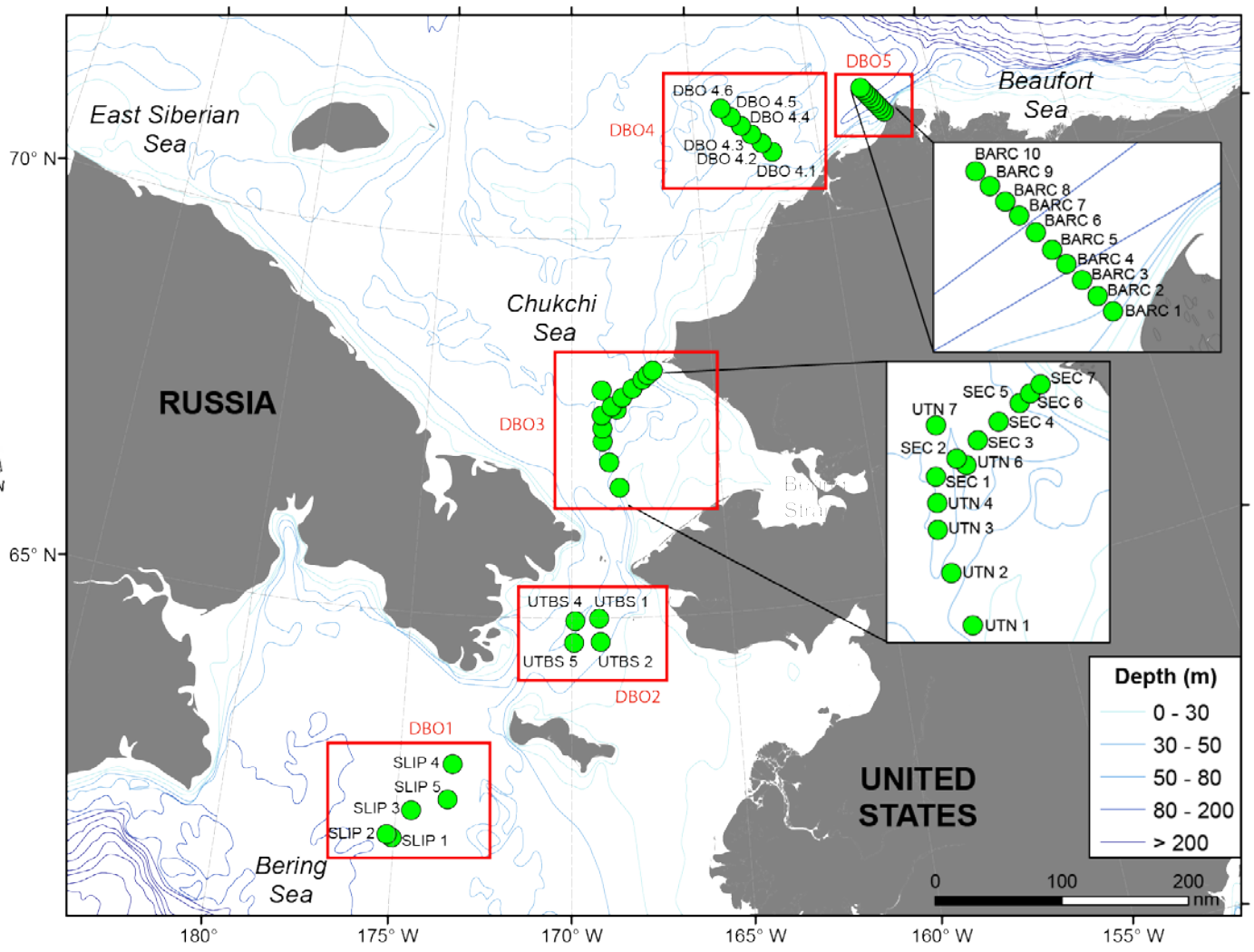
October 28-29, 2015
Incheon, Republi of Korea

2015 PAG and DBO Field Season: Sampling Contributors. Projects Key: AON=US Arctic Observing Network; ARCWEST=Arctic Whale Ecology Study; C30=Canada's Three Oceans; JAMSTEC= Japan Agency for Marine-Earth Science and Technology; KOPRI = Korea Polar Research Institute. DBO Region Key: DBO1=So. St. Lawrence Is., DBO2=Chirikov Basin, DBO3=So Chukchi Sea, DBO4=NE Chukchi Sea, DBO5=Barrow Canyon, DBO6=East Beaufort Sea, DBO7-Central Beaufort Sea, DBO8=Bathurst Polynya region

Dates (Port calls)	Ship	DBO Region	Projects	PAG contact	Chief Scientist
July 2-8 (Nome-Nome)	Norseman II	3	Bering Strait Mooring Project/AON	Rebecca Woodgate woodgate@apl.washington.edu	Rebecca Woodgate woodgate@apl.washington.edu
July 11-22 (Nome-Nome)	Norseman II	2,3,4	USGS	Jackie Grebmeier jgrebmei@umces.edu	Chad Jay cjay@uscg.gov
July 4-25 (Victoria, BC-Barrow)	Sir Wilfrid Laurier	1,2,3,4,5	C30/DBO	Jackie Grebmeier jgrebmei@umces.edu	Svein Vagle Svein.Vagle@dfo-mpo.gc.ca
July 27-14 Aug	Fairweather	2, 3	CTD sampling	Sue Moore sue.moore@noaa.gov	Noaa.Ship.Fairweather@noaa.gov
July 30-Aug 5 (Prudhoe-Prudhoe)	Norseman II	DBO6,7	ANIMIDA	Jackie Grebmeier jgrebmei@umces.edu	Jeremy Kasper jkasper@alaska.edu
August-Sept (Dutch-Barrow)	Healy	-	GEOTRACES	Jackie Grebmeier jgrebmei@umces.edu	David Kadko dkadko@fiu.edu
Aug 6-Sept 2	Araon	3	Korean Expedition (KOPRI)	Sung-Ho Khang shkang@kopri.re.kr	Eun Jin Yang ejyang@kopri.re.kr
Aug 9-Sept 2 (Prudhoe-Wainwright)	Norseman II	3, 4	AMBON	Jackie Grebmeier jgrebmei@umces.edu	Katrin Iken Iken@alaska.edu
Aug 18-Sept 7 (Barrow-Barrow)	Annika Marie	5	AON	Carin Ashjian cashjian@whoi.edu	Carin Ashjian cashjian@whoi.edu
Aug 6-Sept 4 (Kodiak-Dutch Harbor)	Brown	3,4,5	NOAA/PMEL	Phyllis Stabeno Phyllis.Stabeno@noaa.gov	Nancy Kachel Nancy.Kachel@noaa.gov
Aug 25-Oct 6 (Hachinohe, Japan-Dutch Harbor)	Mirai	3,5	JAMSTEC; DBO moorings 3 and 5	Takashi Kikuchi takashik@jamstec.go.jp	Shigeto Nishino nishinos@jamstec.go.jp
6-24 Sep (Nome-Dutch Harbor)	Aquila	3, 4, 5	ARC West/CHAOZ-X	Phyllis Stabeno Phyllis.Stabeno@noaa.gov	Catherine Berchok Catherine.Berchok@noaa.gov
mid-October (Anadyr-Anadyr)	Viktor Buynitsky	3	RUSALCA Bering Strait mooring	Kathy Crane Kathy.Crane@noaa.gov Phyllis.Stabeno@noaa.gov	Kathy.Crane@noaa.gov
Sept 4-12 (Wainwright-Wainwright)	Norseman II	4	Winsor gliders	Jackie Grebmeier jgrebmei@umces.edu	Peter Winsor pwinsor@alaska.edu
Sept-Oct	Louis S St-Laurent	-	JOIS	Bill Williams Bill.Williams@dfo-mpo.gc.ca	Bill Williams Bill.Williams@dfo-mpo.gc.ca
Sept-Oct	Sir Wilfrid Laurier	4, 8	C30/DBO	Bill Williams Bill.Williams@dfo-mpo.gc.ca	Humfrey Melling Humfrey.Melling@dfo-mpo.gc.ca
Oct	USCG ship	-	MARES	Robert Pickart rpickart@whoi.edu	Robert Pickart rpickart@whoi.edu

Canada' Three Oceans (C30) and the Distributed Biological Observatory (DBO)

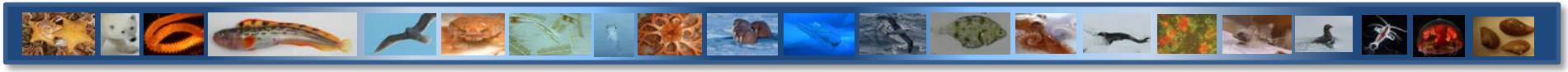




AMBON – a US Arctic Marine Biodiversity Observing Network

Iken K[1], Bluhm BA[1,2], Collins RE[1], Cooper LW[3], Danielson S[1], Grebmeier JM[3], Hopcroft R[1], Kuletz K[4], Mueter F[1], Moore SE[5], Stafford K[6], Bochenek R[7]

(1) University of Alaska Fairbanks; (2) University of Tromsø, Norway; (3) University of Maryland Center for Environmental Science; (4) US Fish and Wildlife Service; (5) National Oceanographic and Atmospheric Administration; (6) University of Washington; (7) Alaska Ocean Observing System/AXIOM, USA

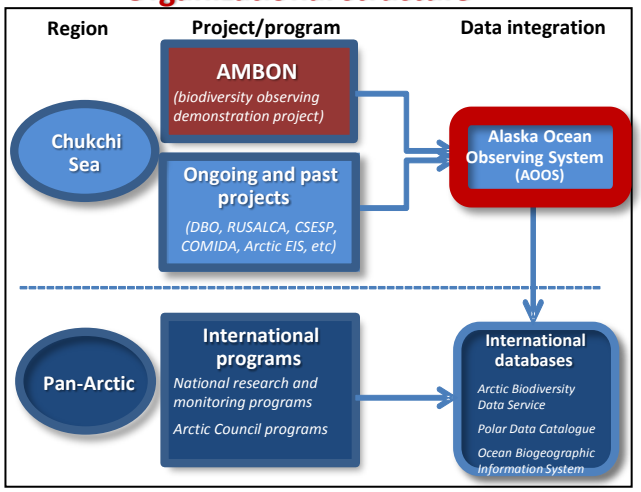


What is AMBON?

Marine biodiversity is a key component of ocean health. Monitoring and understanding marine biodiversity is essential for our ability to forecast and respond to changes . The goal of the new Arctic Marine Biodiversity Observing Network (AMBON) project is to demonstrate and build an operational marine biodiversity observing network from microbes to whales, integrating diversity levels from genetic to organismal. AMBON field region is located on the Chukchi Sea continental shelf in the US Arctic as a region exposed to climatic changes and anthropogenic influences. AMBON has four main goals:

1. To close current gaps in taxonomic and spatial coverage in biodiversity observations on the Chukchi shelf.
2. To integrate and synthesize past and ongoing research programs on the US Arctic shelf into an Arctic biodiversity observation network with publicly accessible data.
3. To demonstrate how a sustainable observing network could be developed for this and other regions and ecosystems.
4. To link with international programs on the pan-Arctic to global level.

Organizational structure



What do we measure?

Environment

Hydrography (synoptic measurements , link to long-term moorings)

Chlorophyll *a* (water column, sediment)

Nutrients (nitrate, ammonia, silicate, phosphate)

Sediment (grain size, organic content)

Biodiversity

Microbes – genetic analysis of water column and sediment microbes

Phytoplankton – species composition

Zooplankton – taxonomic analysis of all zooplankton groups

Benthos – species identifications of infauna and epifauna and genetic identification of meiofauna

Fish – demersal fish diversity

Seabirds – observational data on all seabirds

Marine mammals – observational data on seals and whales

AMBON funding partners

NOAA BOEM Bureau of Ocean Energy Management

http://ambon-us.org/

AMBON 2015 field surveys

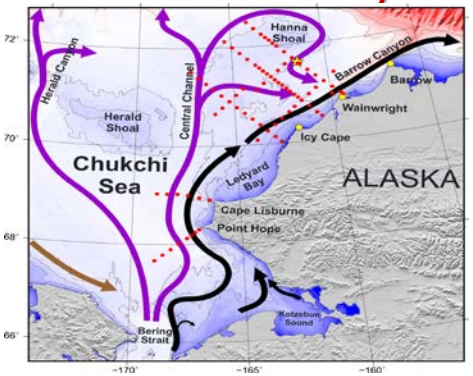


Fig. 1: Map of the study region, incl. major water mass distribution.

AMBON is a 5-year project with field work in years 2015-2017. The first year of field work was successfully completed during August 2015 (Fig. 1). Preliminary results show that areas in the northern study region with high chlorophyll deposition to the seafloor (Fig. 2a) coincide with regions of high benthic biomass (Fig. 2b) and abundance of benthic feeding marine mammals, predominantly walrus (Fig. 2c).

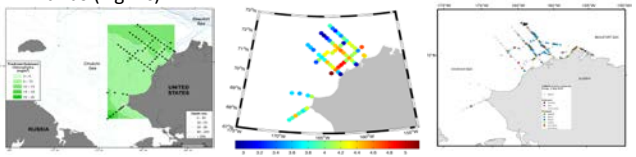


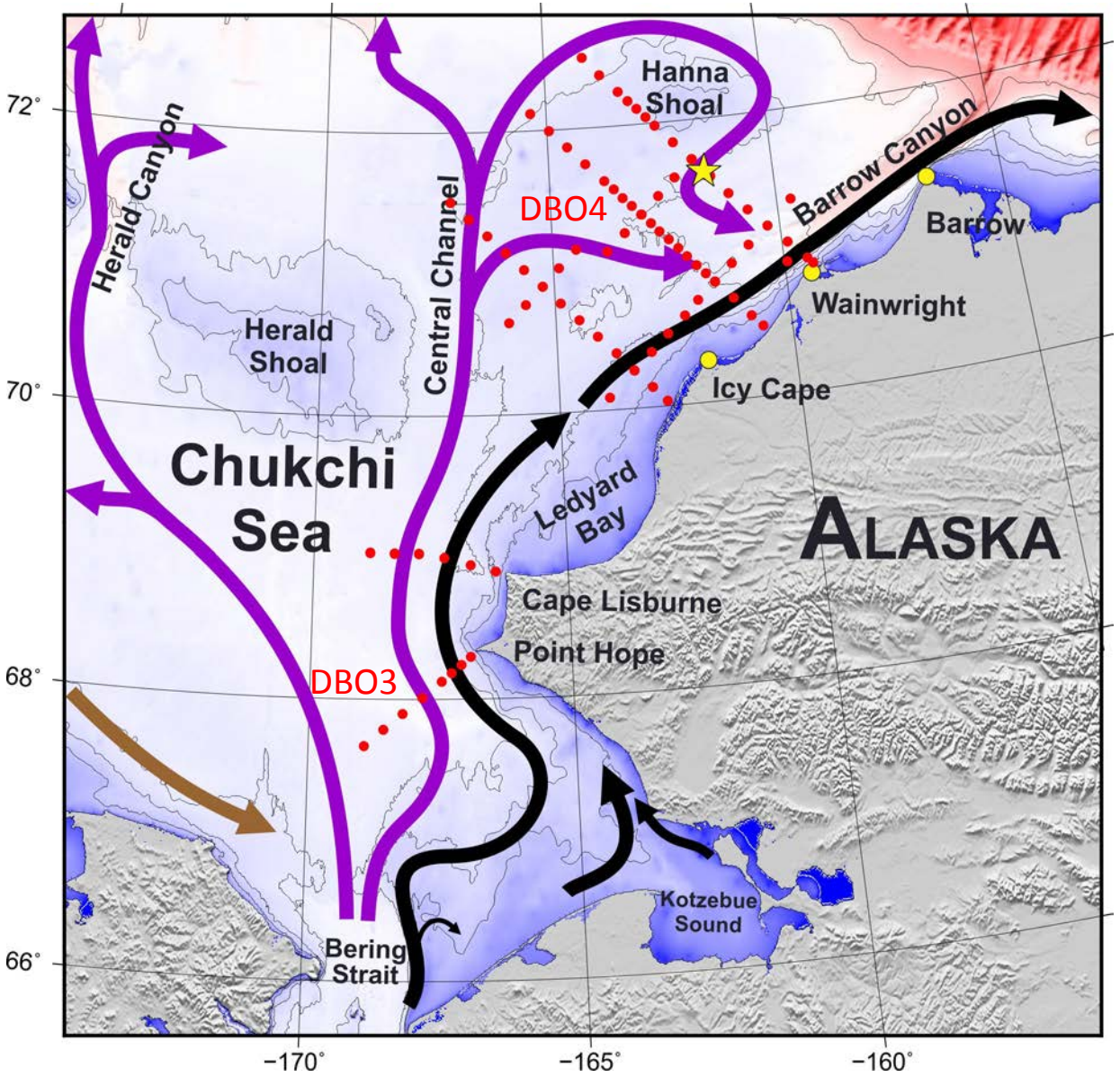
Fig. 2: High sediment chlorophyll (mg/m²) (a), epibenthic biomass (log_{10} g wet weight km²) (b), and sightings of marine mammals (c) coincide in the northern study region

Data management structure

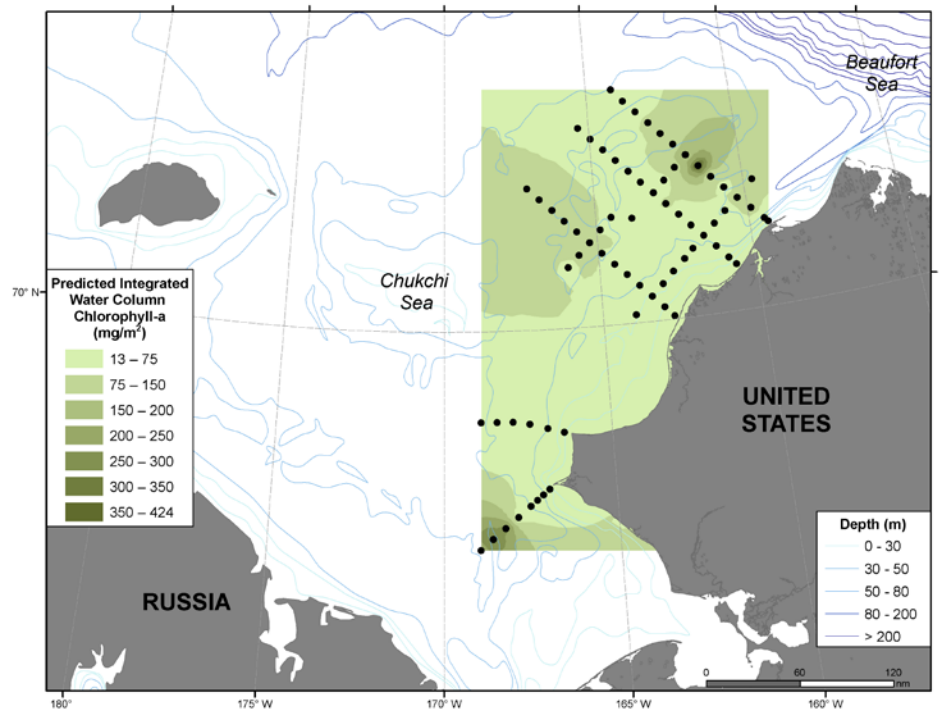
Data management through AOOS is an AMBON key component, providing essential compatible linkages to past and present programs and open data accessibility.

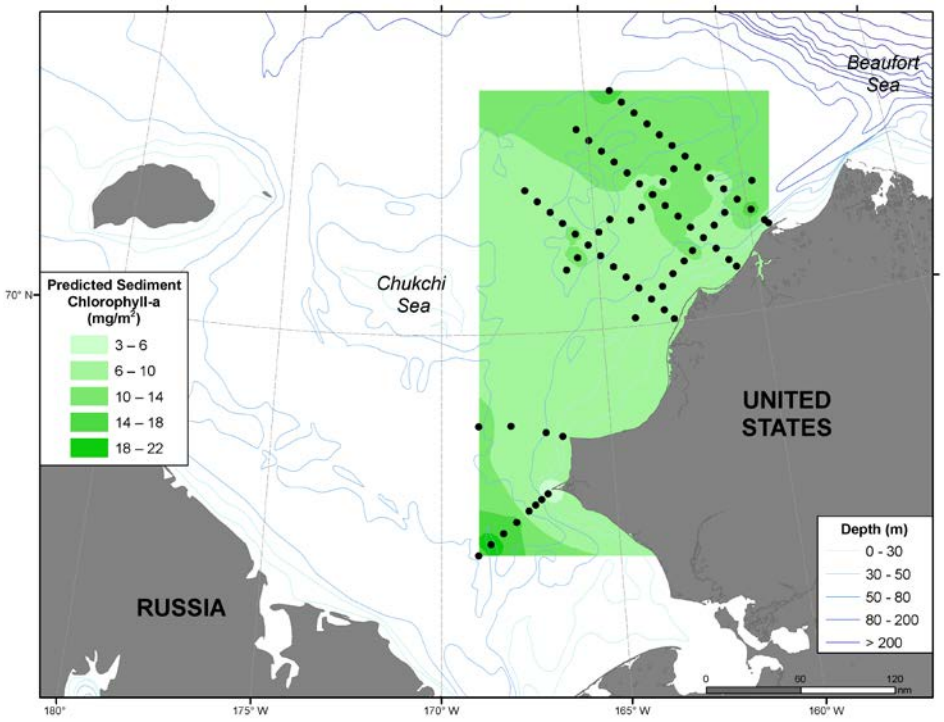
Data are archived and publicly available through the **Data Portal** on the AOOS website. The Data Portal can then be linked to other national and international data bases.

AMBON 2015 Cruise: August-September

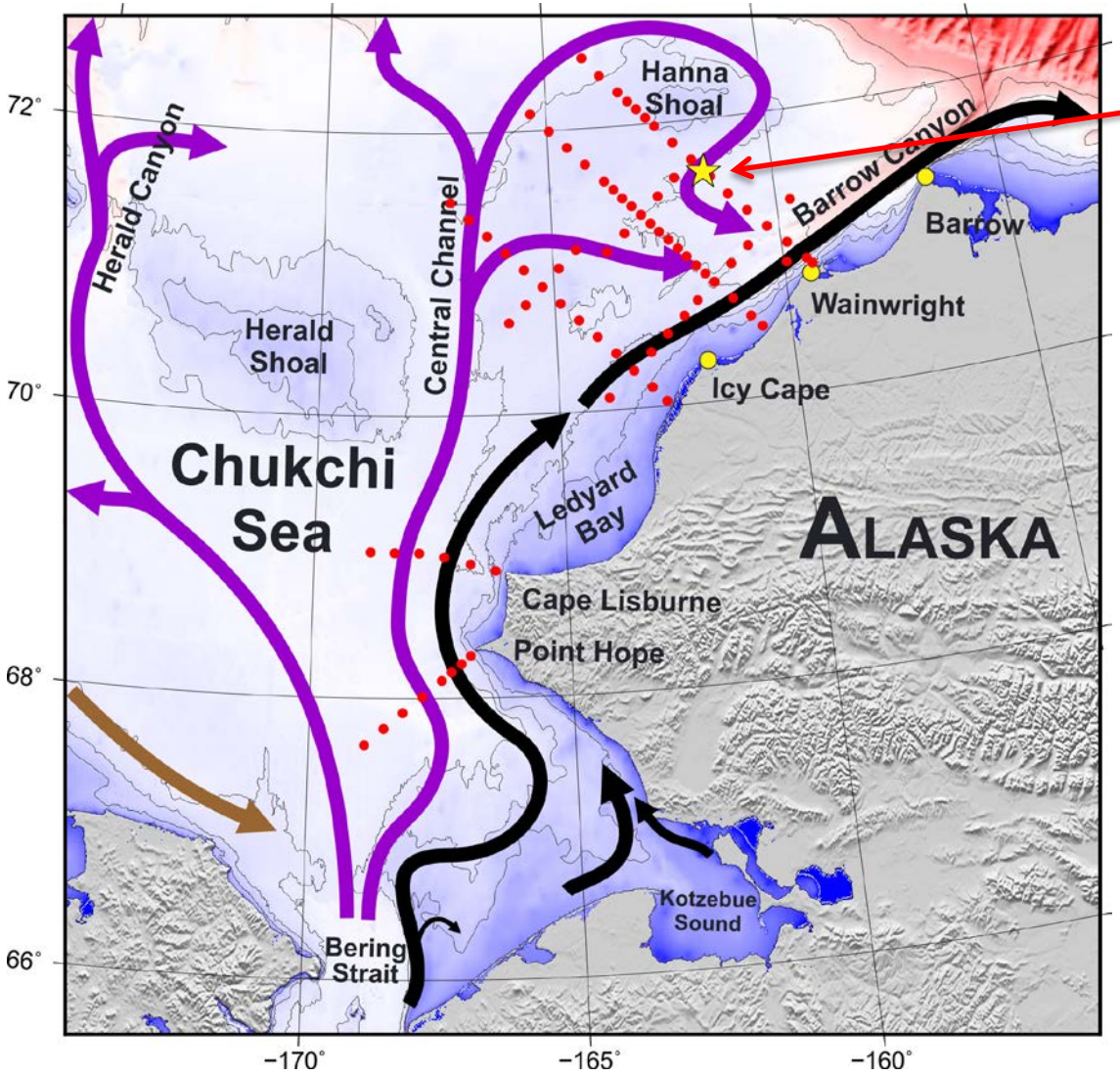


AMBON2015-Integrated water column chlorophyll a (left) and sediment chlorophyll a (right)





NE Chukchi Ecosystem Observatory



CEO Location

Red dots = AMBON stations

Consortium Partners

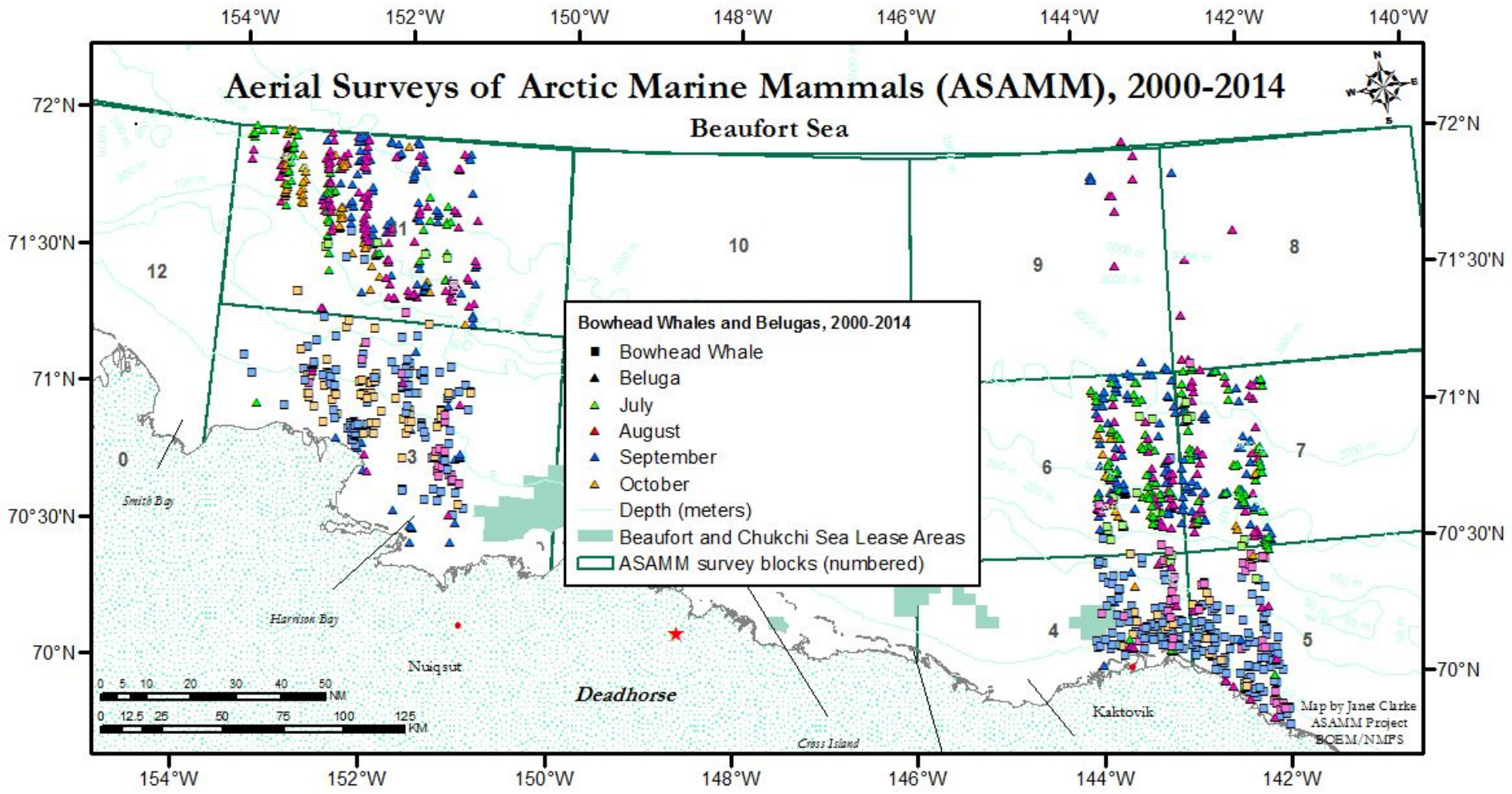
- AOOS
- NPRB
- Olgoonik-Fairweather
- U. Washington
- U. Laval
- U. Alaska Fairbanks

& cruise support from ARCTREX & AMBON

[Seth Danielson, UAF]

Open Data Policy. We encourage new partners to leverage & employ the ongoing measurements. Activities funded through 2019 recovery.

Aerial Surveys of Arctic Marine Mammals (NOAA)



CEO 2015-2016 Measurements:

- Pressure, Temperature, Salinity
- Significant Wave Height & Direction
- Directional Wave Spectra
- Ice Draft (level ice thickness & keels)
- Passive acoustic recordings
- Acoustic Backscatter: 38, 125, 200 & 455 KHz
- Chlorophyll a fluorescence
- Optical Backscatter, PAR
- CDOM, NO3, DO
- Webcam

- 24-bottle Sediment Trap:
  - Chlorophyll a
  - Phytoplankton identification
  - Total particulate matter (dry weight)
  - Particulate organic carbon
  - Particulate nitrogen
  - Zooplankton species
  - Zooplankton fecal pellets

2015 CEO Deployments

Mooring 1:
Physics &
Passive Acoustics

Waves ADCP
2 Microcats
AURAL
RCM-9

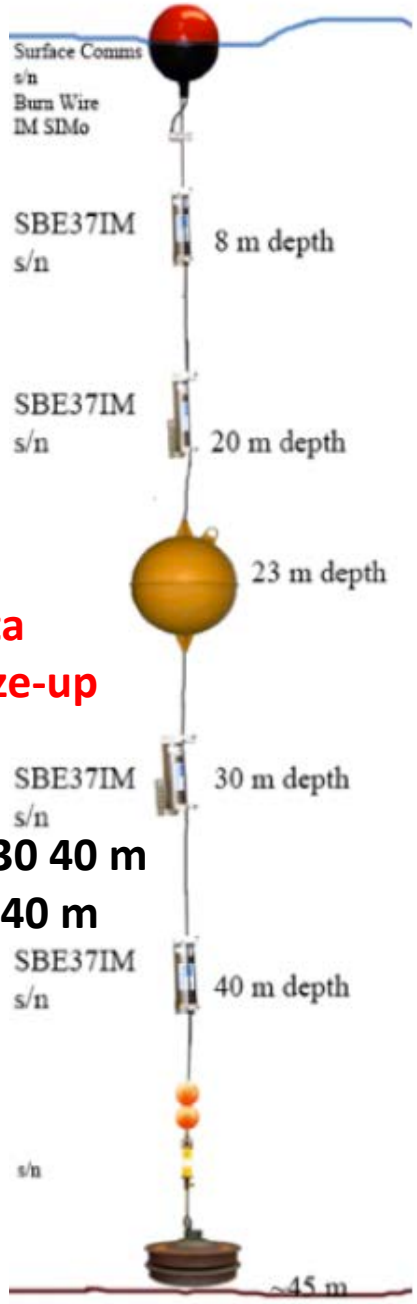
Mooring 2:
BioGeoChemical &
Active Acoustics

AZFP
SeaCat
SBE43
ECO-Triplett
SUNA V2
Sediment Trap

Mooring 3:
Ice Buoy

Real-time data
Through freeze-up

T @ 0, 8, 20, 30 40 m
S @ 8, 20, 30 40 m
Webcam



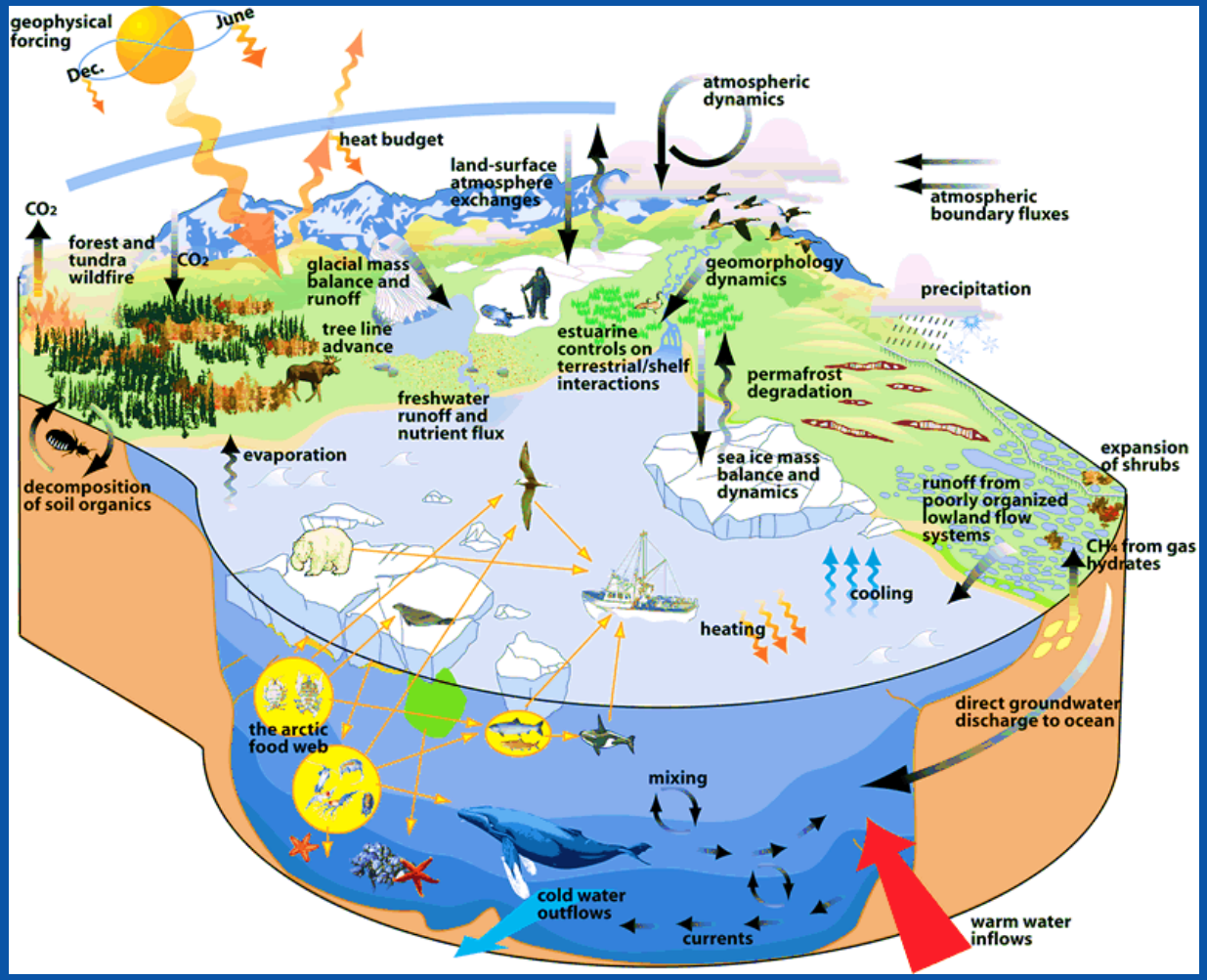
Marine Arctic Ecosystem Study (MARES)

Primary funding agency: Bureau of Ocean Energy and Management (BOEM)

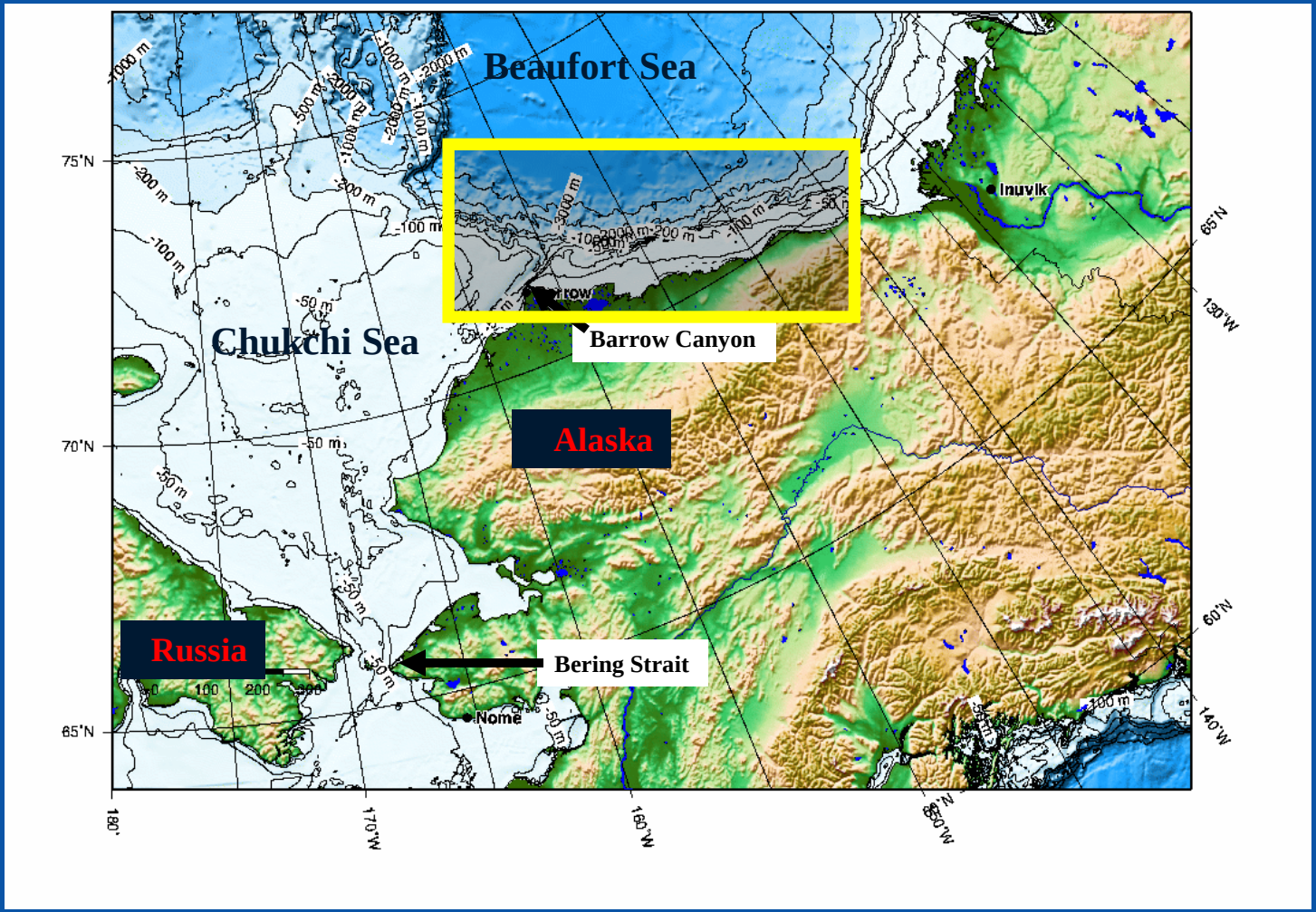
Contracted through : Stantec

Ecosystem Dynamics and Monitoring of the Beaufort Sea: An integrated-science approach

- Conceptual Framework and Scientific Priorities
- Physical Drivers
  - Ice/Atmosphere
  - Freshwater Inputs
- Physical Oceanography
- Chemical Oceanography
- Biological Oceanography and Benthos
- Fish and Trophic Linkages
- Marine Mammals
- Community-based monitoring
- Coupled Modeling

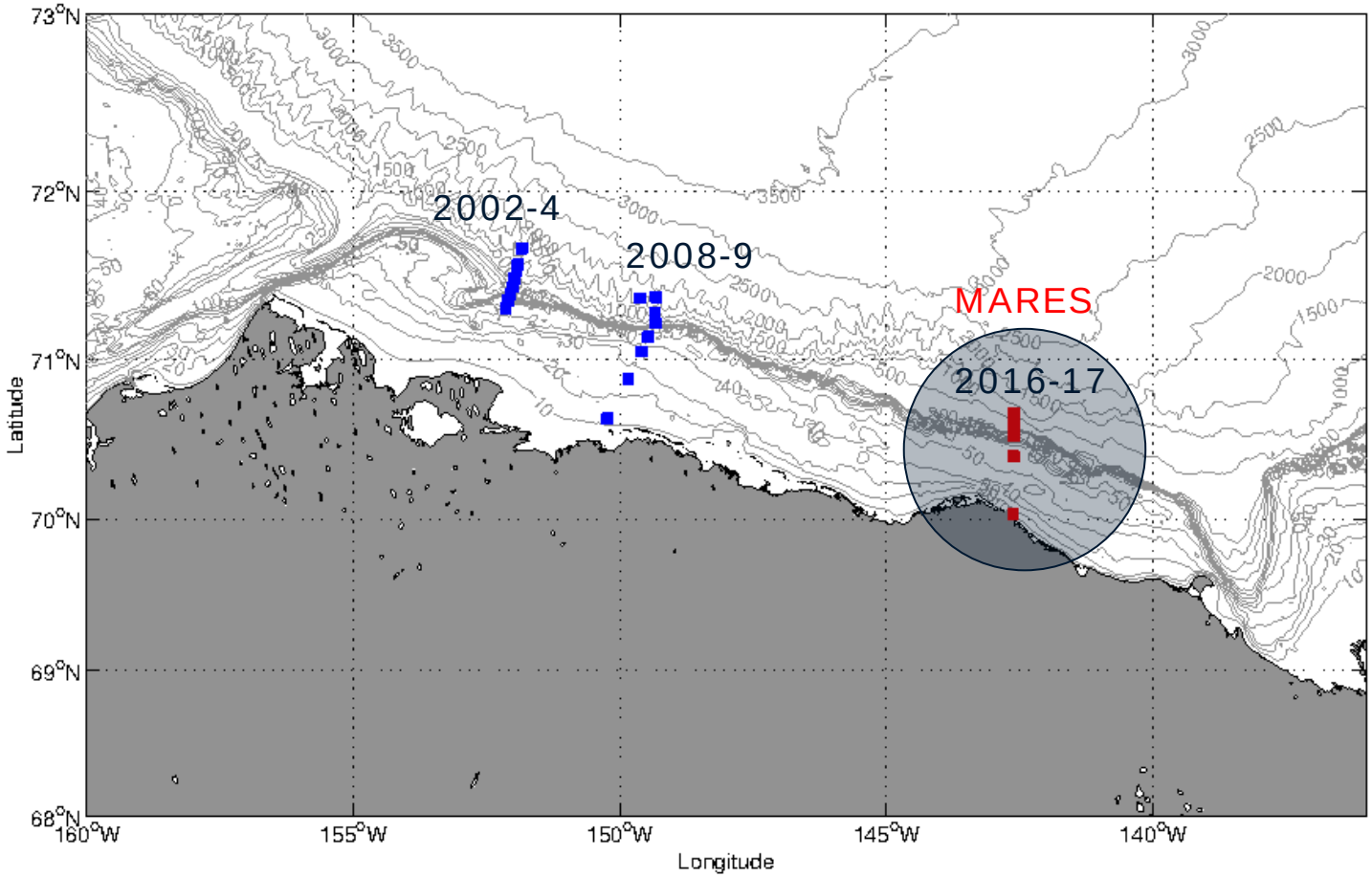


Geographical setting of MARES

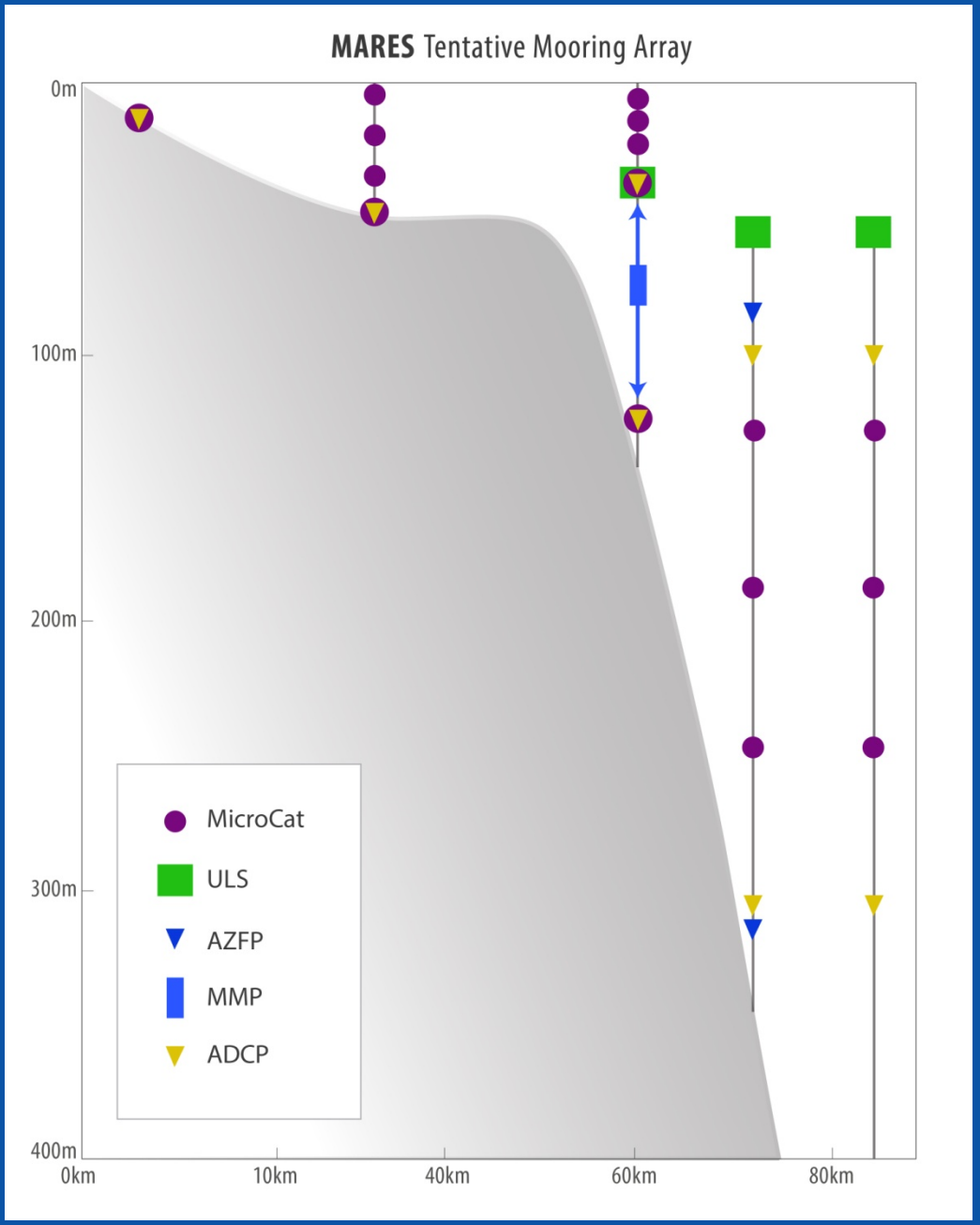


Mooring component of MARES

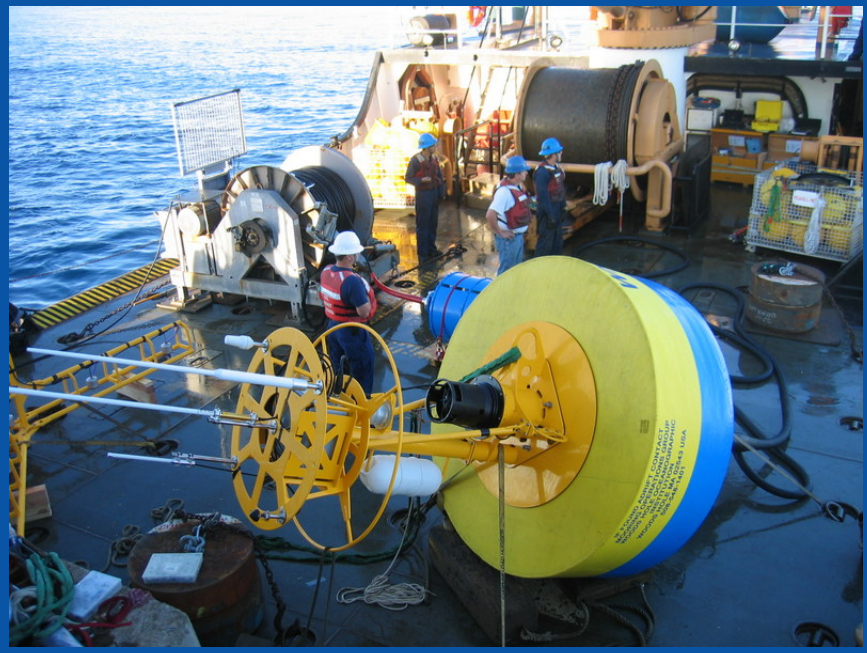
Mooring arrays across the Beaufort shelf/slope

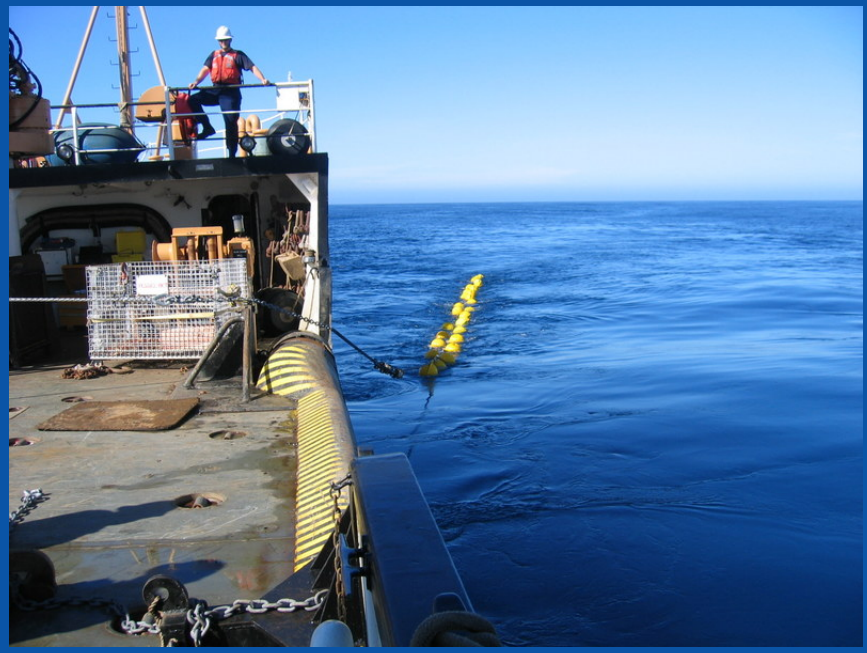


Cross-section view of the MARES array

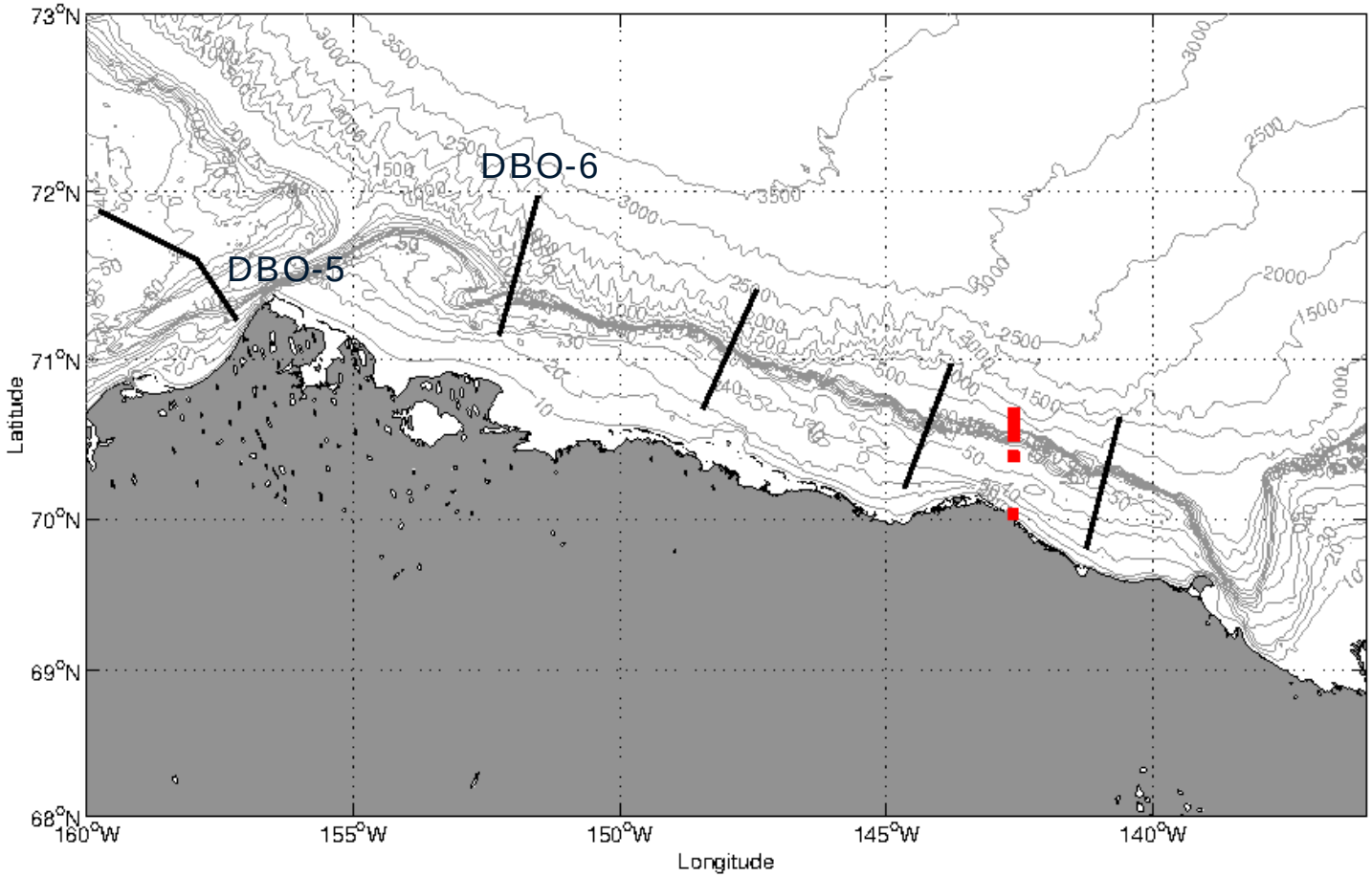


Mooring work to be done on a USCG buoy tender



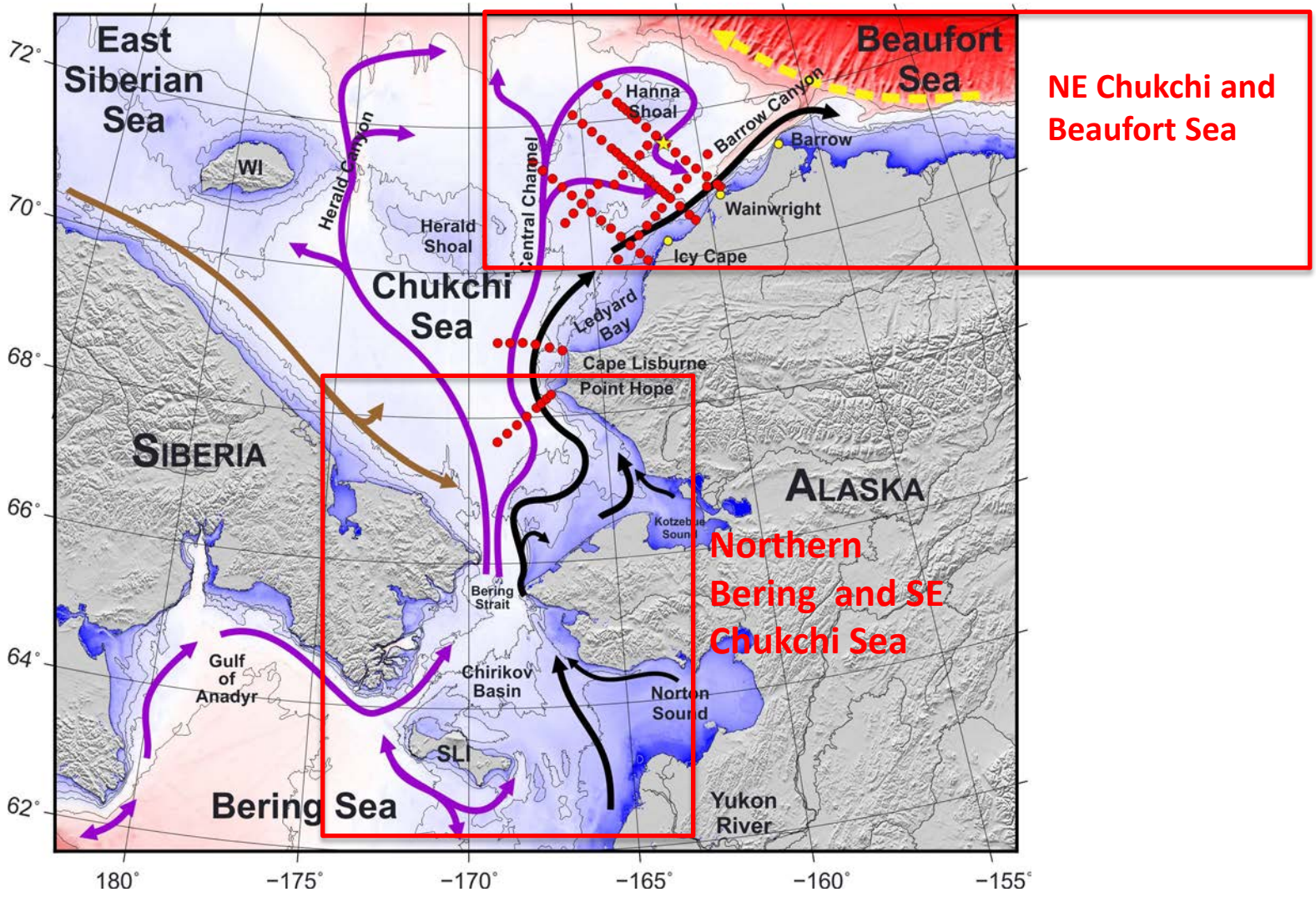


Possible biophysical survey in early-summer 2016 on *Healy*



Science access during subsistence whaling: April-May and Sept-Oct periods

-requires coastal community meetings starting fall prior to next year field season, contact AEWC, EWC, and new Waterways Committee; has input to US Clearance process

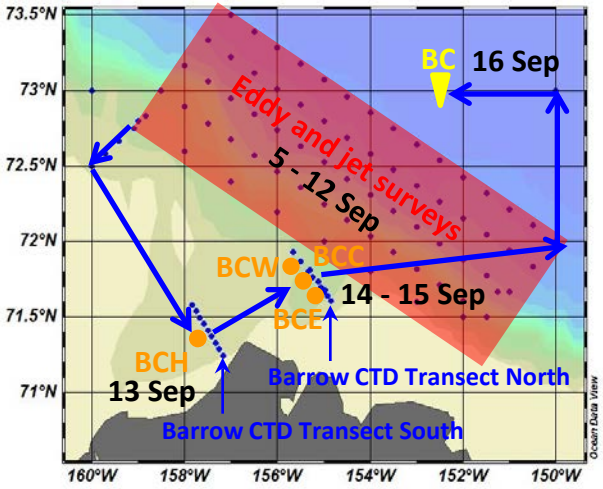


[modified from S. Danielsen map 2015]

R/V Mirai Arctic Ocean cruise in Sep.-Oct., 2015

- The Research Vessel Mirai (R/V Mirai) belonging to Japan Agency for Marine-Earth Science and Technology (JAMSTEC) will conduct hydrographic, marine biogeochemical, and meteorological surveys in the Arctic Ocean from early September to early October.
- The objective of this cruise is to quantify on-going changes in ocean, atmosphere, and ecosystem, which are related to the recent Arctic warming and sea ice reduction.
- The observational activities consist of CTD/XCTD/UCTD, turbulence ocean microstructure measurements, drifting buoy deployments, optical measurements, water samplings, plankton net samplings, ship-board ocean current and surface water monitorings, meteorological measurements and samplings, radiosondes, Doppler radar, sea bottom topography, gravity, and magnetic field measurements, and mooring and sediment trap recoveries & deployments.
- Estimated date when the R/V Mirai will arrive at the Barrow Canyon and work in the area is to be around 5-16 September.

The geographical area of the intended work in the Arctic Ocean. We will pass through the Bering Strait into the Arctic on 3 September and from the Arctic on 3 October. Numbers represent the order of cruise tracks. Planned points of stationary observations are represented by blue dots. A detailed survey area of ocean eddies and current jets is indicated by a red square. Locations of moorings and sediment traps are represented by orange circles and yellow triangles, respectively. The stations and cruise tracks are subject to change due to weather, sea ice, and other conditions.



Barrow CTD Transect South

sta. 001	71	34.70	N	157	50.30	W
sta. 002	71	32.20	N	157	45.20	W
sta. 003	71	29.80	N	157	40.10	W
sta. 004	71	27.30	N	157	35.00	W
sta. 005	71	24.80	N	157	29.90	W
sta. 006	71	22.30	N	157	24.90	W
sta. 007	71	19.80	N	157	19.90	W
sta. 008	71	17.30	N	157	14.90	W
sta. 009	71	14.80	N	157	9.90	W

Barrow CTD Transect North

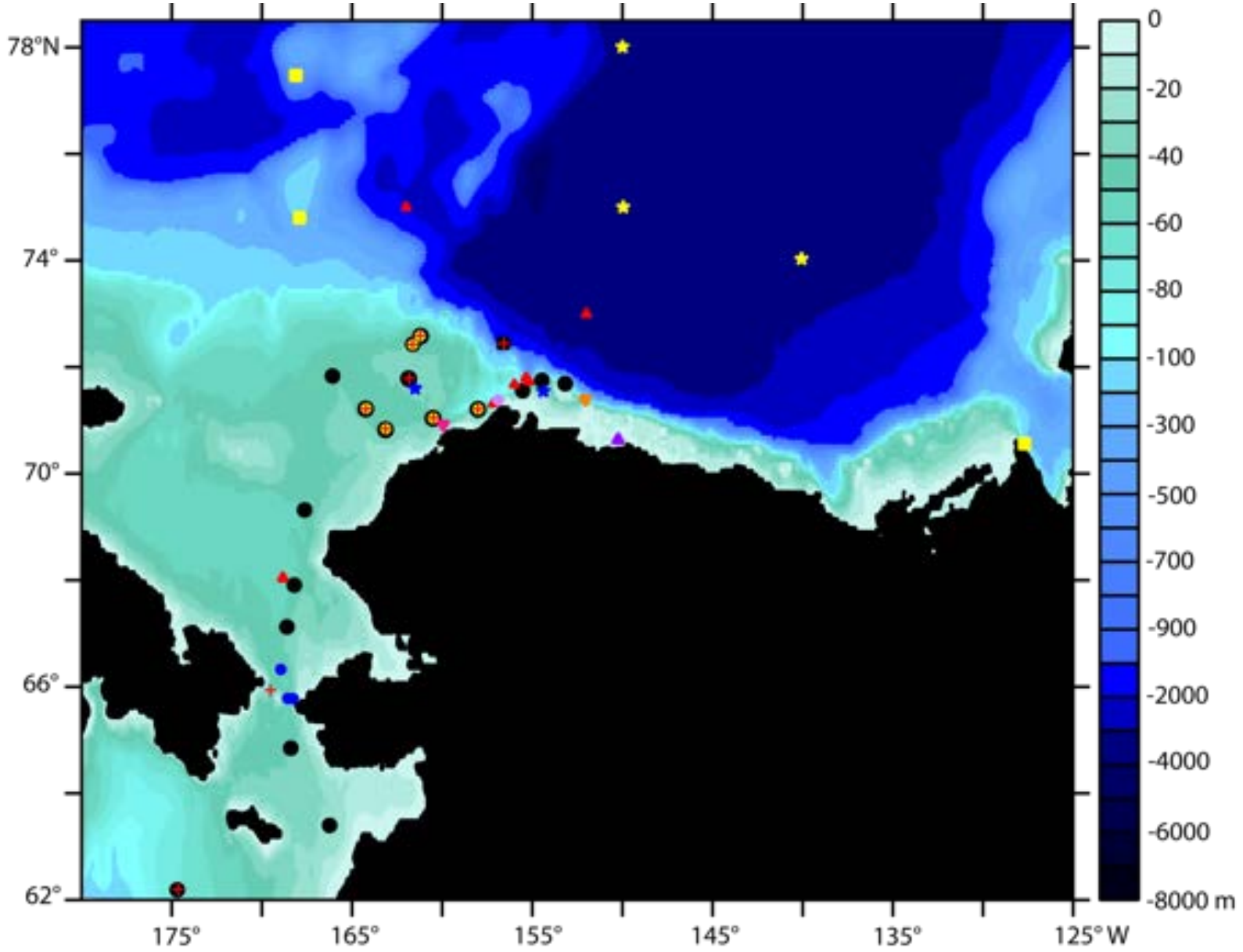
sta. 010	71	55.90	N	155	39.41	W
sta. 011	71	51.99	N	155	29.73	W
sta. 012	71	48.74	N	155	17.60	W
sta. 013	71	45.91	N	155	14.27	W
sta. 014	71	44.05	N	155	7.16	W
sta. 015	71	41.90	N	155	3.91	W
sta. 016	71	40.83	N	154	58.42	W
sta. 017	71	38.48	N	154	55.19	W
sta. 018	71	36.52	N	154	50.63	W

Barrow Canyon Moorings and Sediment Trap

BCH	71	20.00	N	157	40.00	W
BCE	71	40.00	N	155	0.00	W
BCC	71	44.00	N	155	7.00	W
BCW	71	48.00	N	155	20.00	W
BC	73	0.00	N	152	30.00	W

Map and tables of CTD (and XCTD/UCTD), moorings, and sediment trap locations around the Barrow Canyon

Moorings within and near DBO regions



Mooring Name	Latitude (°)	Latitude (min)	Longitude (°W)	Latitude (min)	Latitude	Longitude	Water Depth (m)	Height (m)	POC	Date Deployed	Expected Recovery	DBO Regions?	Equipment
BS14_AU_08b	*62*	*11.392*	*174*	*41.336*	*62.1899*	*174.6889*	*70*	*~10*	*Berchok*	*10/15/14*	*Sept. 2015*	*1*	*Passive accoustics*
ST14_AU_NS1	*63*	*23.987*	*166*	*14.443*	*63.3998*	*166.2407*	*24*	*~10*	*Berchok*	*10/14/14*	*Sept. 2015*	*none*	*Passive accoustics*
NSR-01	72	26.973	156	36.110	72.4496	156.6018	859	~10	Klinck	10/1/14	Sept. 2015	none	Passive accoustics
AW14_AU_WT1	71	2.235	160	30.364	71.0373	160.5061	50	~10	Berchok	10/10/14	Sept. 2015	4	Passive accoustics
CX14_AU_WT2	71	46.900	161	51.503	71.7817	161.8584	42	~10	Berchok	10/4/14	Sept. 2015	4	Passive accoustics
CX14_AU_HS2	72	34.803	161	13.075	72.5801	161.2179	54	~10	Berchok	10/2/14	Sept. 2015	none	Passive accoustics
CX14_AU_HS1	72	25.676	161	37.726	72.4279	161.6288	42	~10	Berchok	10/2/14	Sept. 2015	none	Passive accoustics
AW14_AU_BF3	71	41.297	153	10.676	71.6883	153.1779	123	~10	Berchok	9/30/14	Sept. 2015	none	Passive accoustics
AW14_AU_BF2	*71*	*45.050*	*154*	*27.912*	*71.7508*	*154.4652*	*109*	*~10*	*Berchok*	*9/29/14*	*Sept. 2015*	*5*	*Passive accoustics*
AW14_AU_BF1	*71*	*33.188*	*155*	*31.893*	*71.5531*	*155.5316*	*82*	*~10*	*Berchok*	*9/29/14*	*Sept. 2015*	*5*	*Passive accoustics*
AW14_AU_PB1	*71*	*12.401*	*158*	*0.844*	*71.2067*	*158.0141*	*52*	*~10*	*Berchok*	*9/29/14*	*Sept. 2015*	*5*	*Passive accoustics*
CX14_AU_IC3	*71*	*49.877*	*166*	*4.703*	*71.8313*	*166.0784*	*51*	*~10*	*Berchok*	*9/26/14*	*Sept. 2015*	*none*	*Passive accoustics*
CX14_AU_IC2	*71*	*12.872*	*164*	*14.295*	*71.2145*	*164.2383*	*50*	*~10*	*Berchok*	*9/26/14*	*Sept. 2015*	*4*	*Passive accoustics*
AW14_AU_IC1	*70*	*49.363*	*163*	*8.357*	*70.8227*	*163.1393*	*50*	*~10*	*Berchok*	*9/25/14*	*Sept. 2015*	*4*	*Passive accoustics*
AW14_AU_CL1	69	19.041	167	37.791	69.3174	167.6299	59	~10	Berchok	9/24/14	Sept. 2015	none	Passive accoustics
AW14_AU_KZ1	67	7.413	168	36.266	67.1236	168.6044	51	~10	Berchok	9/24/14	Sept. 2015	none	Passive accoustics
AW14_AU_NM1	64	50.918	168	23.404	64.8486	168.3901	48	~10	Berchok	9/21/14	Sept. 2015	none	Passive accoustics
AW14_AU_PH1	67	54.476	168	12.130	67.9079	168.2022	68	~10	Berchok	9/15/14	Sept. 2015	none	Passive accoustics
4CKIP-1A	*70*	*50.112*	*163*	*6.900*	*70.8353*	*163.1150*	*43*	*~10*	*Stabeno*	*9/25/14*	*Sept. 2015*	*4*	*Ice profiler, RCM*
14CKT-1A	70	50.400	163	7.320	70.8400	163.1220	43	~10	Napp	9/25/14	Sept. 2015	4	TAPS8, SeaCat
14CKP-1A	*70*	*49.841*	*163*	*7.140*	*70.8397*	*163.1190*	*43*	*~10*	*Stabeno*	*9/25/14*	*Sept. 2015*	*4*	*ADCP, ISUS, SC/PAR, FL*
14CKIP-2A	*71*	*13.200*	*164*	*14.400*	*71.2200*	*164.2400*	*43*	*~10*	*Stabeno*	*9/26/14*	*Sept. 2015*	*4*	*Ice profiler, RCM*
14CKT-2A	71	13.778	164	12.780	71.2296	164.2130	43	~10	Napp	9/26/14	Sept. 2015	4	TAPS8, SeaCat
14CKP-2	*71*	*13.752*	*164*	*14.760*	*71.2292*	*164.2460*	*43*	*~10*	*Stabeno*	*9/26/14*	*Sept. 2015*	*4*	*ADCP, ISUS, SC/PAR, FL*
14CKIP-4	*71*	*2.440*	*160*	*31.020*	*71.0407*	*160.5170*	*55*	*~10*	*Stabeno*	*10/10/14*	*Sept. 2015*	*4*	*Ice profiler, RCM*
14CKT-4	71	2.414	160	29.700	71.0402	160.4950	55	~10	Napp	10/10/14	Sept. 2015	4	TAPS8, SeaCat
14CKP-4	*71*	*2.609*	*160*	*30.300*	*71.0435*	*160.5050*	*55*	*~10*	*Stabeno*	*10/10/14*	*Sept. 2015*	*4*	*ADCP, ISUS, SC/PAR, FL*
14CKT-5	71	12.640	158	0.120	71.2107	158.0020	50	~10	Napp	9/29/14	Sept. 2015	5	TAPS8, SeaCat
14CKP-5	71	12.397	158	0.120	71.2066	158.0020	50	~10	Stabeno	9/29/14	Sept. 2015	5	ADCP, ISUS, SC/PAR, FL
14CKIP-6	71	46.450	161	51.840	71.7742	161.8640	50	~10	Stabeno	10/4/14	Sept. 2015	4	Ice profiler, RCM
14CKP-6	71	46.600	161	52.740	71.7767	161.8790	50	~10	Stabeno	10/4/14	Sept. 2015	4	ADCP, ISUS, SC/PAR, FL
14CKT-7	72	25.259	161	37.860	72.4210	161.6310	50	~10	Napp	10/2/14	Sept. 2015	none	TAPS8, SeaCat
14CKP-7	72	25.475	161	37.260	72.4246	161.2593	50	~10	Stabeno	10/2/14	Sept. 2015	none	ADCP, ISUS, SC/PAR, FL
14CKIP-8	72	35.180	161	12.900	72.5863	161.2150	50	~10	Stabeno	10/2/14	Sept. 2015	none	Ice profiler, RCM
14CKT-8	72	34.980	161	13.560	72.5830	161.2250	50	~10	Napp	10/2/14	Sept. 2015	none	TAPS8, SeaCat
14CKP-8	72	34.980	161	12.300	72.5830	161.2050	50	~10	Stabeno	10/2/14	Sept. 2015	none	ADCP, ISUS, SC/PAR, FL
14CKP-9	*72*	*27.473*	*156*	*33.900*	*72.4579*	*156.5650*	*1000*	*600*	*Stabeno*	*10/1/14*	*Sept. 2015*	*none*	*RCMs, Temp, ADCP*
Chukchi-Eco	*71*	*36.000*	*161*	*30.000*	*71.6000*	*161.5000*			*Danielson*	*2014*	*2015*	*4*	*ADCP, LISST, SeaCat, FL,*
14BS-8	*62*	*11.706*	*174*	*40.998*	*62.1951*	*174.6833*	*74*	*50*	*Stabeno*	*10/12/14*	*2015*	*1*	*T, S, Fl,*
14BSP-8	*62*	*11.388*	*174*	*41.334*	*62.1898*	*174.6889*	*74*	*20*	*Stabeno*	*10/12/14*	*2015*	*1*	*ADCP, AURAL*
W Bering Strait	*65*	*55.994*	*169*	*36.990*	*65.9332*	*169.6165*	*51*	*15*	*Stabeno*	*2014*	*2015*	*none*	*RCM, SeaCat, passive acc*

Chukchi-Eco	*71*	*36.000*	*161*	*30.000*	*71.6000*	*161.5000*			*Danielson*	*2014*	*2015*	*4*	*ADCP, LISST, SeaCat, FL,*
14BS-8	*62*	*11.706*	*174*	*40.998*	*62.1951*	*174.6833*	*74*	*50*	*Stabeno*	*10/12/14*	*2015*	*1*	*T, S, Fl,*
14BSP-8	*62*	*11.388*	*174*	*41.334*	*62.1898*	*174.6889*	*74*	*20*	*Stabeno*	*10/12/14*	*2015*	*1*	*ADCP, AURAL*
W Bering Strait	*65*	*55.994*	*169*	*36.990*	*65.9332*	*169.6165*	*51*	*15*	*Stabeno*	*2014*	*2015*	*none*	*RCM, SeaCat, passive acc*
SCH-14	*68*	*2.002*	*168*	*50.028*	*68.0334*	*168.8338*	*60*		*Kikuchi*	*2014*	*2015*	*none*	
SCH-14w	68	3.006	168	50.003	68.0501	168.8334	60		Kikuchi	2014	2015	none	
AON/BS3	*71*	*23.659*	*152*	*3.046*	*71.3943*	*152.0508*	*147*		*Pickart*	*2014*	*2015*	*6*	
CPS14	*74*	*48.040*	*167*	*53.896*	*74.8007*	*167.8983*			*Melling*	*2014*	*2015*	*none*	*ADCP, SC, Acoustic*
CP13	77	28.335	168	7.079	77.4723	168.1180			Melling	2014	2015	none	
BCW-14	*71*	*47.742*	*155*	*20.750*	*71.7957*	*155.3458*	*170*		*Kikuchi*	*2014*	*2015*	*5*	
BCC-14	*71*	*43.585*	*155*	*11.108*	*71.7264*	*155.1851*	*283*		*Kikuchi*	*2014*	*2015*	*5*	
BCE-14	*71*	*40.353*	*155*	*59.742*	*71.6726*	*155.9957*	*106*		*Kikuchi*	*2014*	*2015*	*5*	
BCH-14	*71*	*18.920*	*157*	*8.802*	*71.3153*	*157.1467*	*62*		*Kikuchi*	*2014*	*2015*	*5*	
A2-14	*65*	*46.900*	*168*	*34.000*	*65.7817*	*168.5667*	*56*	*~15*	*Woodgate*	*2014*	*2015*	*none*	*ADCP,SeaCat,AURAL*
A3-14	*66*	*19.600*	*168*	*57.100*	*66.3267*	*168.9517*	*58*	*~15*	*Woodgate*	*2014*	*2015*	*none*	*ADCP,SeaCat, ISUS*
A4-14	*65*	*46.800*	*168*	*15.800*	*65.7800*	*168.2633*	*49*	*~15*	*Woodgate*	*2014*	*2015*	*none*	*ADCP,SeaCat*
NBC-15t	*73*	*0.000*	*152*	*0.000*	*73.0000*	*152.0000*	*>1000*		*Kikuchi*	*2015*	*2016*	*none*	*sediment trap*
NAP-15t	*75*	*0.000*	*162*	*0.000*	*75.0000*	*162.0000*	*>1001*		*Kikuchi*	*2015*	*2016*	*none*	*sediment trap*
BGEP-A	*75*	*0.137*	*149*	*57.322*	*75.0023*	*149.9554*	*3830*			*10/1/14*	*2015*	*none*	*ADCP, MMP, BPR*
BGEP-B	*78*	*0.618*	*149*	*59.820*	*78.0103*	*149.9970*	*3830*			*10/9/14*	*2015*	*none*	*ADCP, MMP, BPR*
BGEP-C	*74*	*1.853*	*140*	*3.741*	*74.0309*	*140.0624*	*3530*			*9/27/14*	*2015*	*none*	*ADCP, MMP, BPR*
CB	*70*	*33.775*	*127*	*41.714*	*70.5629*	*127.6952*	*38*	*~5*	*Melling*	*9/28/14*	*9/28/15*	*8*	*ADCP, SBE37*
SBN	71	32.900	154	22.800	71.54833	154.38000	40	4	Danielson	2014	2015	6	ADCP, T/S
BC2	70	55.26	159	56.4	70.92100	159.94000	52	4	Weingartner	2014	2015	4	ADCP, T/S
AON East Barrow C	71	22.56	156	53.7	71.37600	156.89500	72	4	Okkonen	2014	2015	5	ADCP, T/S
AOOS Beaufort Wave	70	38.094	150	14.22	70.63490	-150.23700	12	1	Kasper	2014	2015		Waves ADCP, T/S/P, Trans

italics indicate moorings which will be redeployed

POC	Organ.		e-mail	Symbol
P. Stabeno	PMEL	NOAA	phyllis.stabeno@noaa.gov	red cross
T. Kikuchi	JAMSTEC		takashik@jamstec.go.jp	red triangle
H. Melling	DFO	Canada	humfrey.melling@dfo-mpo.gc.ca	yellow square
C. Berchok	AFSC	NOAA	Catherine.berchok@noaa.gov	black circle
R. Woodgate	APL, UW		woodgate@apl.washington.edu	blue circle
R. Pickart	WHOI		rpickart@whoi.edu	orange triangle
S. Danielson	UAF		sidanielson@alaska.edu	blue star
H. Klinck	Cornell U.		Holger.Klinck@cornell.edu	black square
J. Napp	AFSC	NOAA	jeff.napp@noaa.gov	yellow diamond
T. Weingartner	UAF		tjweingartner@alaska.edu	bright pink triangle
S. Okkonen	UAF		okkonen@alaska.net	purple diamond
J. Kasper	UAF		jlkasper@alaska.edu	purple triangle