

2005 Icebreaker and AICC Activities

Carin Ashjian, AICC Co-Vice Chair

AICC

- Margo Edwards, *Chair*
- Carin Ashjian, *Co-Vice Chair*
- Henrietta Edmonds, *Co-Vice Chair*
- Robert Bourke
- Dale Chayes (RVTEC)
- Bernard Coakley
- Rolf Gradinger
- Peter Minnett
- Dan Schwartz (RVOC)
- Rebecca Woodgate

Members in **BLUE** rotate off at the end of next year.

We will start to work on advertising for new members at our next meeting (we try to have representatives across the scientific disciplines)

We may try to have some overlap at a meeting to ease the transition for the new members

AICC Activities 2004/2005

- November 2004 Meeting at USCG, Seattle
- March 2005 Meeting at NSF (right after UNOLS Council)
- Debriefs of 2004 Cruises and Prioritized Recommendations (NEW!!!)
- Final Review of Booz Allen Hamilton Science Mission Needs Analysis Report, which was accepted by USCG
- Preparing to report to National Academy of Science panel on need for CG Icebreakers
- Developed short-term plan (and working on long-term plan) for getting ice images/information to underway HEALY
- Continued to work with USCG to determine long range solution for science system support including recent improvements to HEALY lab space layouts by LDEO
- Monitor and maintain interest in issues relevant to Arctic icebreakers from the critical to the near mundane

Other “Events”

- Operating funds for icebreakers have been transferred to the NSF, rather than the USCG
- The NSF and USCG signed a Memorandum of Agreement in early August

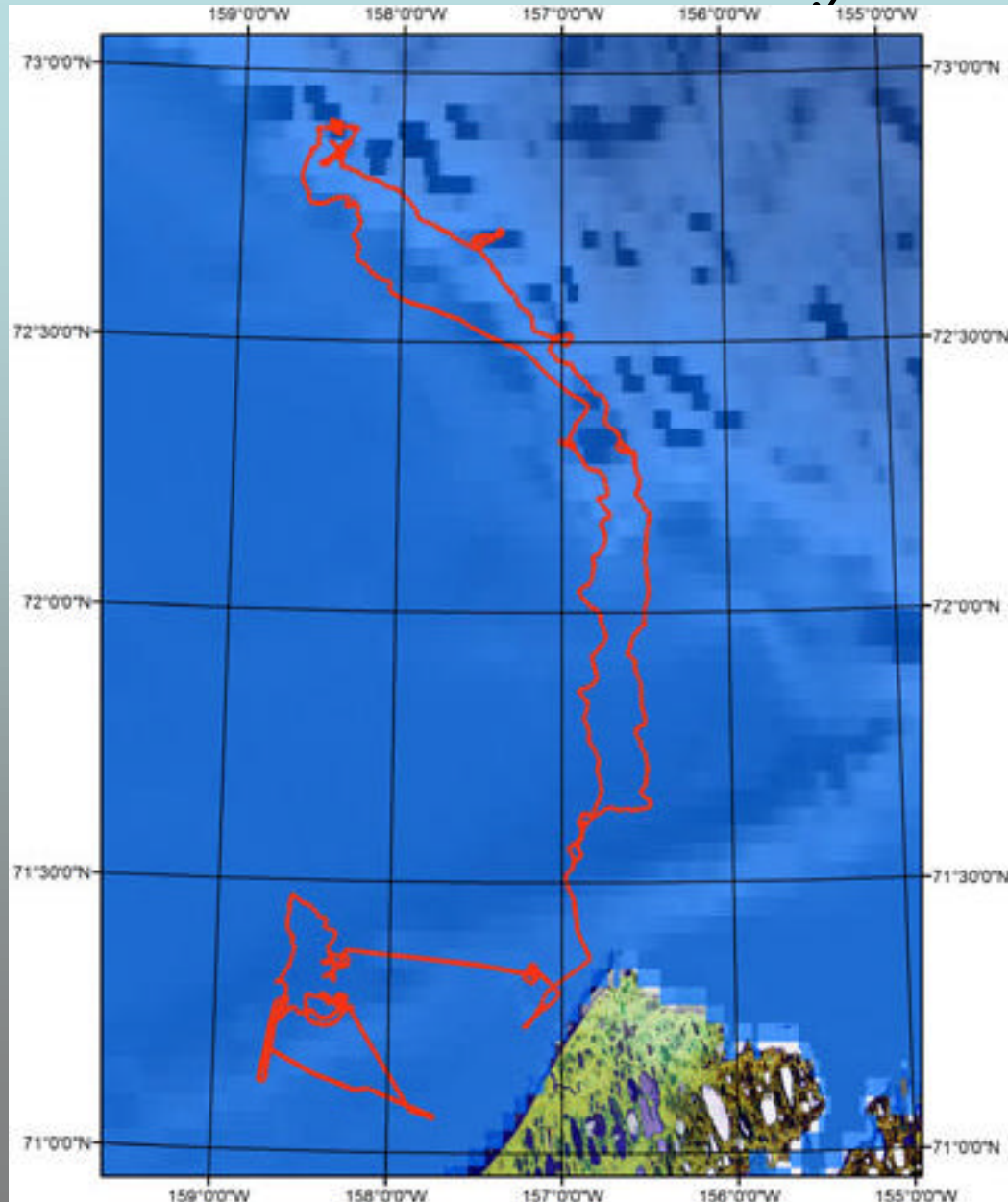
Healy in 2004

- Three Cruises:
 - Mapping and Coring the Alaska-Beaufort Margin (HOTRAX 01), 13-26 June
 - NOAA Ocean Exploration “Hidden Ocean”, 27 June - 26 July
 - Mapping and Coring across the Arctic Basin (HOTRAX 02) with Swedish icebreak *Oden*, 5 Aug. - 30 Sept.
- Two foreign port calls:
 - Tromso, Norway and Dublin, Ireland (post-HOTRAX 02)
- Return to Seattle in early December

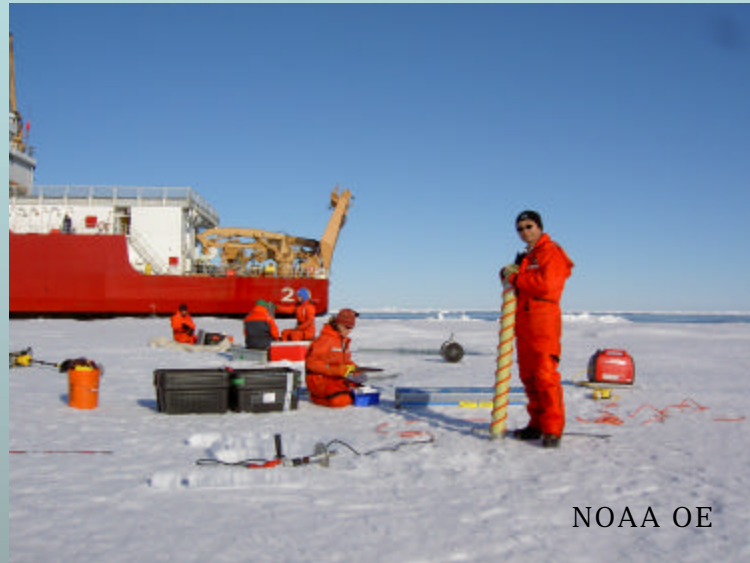
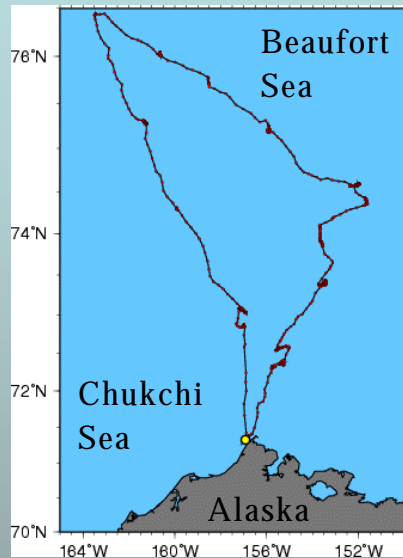
HOTRAX 01 Cruise on *Healy*

- Heavy ice limited northern extent of survey.
- Unable to launch and tow IMI-30 system.
- Beset for four days.

- Eight Jumbo piston cores.
- Many multicores.
- Useful bathymetry and subbottom from hull-mounted systems when not ramming.



NOAA OE “Hidden Ocean” Cruise

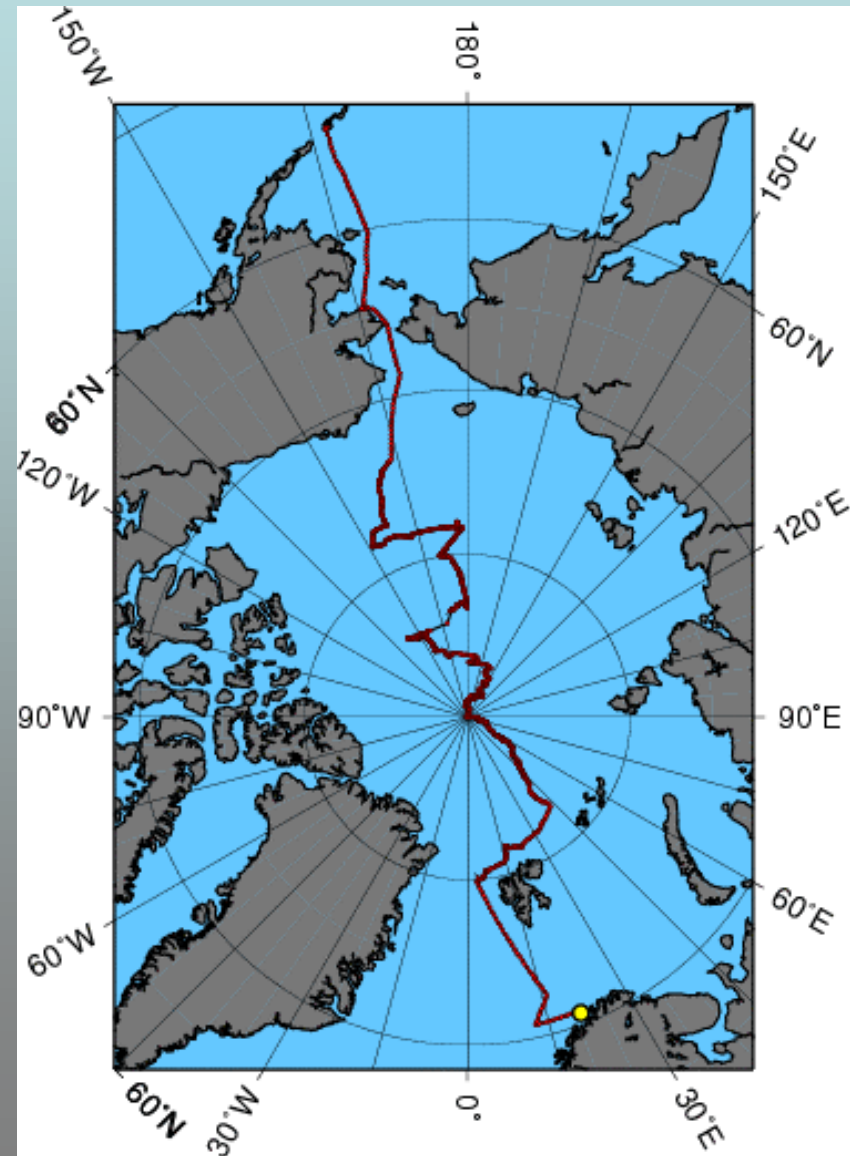


- ROV and diver investigations from just under ice to 3000 m (ROV only) water depth, mostly imaging biota.
- Ice coring, CTD, net tows etc.
- Many new discoveries, widely reported on NPR, CBS, ABC, etc.

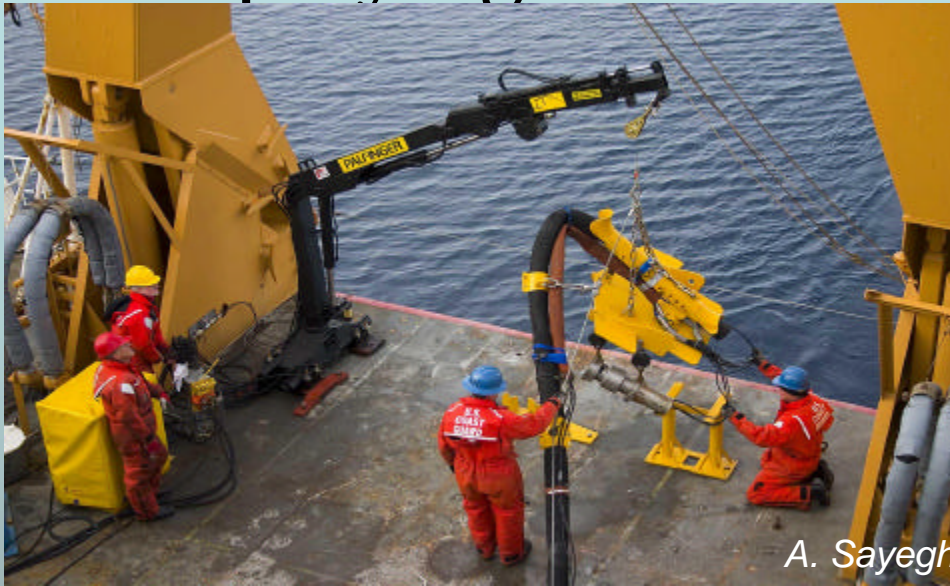
HOTRAX leg 02 (HLY-0503)



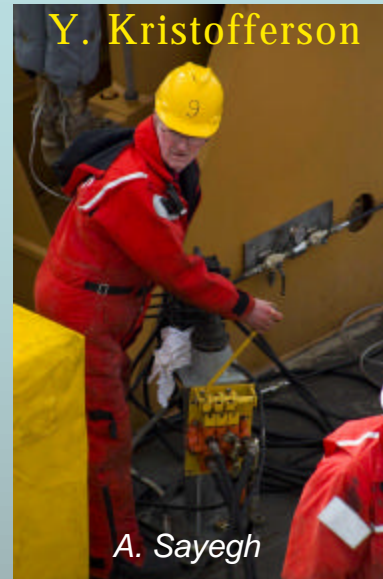
- Multibeam, CHIRP, sidebeam sonars
- Multicore and piston core
- Ice sampling
- IHA was obtained for this cruise



Deploying the Seismic Streamer



A. Sayegh



Y. Kristofferson

A. Sayegh

A nice core showing layers



HOTRAX

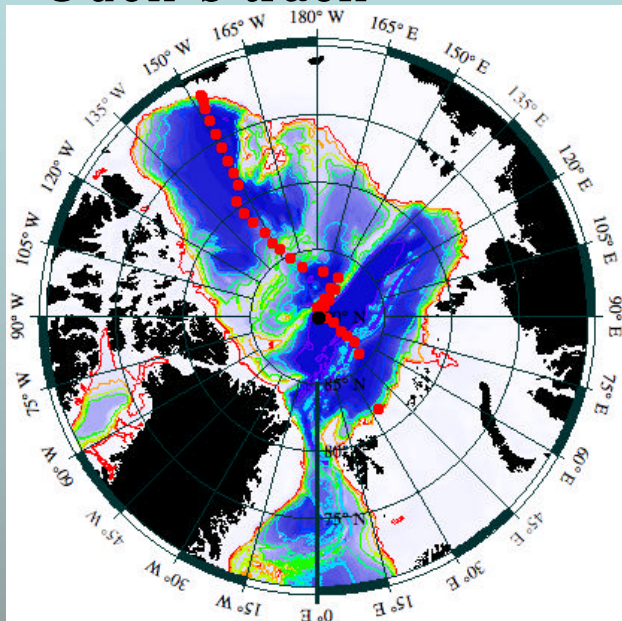


D. Darby

HOTRAX

Two ships across the Pole

Oden's track



- *Healy* and *Oden* met on September 1
- The two ships reached the Pole on September 12.
- Heavy ice in the eastern Arctic limited science stations



Healy in 2006

Early May-early June: Lovvorn, Grebmeier,
Cooper - Biological Oceanography/Benthic
Sampling near St. Lawrence Island

Mid-July-end August: Lawver, Avendonk -
Geophysical mapping of Chukchi Borderland

Early Sept. - third week Oct. : Mayer,
Armstrong - EEZ mapping of Chukchi
Borderland *AND* Sohn, Humphries, Singh-
Deep ROV testing for future Gakkel Ridge
Cruise

Healy in 2007 ?

Sohn, Humphries, Singh - Gakkel Ridge

Polar Sea and Polar Star

- *Polar Sea* is laid up, but has received funds for repairs (~\$48M)

- *Polar Star* -
 - Backup ship for DF06
 - Russian *Krasin* will lead the DF06 break-in
 - Light Antarctic ice conditions this year.

Photo by Ed Beale

Polar Star

- Repairs completed from damage during 2004 Deep Freeze
- No planned shakedown?
- Departure for Antarctica for Deep Freeze 2005 on November 1, but will return to Seattle if it is reported that Krasin has complete break-in
- The NSF is exploring need for USCG icebreaker operations in Antarctic through National Academy of Sciences panel - fast-track report.

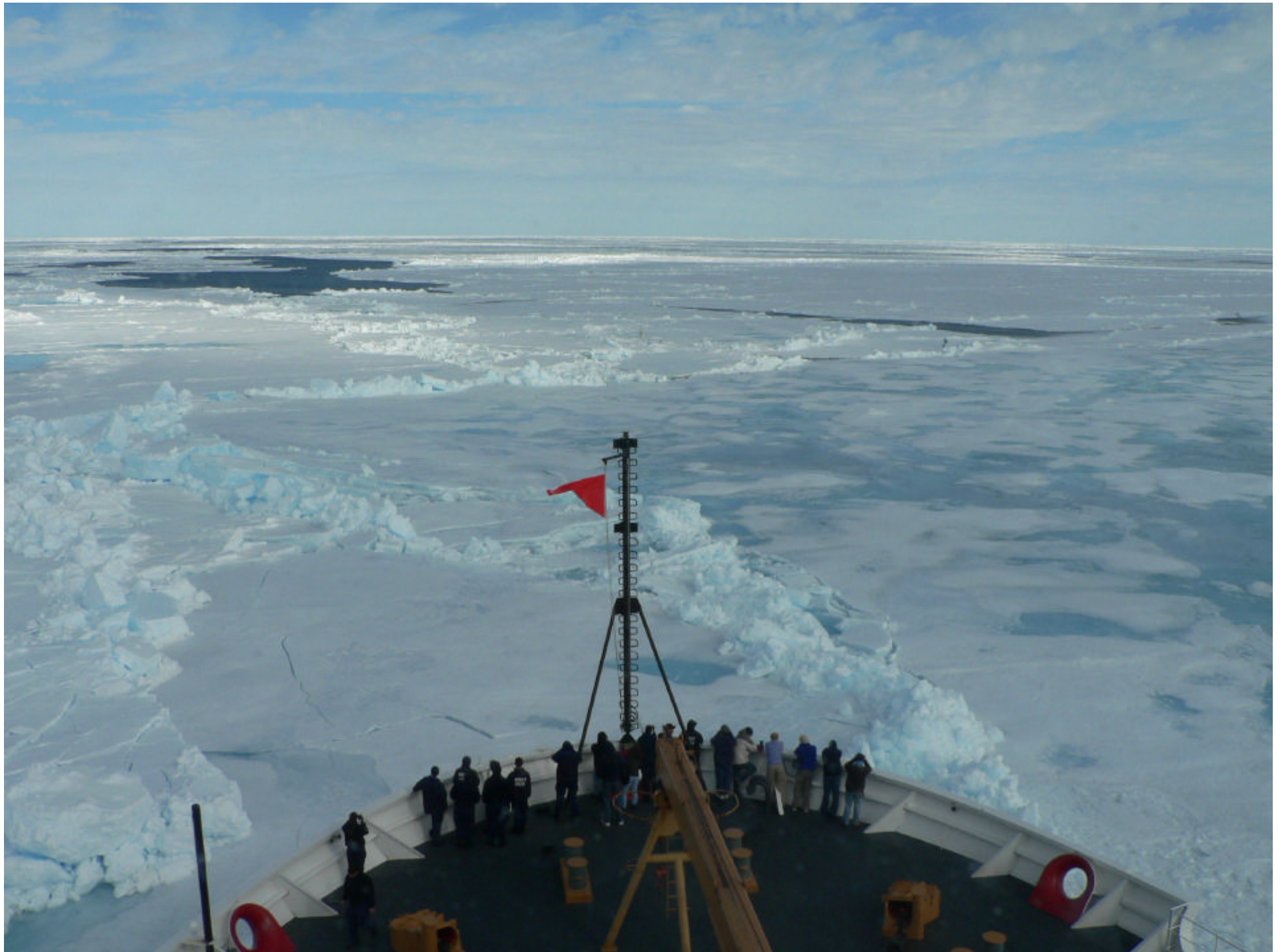
Next for AICC

- Fall Meeting, Seattle, December 12 & 13
- De-briefs for the three science cruises on Healy prior to December meeting.
- Assess how well the prioritization of suggestions worked and continue to perform this analysis
- Continue to advise and assist science community and USCG to facilitate doing science on the icebreakers
- Continue to watch with interest the progress of MOA, NAS panel and the future of icebreakers
- M. Edwards will participate by teleconference at the next meeting of the NAS panel



Mark Rognstad









A photograph of a sunset over a beach. The sun is low on the horizon, creating a bright glow and long shadows. The sky is filled with soft, colorful clouds. In the distance, a small island or rock formation is visible in the water. The foreground shows the sandy beach and the gentle waves of the ocean.

Swedish icebreaker *Oden*

Photo: Alejandro Sayegh

