

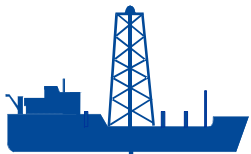
The Drilling of the Lomonosov Ridge by the IODP and future Arctic scientific drilling



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ESO Science Manager

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ECORD Science Operator (ESO)
British Geological Survey, Edinburgh, UK



IODP Arctic Proposals

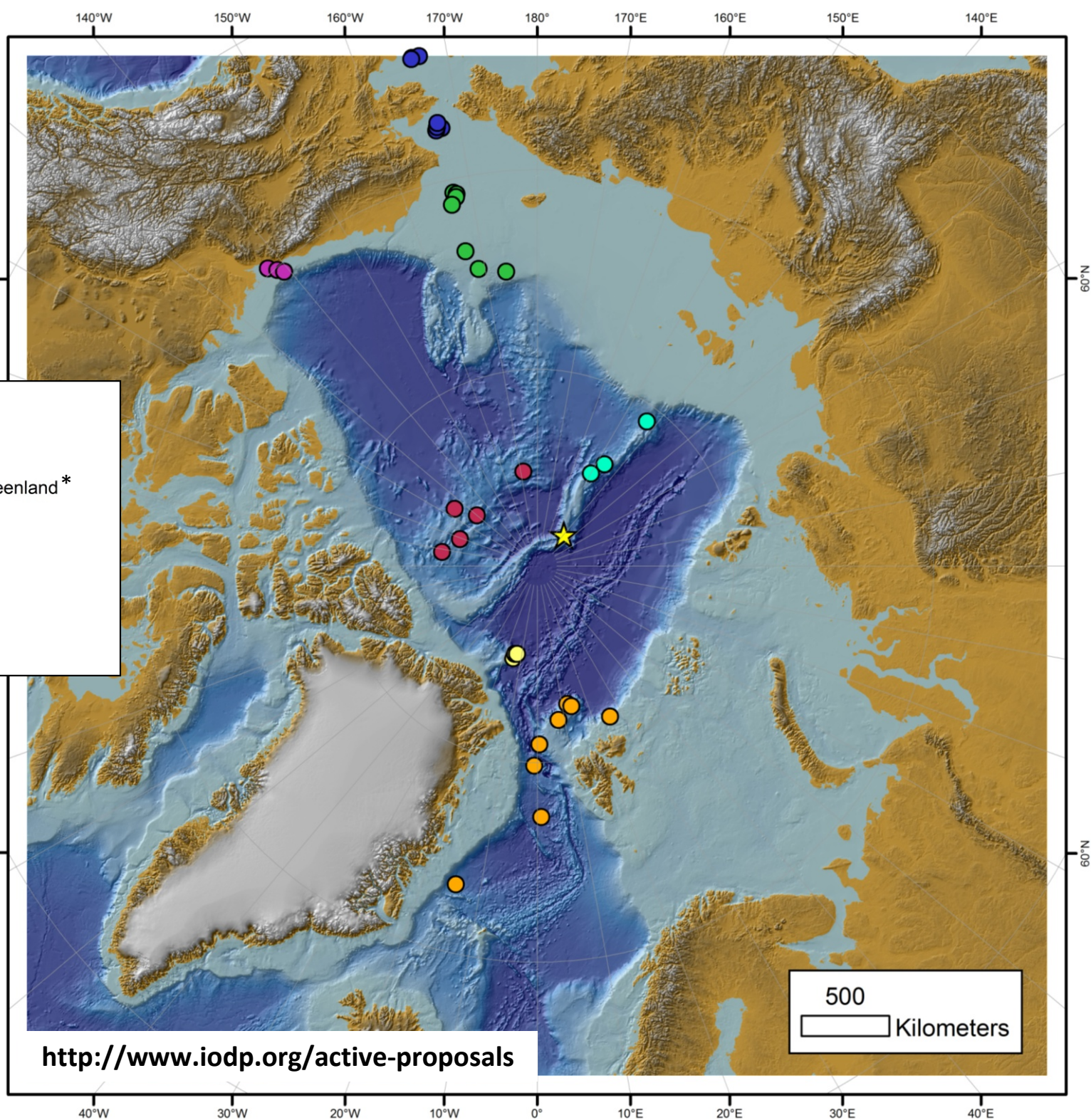
IODP Expedition 302

★ Arctic Coring Expedition (ACEX)

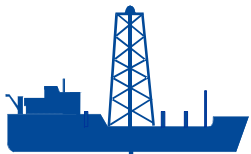
IODP Arctic Proposals

- 645 Fram Strait, Yermak Plateau & E. Greenland *
- 680 Bering Strait
- 708 Lomonosov Ridge
- 746 Alpha-Mendeleev Ridge*
- 750 Chukchi Sea
- 753 Beaufort Sea
- 756 Morris Jesup Rise

* Proposals not forwarded to new IODP program, but could be reactivated if there is industry interest.



<http://www.iodp.org/active-proposals>



IODP Arctic Proposals

IODP Expedition 302

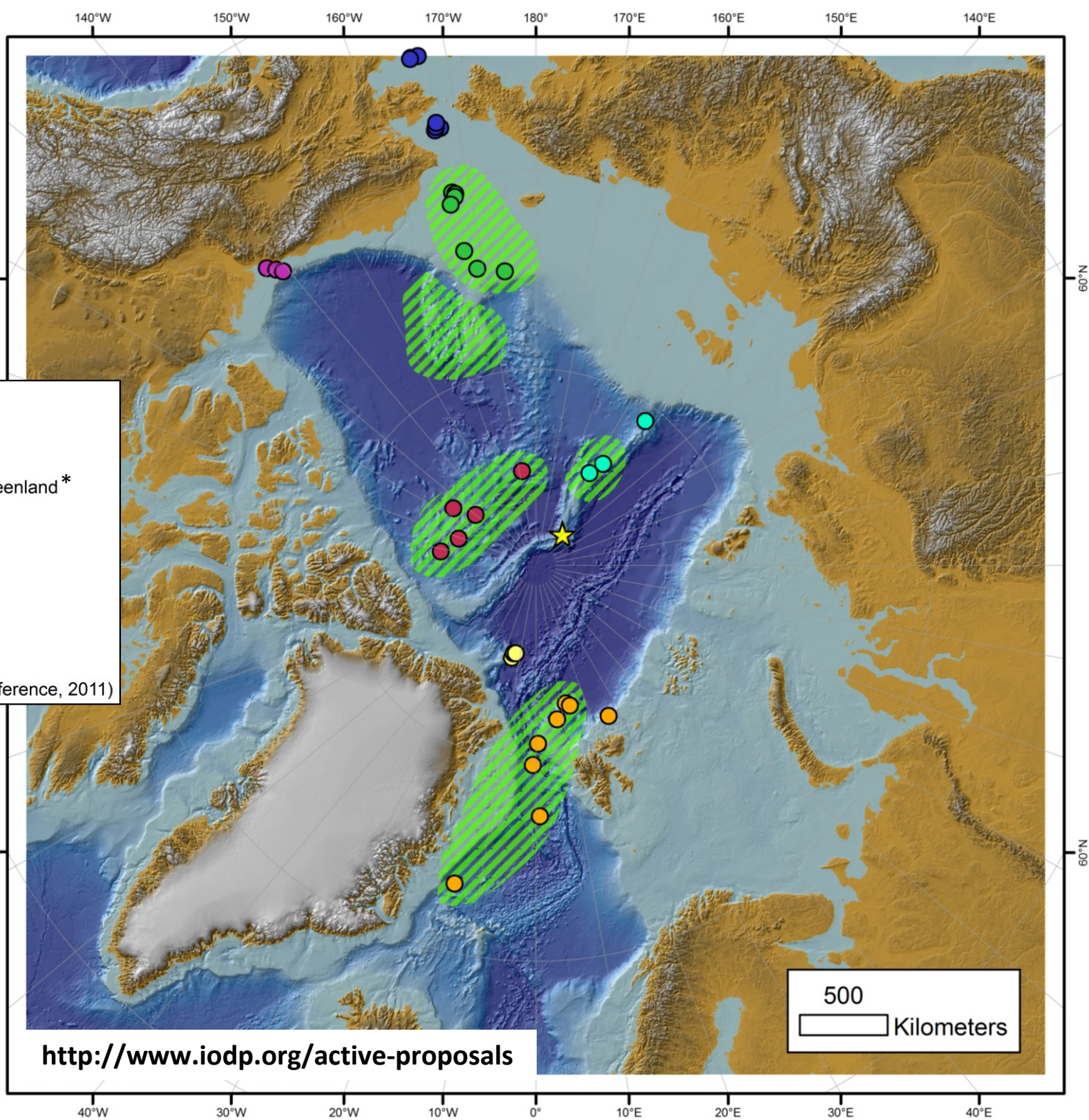
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Potential industry interest (AAPG 3P Conference, 2011)

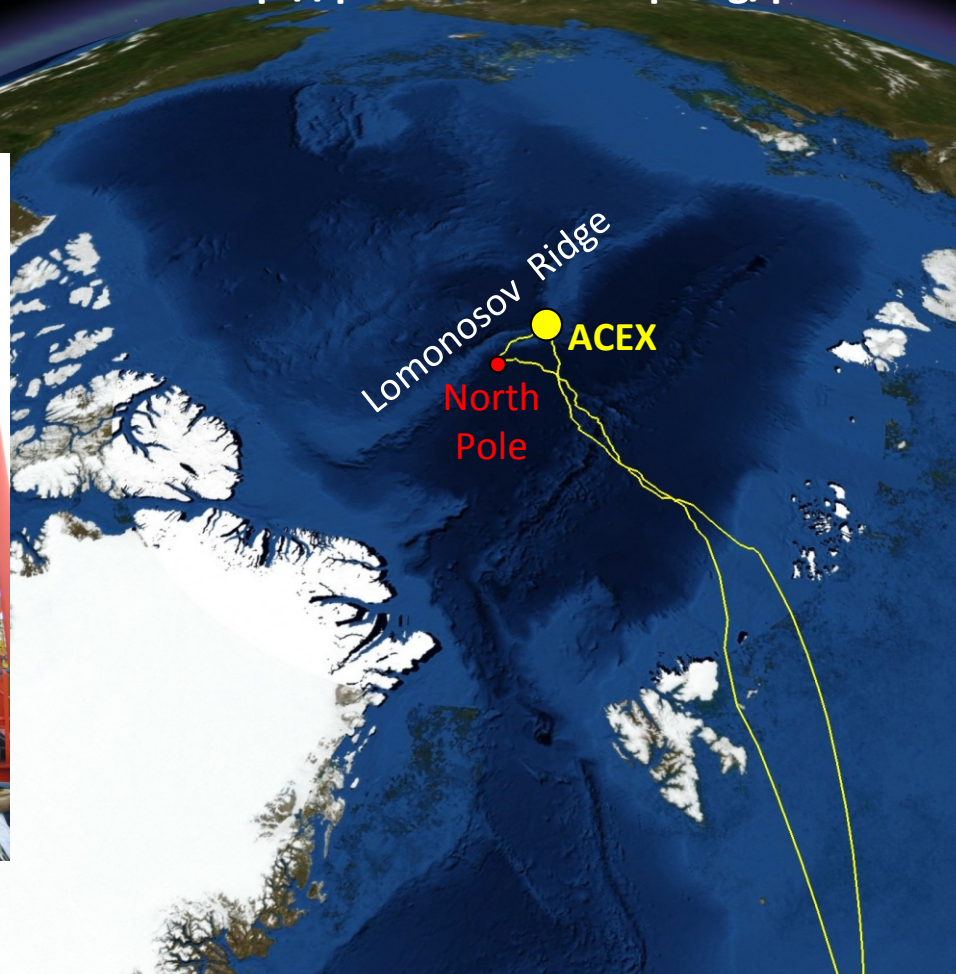
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The Arctic Coring Expedition (ACEX)

IODP Expedition 302

<http://publications.iodp.org/proceedings/302/302toc.htm>



Who Implemented ACEX?

The **ECORD Science Operator (ESO)**, under the auspices of the **Integrated Ocean Drilling Program (IODP)**

The **Swedish Polar Research Secretariat (SPRS)**

- Support icebreaker sub-contracts (x2) and associated logistics
- Fleet management
- Helicopter services
- Ice management (sub-contracted to **Arno Keinonen Arctic Consulting Incorporated - AKAC Inc.**)

Seacore Ltd.: drilling services and drillship sub-contract

Schlumberger: downhole logging services

.....plus the Science Party and Educators



The Ice



The ACEX Fleet



Vidar Viking



Oden

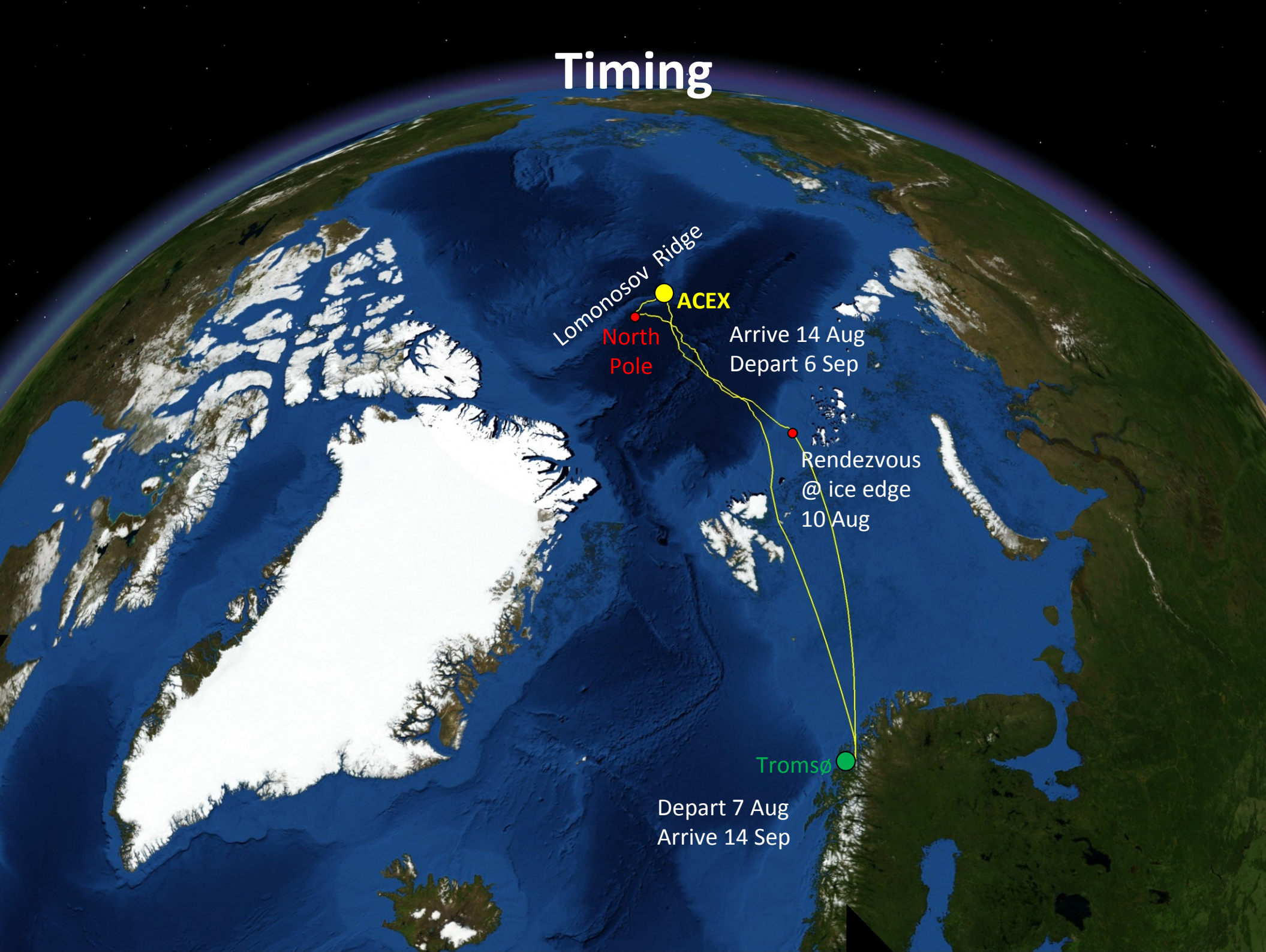


Sovetskiy Soyuz

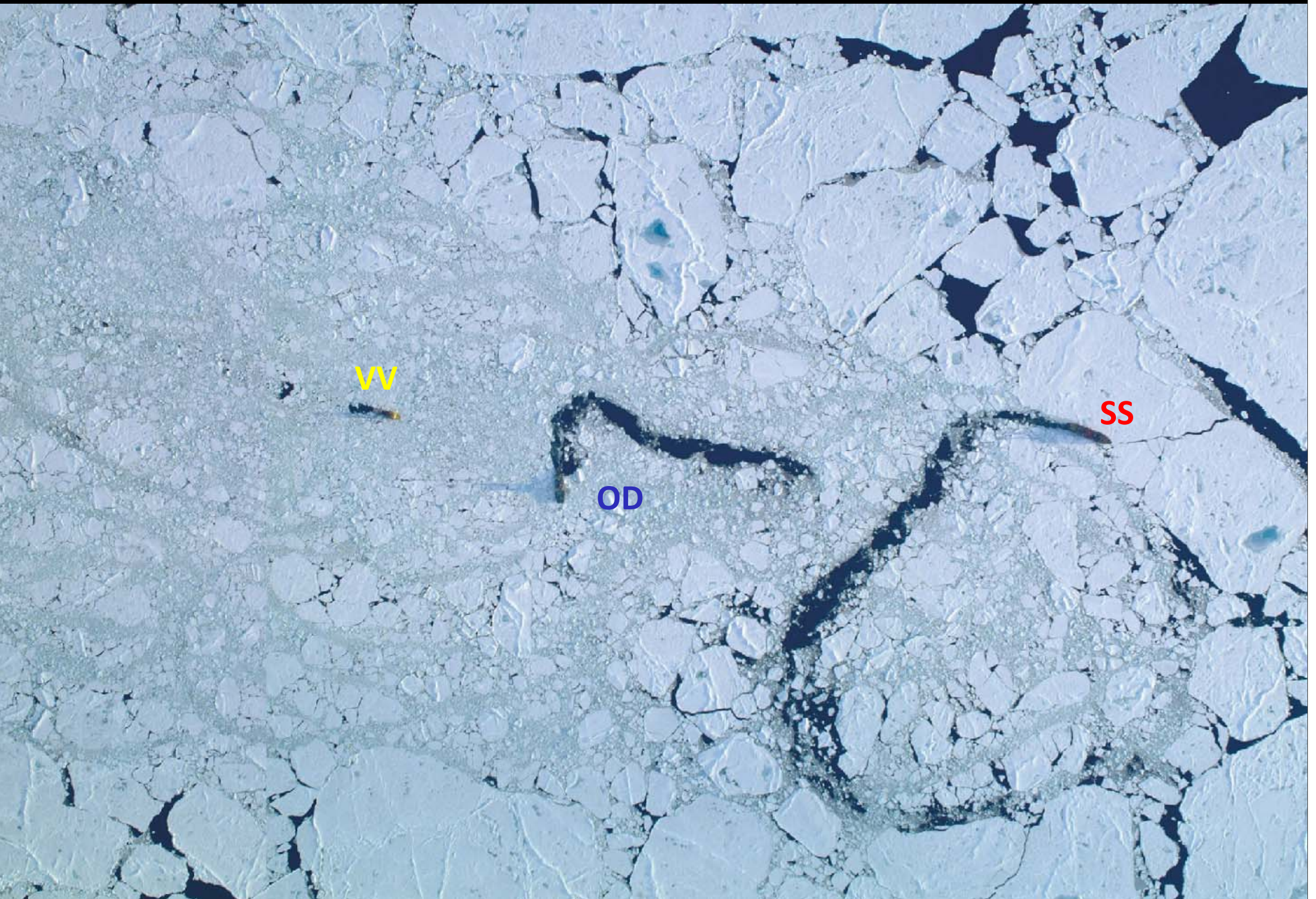




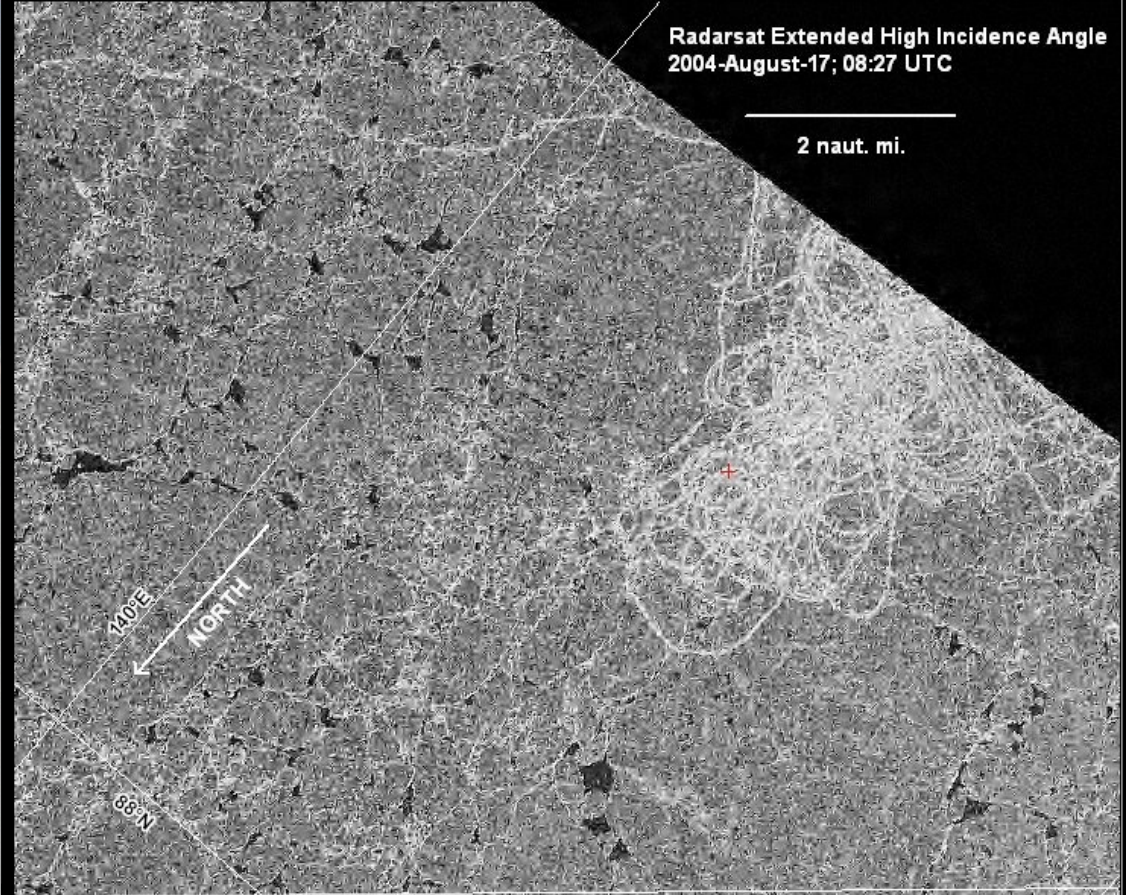
Timing



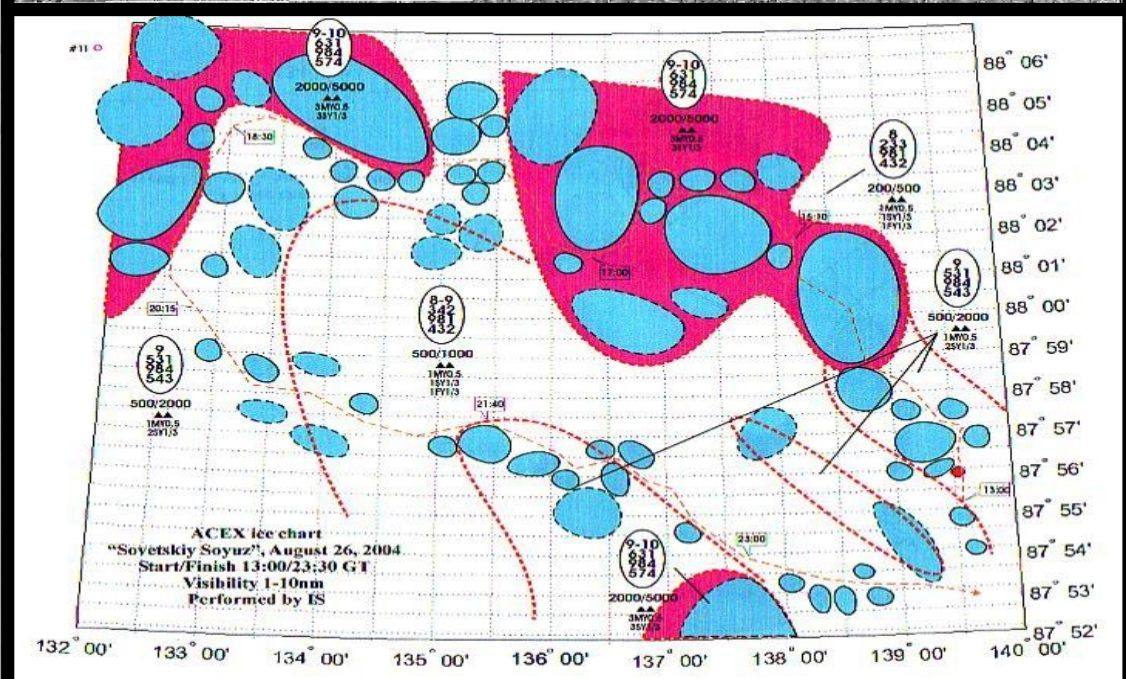
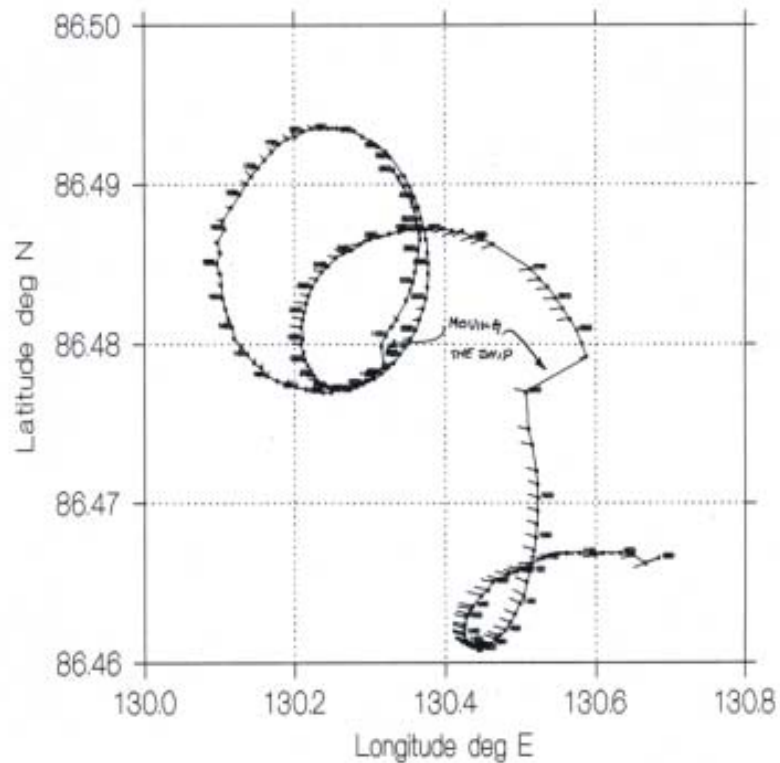
Breaking ice, from 3.6 km height



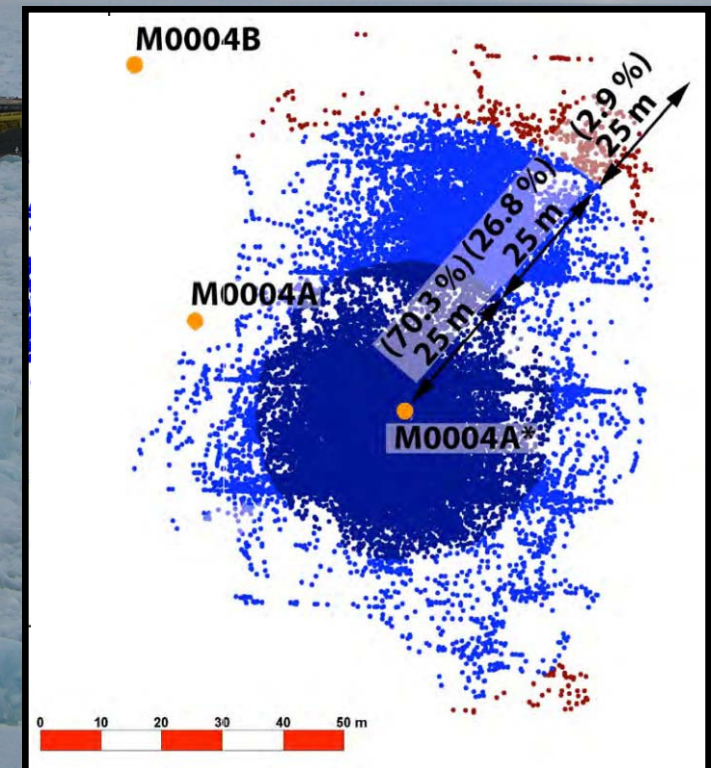
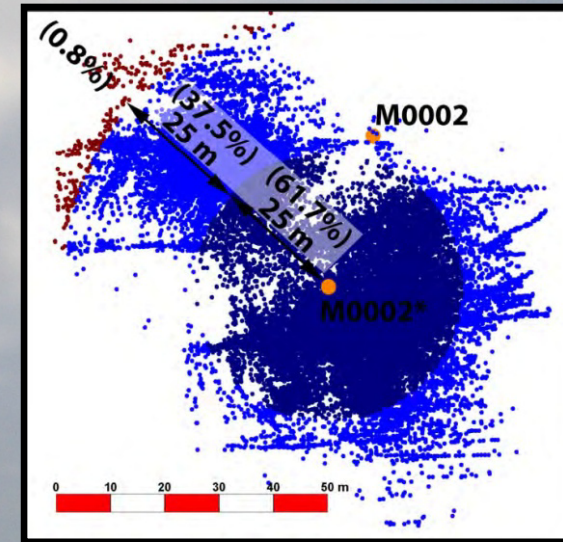
Ice Management

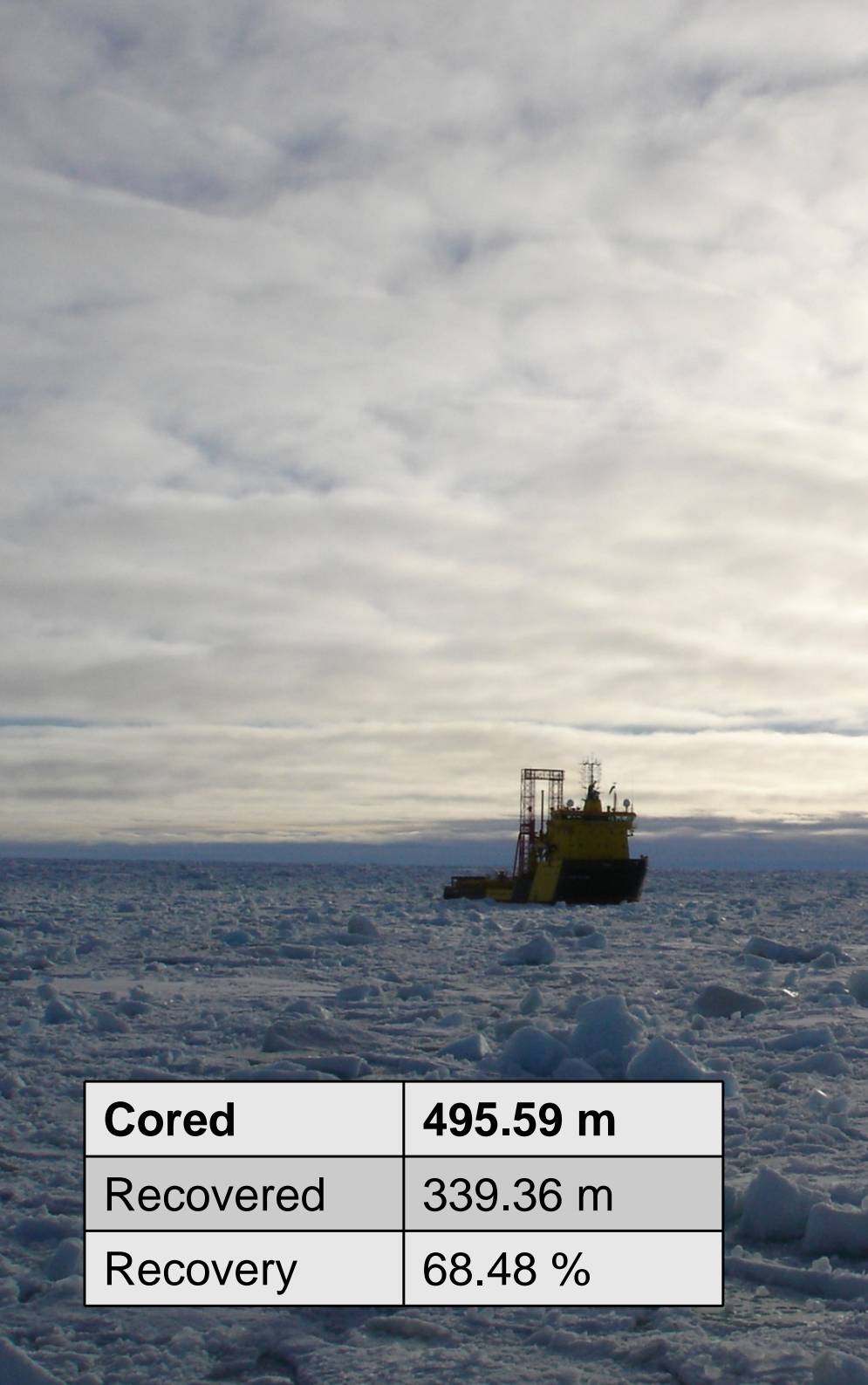


Icedrift 08240800-08251830

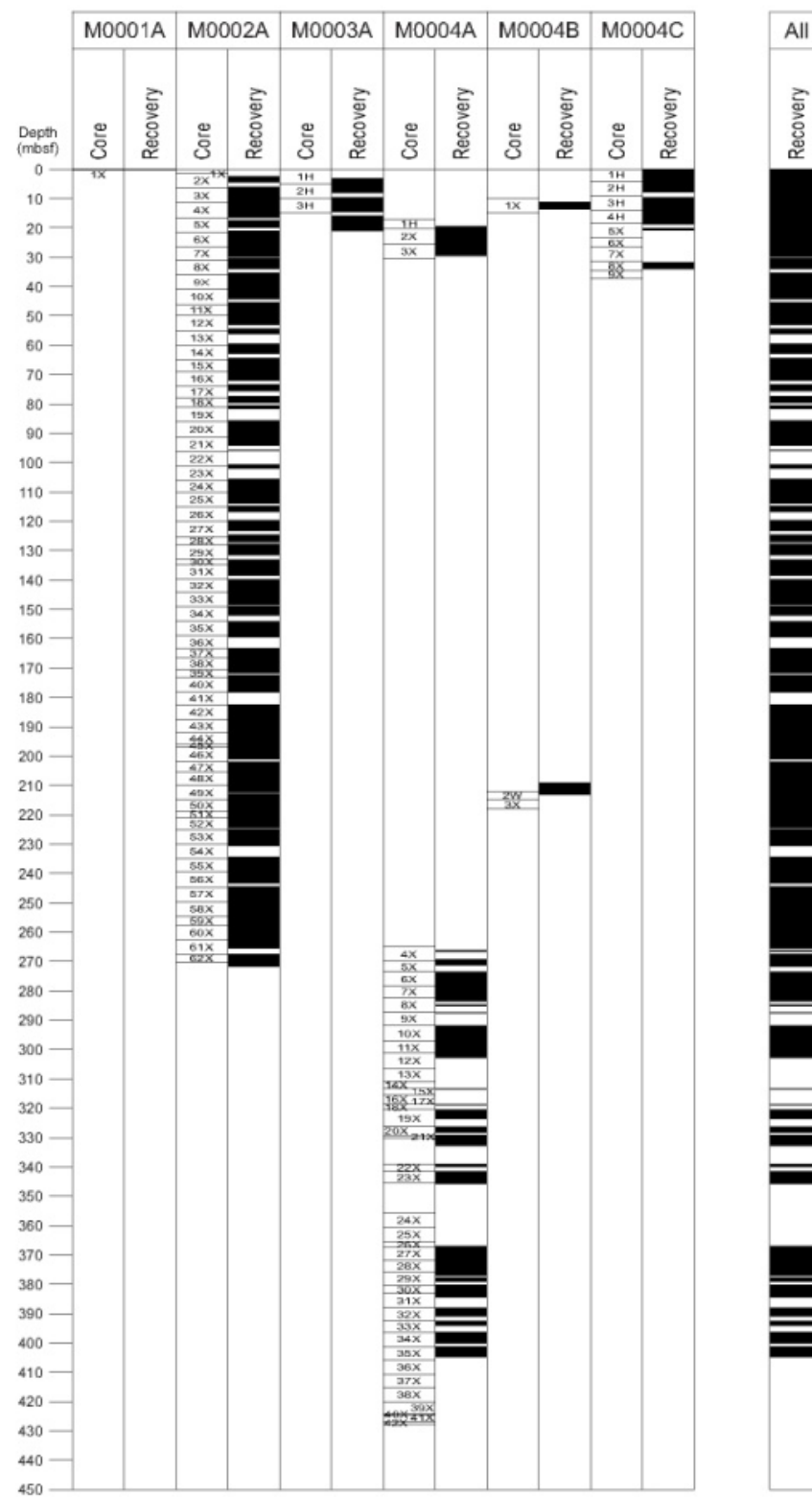


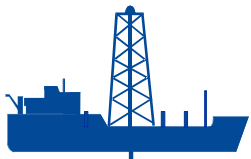
Station Keeping





Cored	495.59 m
Recovered	339.36 m
Recovery	68.48 %



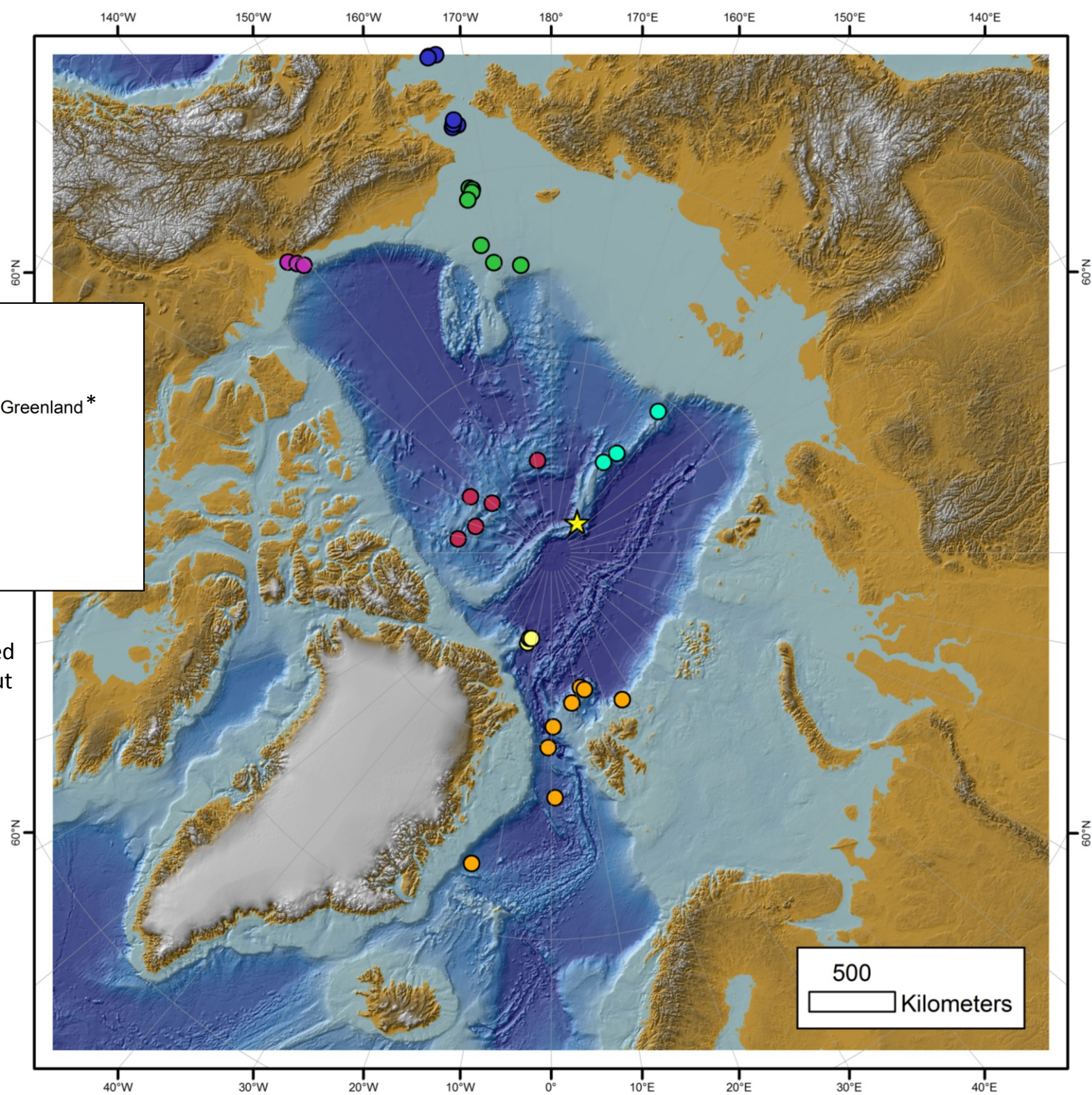


Summary

- Ice management program exceeded expectations:
 - 48 consecutive hours envisaged: 9 days achieved at Site M0004.
 - Highly rated fleet and ice management teams.
- Hard-working, innovative drilling team.



- By using a similar fleet with a similar, if not identical Arctic-experienced professional team, the success ACEX can be replicated in virtually any other area of the Arctic Ocean.



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