

UNDERSEA FEATURE NAME PROPOSAL
(Sea NOTE overleaf)

Note: The boxes will expand as you fill the form.

Name Proposed: Koldewey Seamount Ocean or Sea: Arctic Ocean

Geometry that best defines the feature (Yes/No) :

Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
Yes						

* Geometry should be clearly distinguished when providing the coordinates below.

Coordinates:

Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
80°12.0' N	1°01.0' W

Feature Description:

Maximum Depth:	3,600 m	Steepness :	~ 7°
Minimum Depth :	2,079 m	Shape :	Oval shape, conic form, NW to SE
Total Relief :	~ 1.500 m	Dimension/Size :	20 km x 40 km

Associated Features: Located at the NE end of the Spitsbergen Fracture Zone,
South of the Lena Trough

Chart/Map References:

Shown Named on Map/Chart:	581-12-04 (on Plotting Sheet 581)
Shown Unnamed on Map/Chart:	
Within Area of Map/Chart:	

Reason for Choice of Name (if a person, state how associated with the feature to be named):

Carl Christian Koldewey, born October 26, 1837 in Bücken near Hoya, Germany; died May 17, 1908 in Hamburg. He enrolled as a sailor in 1853, before he attended the naval school in Bremen. After becoming a captain, Koldewey studied mathematics, physics, and astronomy at the universities of Hannover and Göttingen between 1866 and 1867. Carl Koldewey was given the leadership of the first German Arctic expedition as captain of ship *Grönland* in the summer of 1868. He had the choice of either advancing northwards as far as possible along Greenland's east coast or to reach so-called Gillis-Land by travelling around Spitsbergen. But adverse conditions and strong ice floes prevented him from reaching both destinations. Finally he reached his northmost latitude of 81°5' near Spitsbergen and returned. The second expedition consisted of a two-vessel convoy: *Germania* and *Hansa*- under the command of Carl Koldewey. The *Germania* made it through the pack ice during late summer, explored the region around Sabine Island, Little Pendulum Island and Shannon. On September 13, 1869, the ship wintered near the south coast of Sabine Island. In late July 1870, *Germania* was able to raise anchor and continue the expedition, until it returned to Bremerhaven, most of the way by sail, on September 11, 1870.

Discovery Facts:	Discovery Date:	May 2004
	Discoverer (Individual, Ship):	RV "Polarstern" T. Hartmann Expeditions ARK-XIII/3 1997 ARK-XV/2 1999 ARK-XVIII/2 2002

Supporting Survey Data, including Track Controls:	Date of Survey:	div.
	Survey Ship:	RV "Polarstern"
	Sounding Equipment:	Multibeam Hydrosweep DS-2
	Type of Navigation:	GPS (SPS)
	Estimated Horizontal Accuracy (nm):	< 100 m
	Survey Track Spacing:	Full coverage of the feature
Supporting material is submitted as Annex in analog and digital form.		

Proposer(s):	Name(s):	Hans Werner Schenke
	Date:	01 August 2010
	E-mail:	Hans-Werner.Schenke@awi.de
	Organization and Address:	Alfred Wegener Institute for Polar and Marine Research, POB 120161, Bremerhaven, Germany
	Concurrer (name, e-mail, organization and address):	

Remarks:

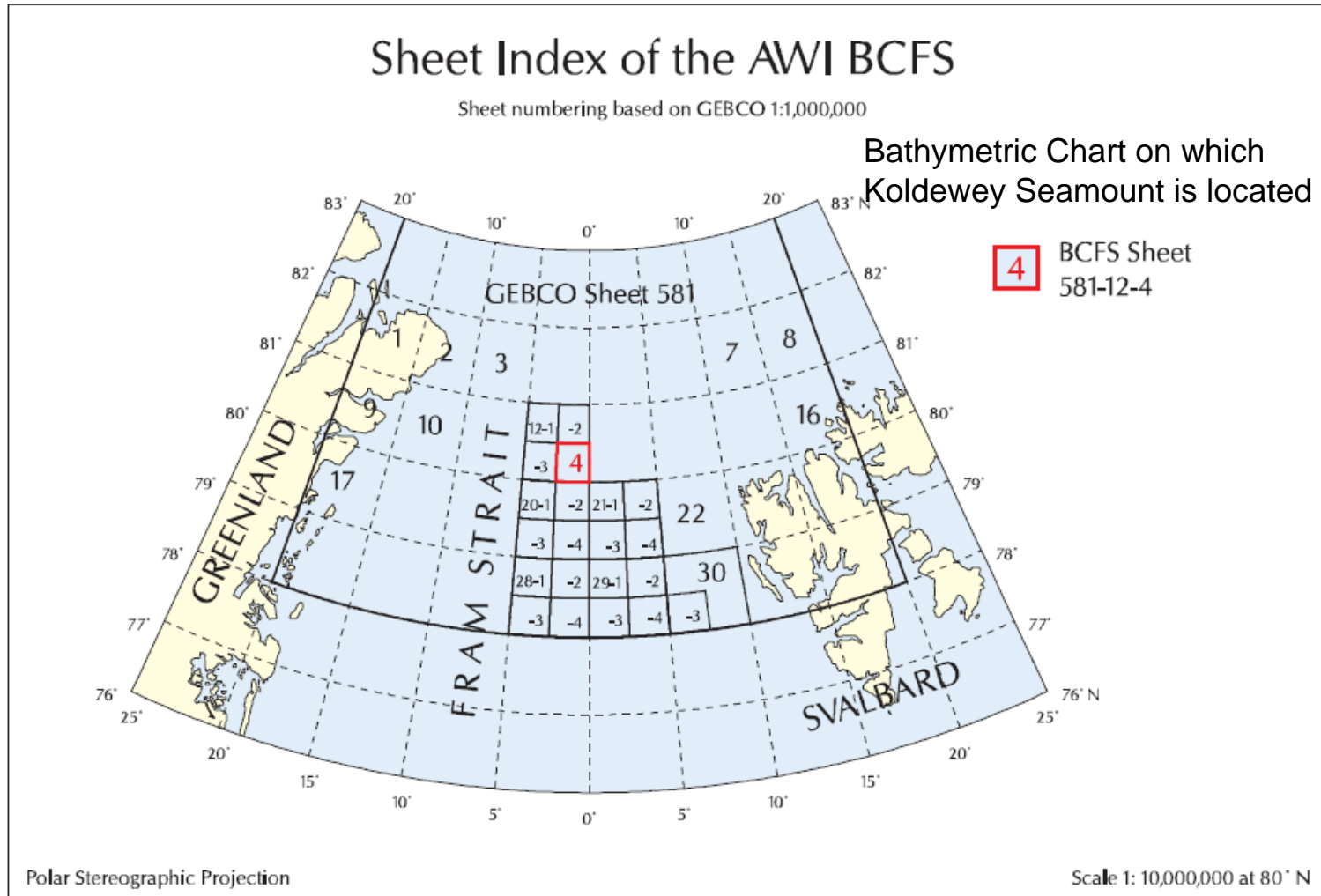
NOTE : This form should be forwarded, when completed :

- a) **If the undersea feature is located inside the external limit of the territorial sea :-**
to your "National Authority for Approval of Undersea Feature Names" (see page 2-9) or, if this does not exist or is not known, either to the IHB or to the IOC (see addresses below);
- b) **If at least 50 % of the undersea feature is located outside the external limits of the territorial sea :-**
to the IHB or to the IOC, at the following addresses :

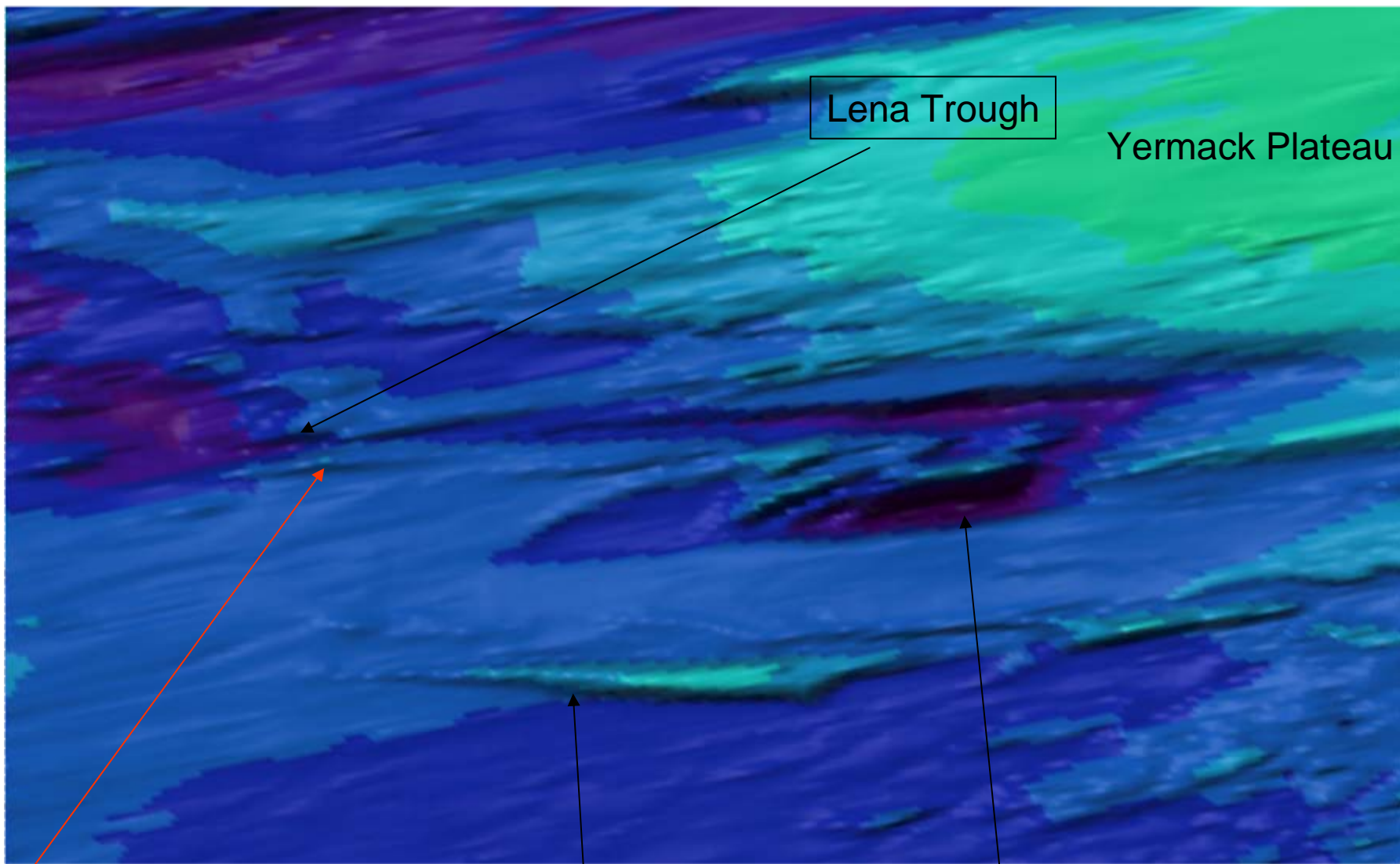
International Hydrographic Bureau (IHB) 4, Quai Antoine 1er B.P. 445 MC 98011 MONACO CEDEX <u>Principality of MONACO</u> Fax: +377 93 10 81 40 E-mail: info@ihb.mc	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy 75700 PARIS <u>France</u> Fax: +33 1 45 68 58 12 E-mail: info@unesco.org
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Name proposal Koldewey Seamount

AWI Bathymetric Chart of the Fram Strait, 1:100 000 at 79° N



Fram Strait overview



Lena Trough

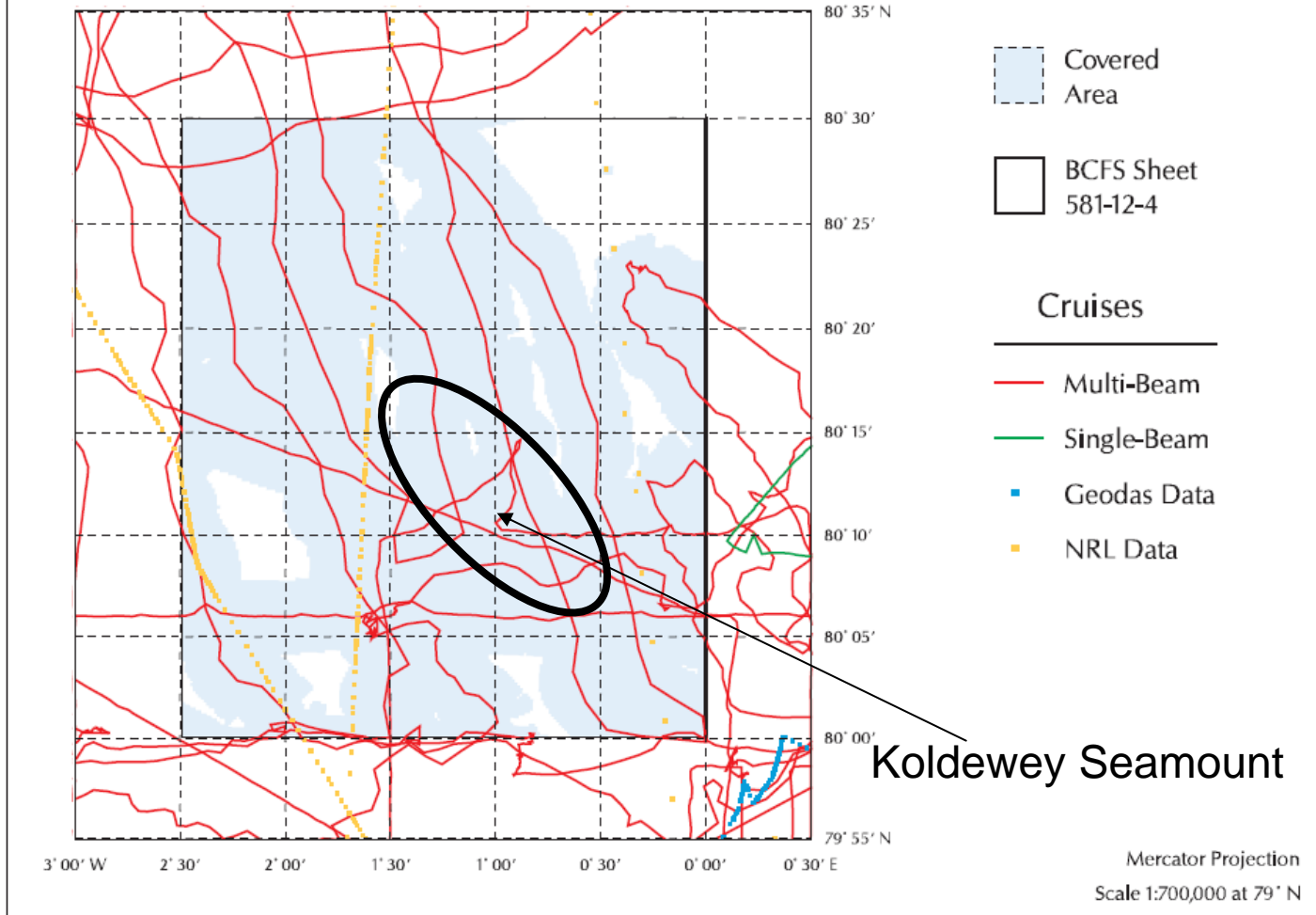
Yermack Plateau

Koldewey Seamount

Hoovgaard Ridge

Molloy Hole

Data Sources



Data Sources and References

Data Sources

RV "Polarstern" cruises (Singlebeam):

ARK XVI/2, ARK XV/3, ARK XIV/2, ARK IX/3, ARK IX/2, ARK IX/1, ARK VII/2.

RV "Polarstern" cruises (Multibeam): ARK XIX/4, ARK XVIII/2, ARK XVIII/1,

ARK XV/2, ARK XIII, ARK XI/2, ARK X/1, ARK VIII/3, ARK VII/4, ARK IV/3, ARK IV/1, ARK III/3, ARK III/2, ARK II/4.

Geodas and NRL data

Data Editing

After the depths had been edited, contour lines with 50m intervals were generated. These contour lines were checked and then transferred to a raster. From of this DTM, contours with 20m interval were generated.

Data Processing

Depth editing, DTM modeling, GIS processing, and cartography by Thomas Hartmann.

Preferred Reference to this Map

Hartmann, T. & Klenke, M. (Eds.): AWI Bathymetric Chart of the Fram Strait 1:100,000. Sheet 581-12-4 (AWI BCFS 581-12-4), Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, 2004.

References

Geodas Volume 1, Version 4.1. U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA).

NRL: U.S. Naval Research Laboratory.

Vertical reference system: Mean sea level (MSL). Vertical datum: Instantaneous sea level.

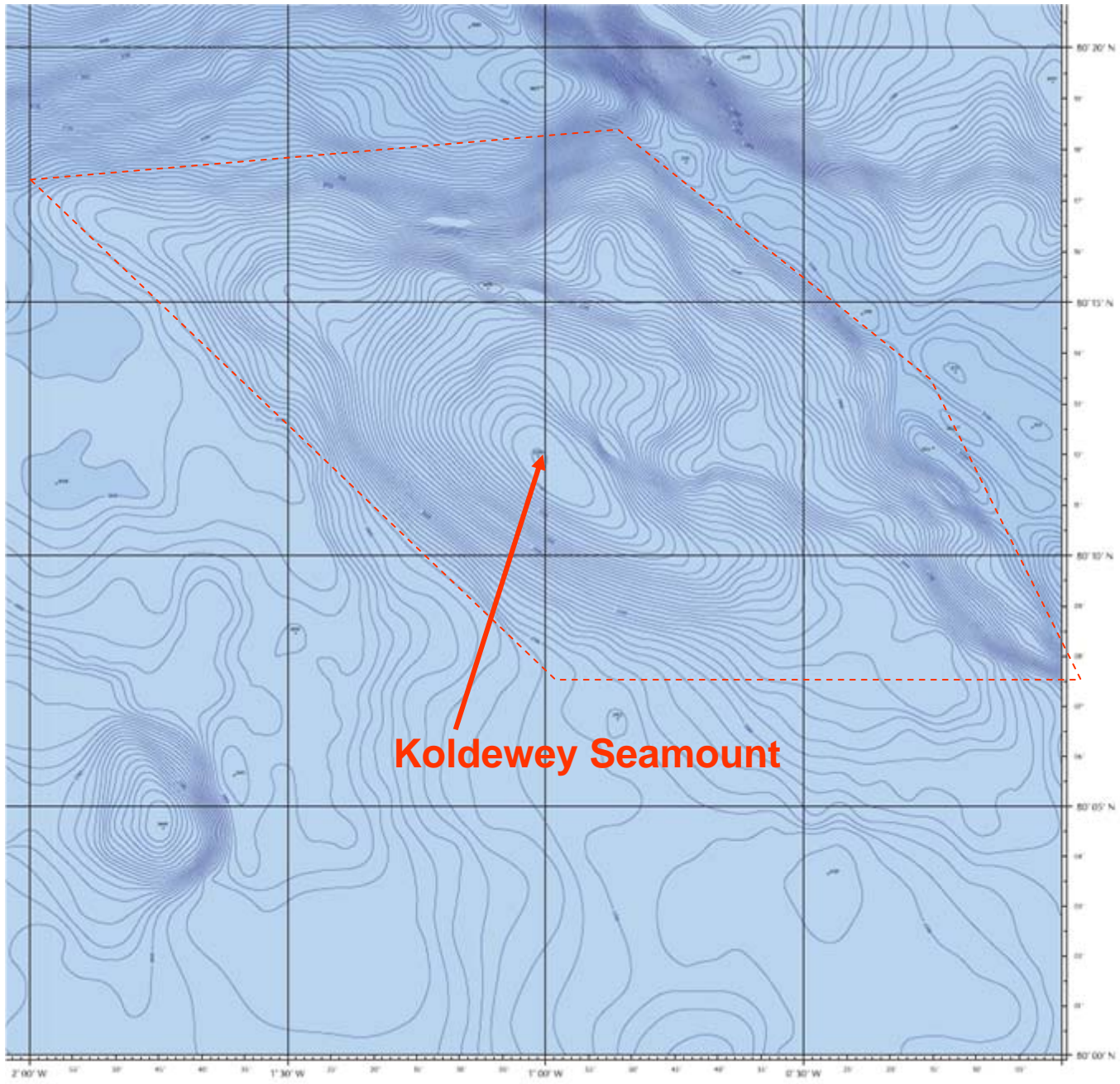
Depth is shown in meters assuming a sound velocity in water of 1500 m/s.

To achieve depth in feet multiply by 3.2808. To achieve depth in fathoms multiply by 0.5468.

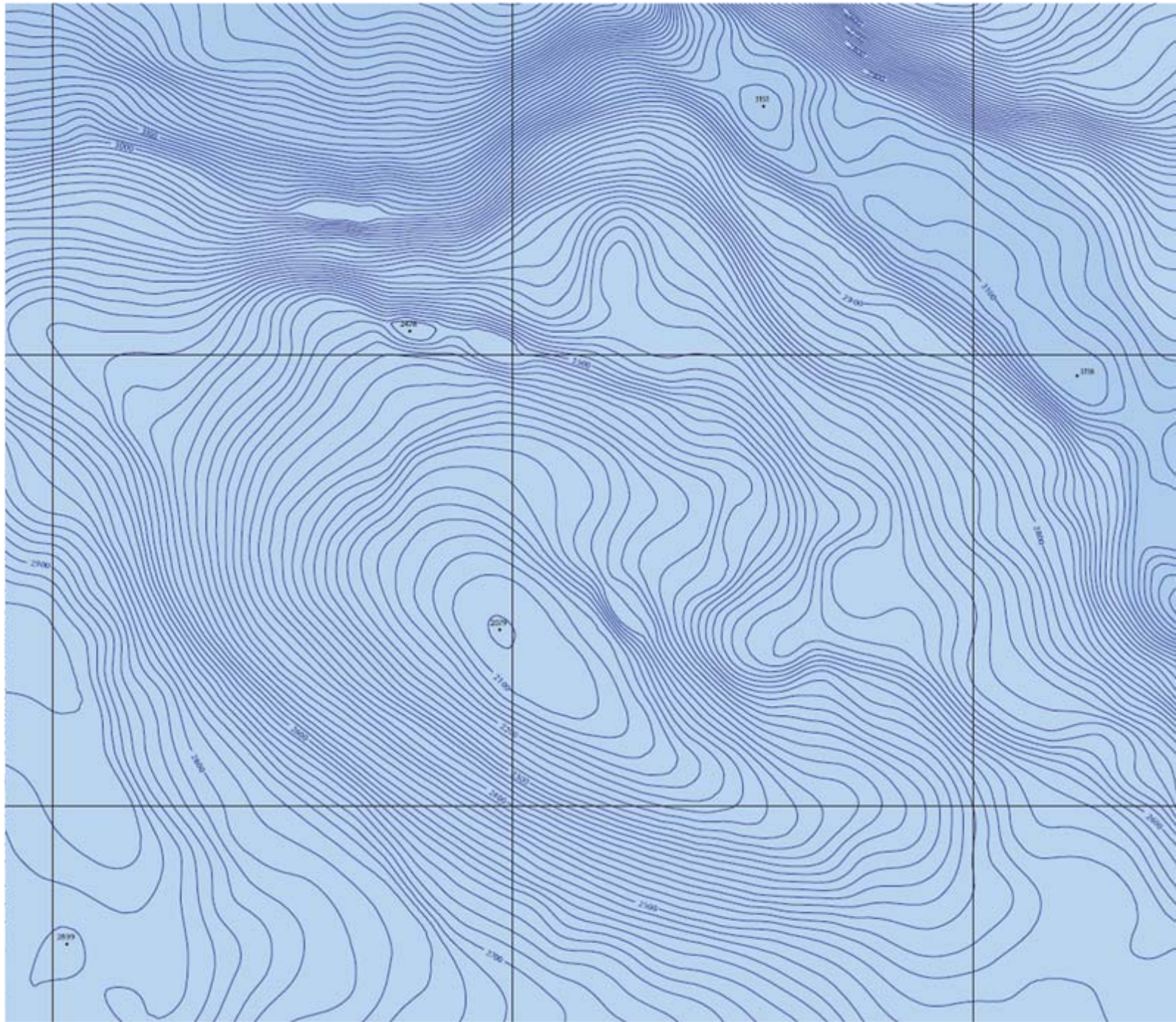
This product is not intended for navigational purposes.

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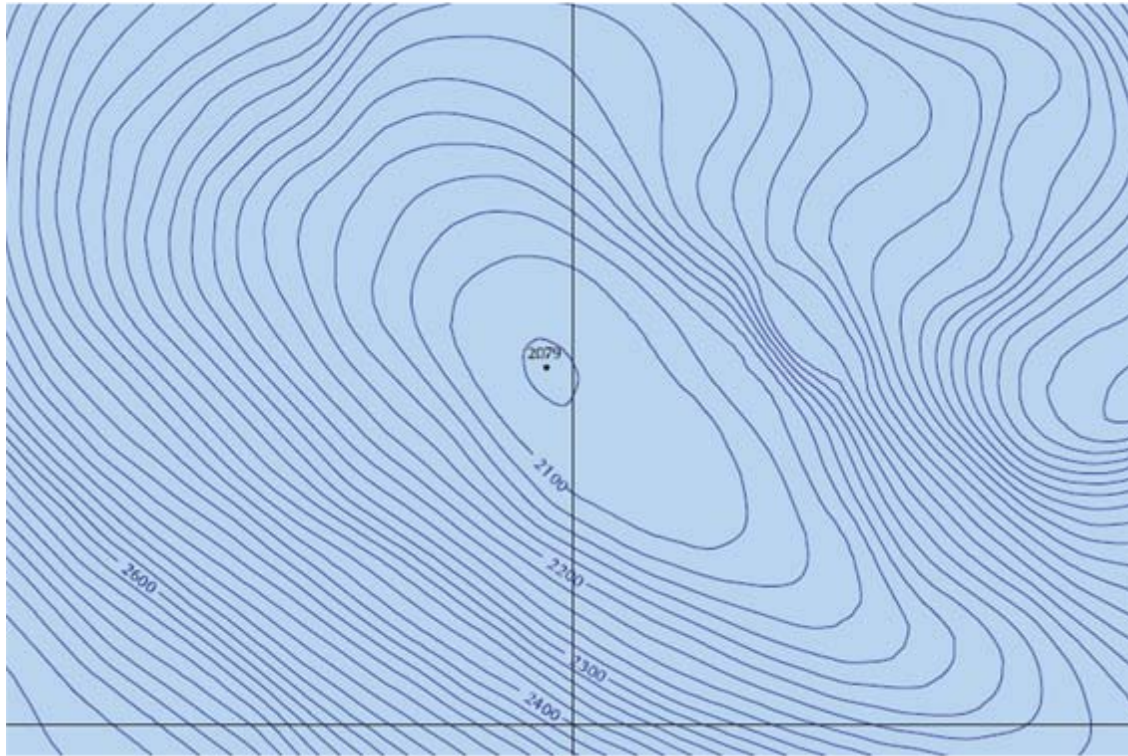
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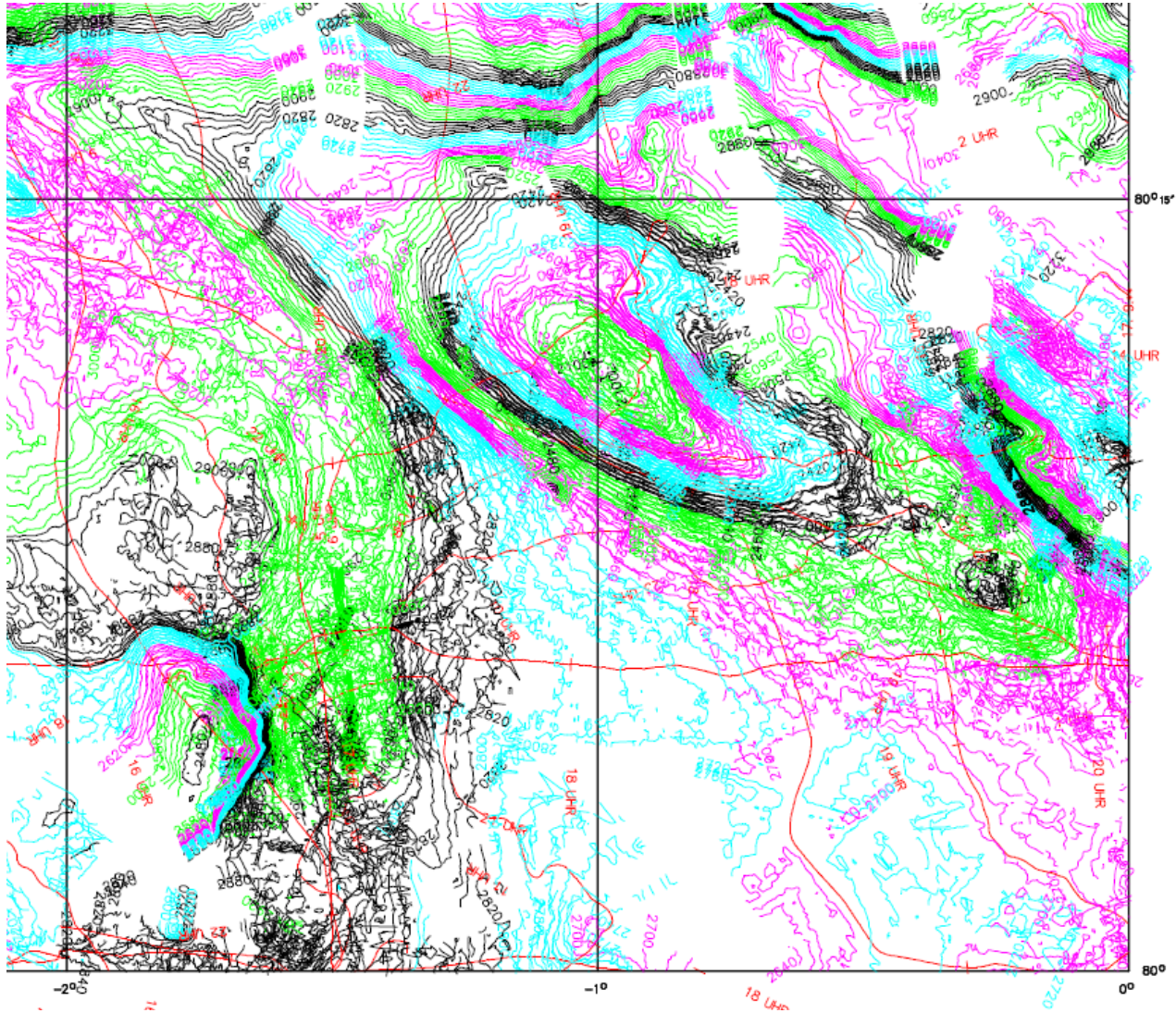
Koldewey Seamount



The top of Koldewey Seamount (2079 m)



Multibeam Survey of the Koldewey Seamount plus track lines from RV Polarstern



Multibeam Survey of the Koldewey Seamount plus track lines from RV Polarstern

