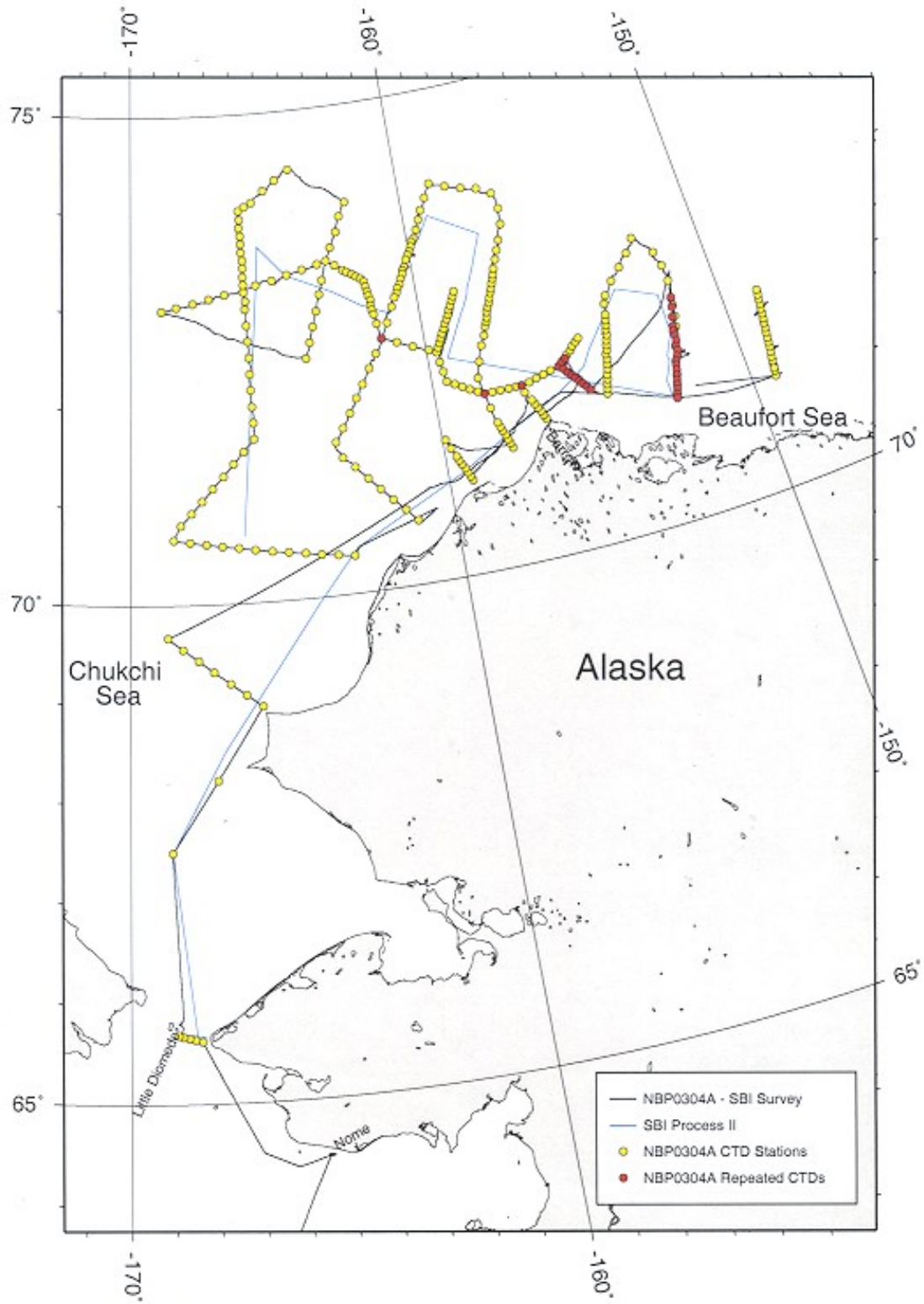# NBP0304A
Multibeam
End of Cruise Report

Photo by Dave Munroe

Prepared By Kathleen Gavahan

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- Cruise Track Map
- Description of Work
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SBI Survey - NBP0304A

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Chukchi Sea

Alaska

Little Diomede

Nome

| NBP0304A - SBI Survey |
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| ● NBP0304A CTD Stations |
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GMT 2003 Aug 18 00:56:51   K. Gavahan, RPSC

NBP0304A MultiBeam Description of Work

This report covers the Simrad EM120 multibeam data collection for the R/V Nathaniel B. Palmer cruise NBP0304A. This cruise started from Dutch Harbor, Alaska on July 6, 2003 and ended at Barrow, Alaska on August 19th, 2003. The chief scientist was Jim Swift Kathleen Gavahan (RPSC) and Jim Waters (RPST) were responsible for multibeam data acquisition. The science party did stood a 24 hour watch.

The raw multibeam data was logged in approximately one hour-long files in the Kongsberg-Simrad EM120 raw format. This is a complex format that is not described in this report The MB-System[1] software package may be used to access the files if additional work is to be done with the data. These raw data files are named xxxx_yyyymmdd_hhmmss_raw.all where xxxx is a consecutive line number within the survey, yyyy is the year, mm is the month, dd is the day, hh is the hour, mm is the minute, and ss is the seconds that the file was started.

The logged multibeam data files were transferred from the data acquisition computer to a data storage area just after the end of the day. The raw hourly data files were converted from MB-System format 56 (the raw Simrad format_) to format 57 using mbcopy. The format 57 files are named xxx_yyyymmdd_hhmmss.mb57 where the first part of the name is identical to the raw file.

The data were not edited or processed.

The UNIX tar command was used to write the digital data to DAT tapes at the end of the cruise. These tapes were checked before distribution. All DAT tapes have a blocking factor of 20. The tapes contain the raw data for the entire cruise. The contents of these tapes and an itemized distribution list are located on a separate pate of this report.

NBP0304A Data Description

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[1] The MB-System4.6software package was used for all multibeam data handling. This package was developed at Lamont-Doherty Earth Observatory. This system is designed to manipulate, process, list and display many kinds of multibeam bathymetry, amplitude, and sidescan data. IT has been successfully installed on many different computer platforms. To obtain more information about the MB-System programs or to obtain a copy of the current distribution, contact the authors David W. Caress (carress@mbari.org) and Dale N. Chayes (dale@lamont.ldeo.columbia.edu).

Multibeam data had been provided on 4mm DDS4 data tapes to the science party. Each complete set of multibeam data consists of 5 DDS4 tape. The original DDS4 tapes were created on a UNIX computer using the command "tar cvbf 20 /dev/rmt/01". All tapes were verified to be sound on a different UNIX machine before they were distributed.

Tapes:
    DDS3:
1. Raw Data Tape. Raw hourly data files in mbio format 56. Raw hourly data files converted to mbio format 57.
   - Tape one: days 07/07/03 to 07/19/03
   - Tape two: days 07/20/03 to 07/31/03
   - Tape three: days 08/01/03 to 08/06/03
   - Tape four: days 08/07/03 to 08/14/03
   - Tape five: days 08/15/03 to 08/18/03

NBP0304A Multibeam Tape Distribution

Tape #	Who	Description	Type	Created on	Verified on
1	RPSC	Raw Multibeam 7/7 to 7/31	DLT	Endurance	Eltanin
2	NBP	Raw Multibeam 7/7 to 7/31	DLT	Endurance	Eltanin
3	Swift 1	Raw Multibeam 7/7 to 7/19	DDS4	Duke	Icecap
4	Swift 2	Raw Multibeam 7/7 to 7/19	DDS4	Duke	Icecap
5	Swift 1	Raw Multibeam 7/20 to 7/31	DDS4	Icecap	Duke
6	Swift 2	Raw Multibeam 7/20 to 7/31	DDS4	Icecap	Duke
7	Swift 1	Raw Multibeam 8/1 to 8/6	DDS4	Duke	Icecap
8	Swift 2	Raw Multibeam 8/1 to 8/6	DDS4	Icecap	Duke
9	Swift 1	Raw Multibeam 8/7 to 8/14	DDS4	Duke	Icecap
10	Swift 2	Raw Multibeam 8/7 to 8/17	DDS4	Icecap	Endurance
11	Swift 1	Raw Multibeam 8/15 to 8/18	DDS4	Duke	Icecap
12	Swift 2	Raw Multibeam 8/15 to 8/18	DDS4	Icecap	Duke
13	RPSC	Raw Multibeam 8/1 to 8/18	DLT	Endurance	Eltanin
14	NBP	Raw Multibeam 8/1 to 8/18	DLT	Endurance	Eltanin