

UNDERSEA FEATURE NAME PROPOSAL
(Sea NOTE overleaf)

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

Name Proposed:	Varenius Hills	Ocean or Sea:	Arctic Ocean
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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)
	79°08' N	0°57' W
	79°11' N	1°01.8' W

Feature Description:	Maximum Depth:	2,600 m	Steepness :	10°
	Minimum Depth :	2,029 m/2,134 m	Shape :	Oval shape, conic form
	Total Relief :	~ 500 m	Dimension/Size :	20 km x 5 km

Associated Features:	Located 15 naut. miles NW of the Greenland-Spitsbergen Sill
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Chart/Map References:	Shown Named on Map/Chart:	581-20-04 (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):	Bernhard Varenius (1622-1650) wrote the first book of modern oceanography "Geographica Generalis"
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Discovery Facts:	Discovery Date:	May 2004
	Discoverer (Individual, Ship):	RV "Polarstern" T. Hartmann Expeditions ARK-IV/3 1987, ARK-XVIII/2 2002

Supporting Survey Data, including Track Controls:	Date of Survey:	
	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:	27 July 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:

The original proposal from 14 May 2004 is withdrawn, it is replaced by this name proposal

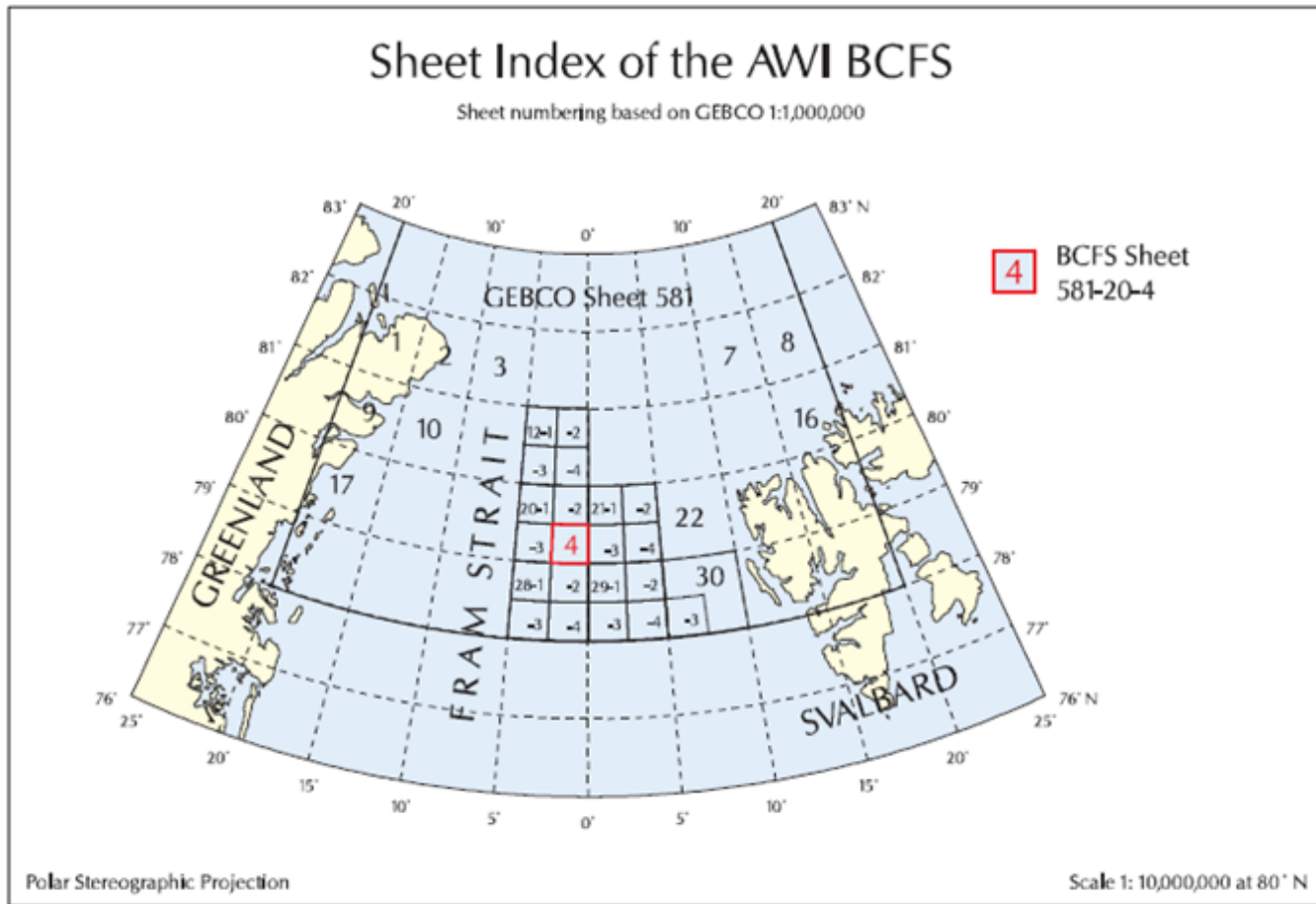
NOTE : This form should be forwarded, when completed :

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

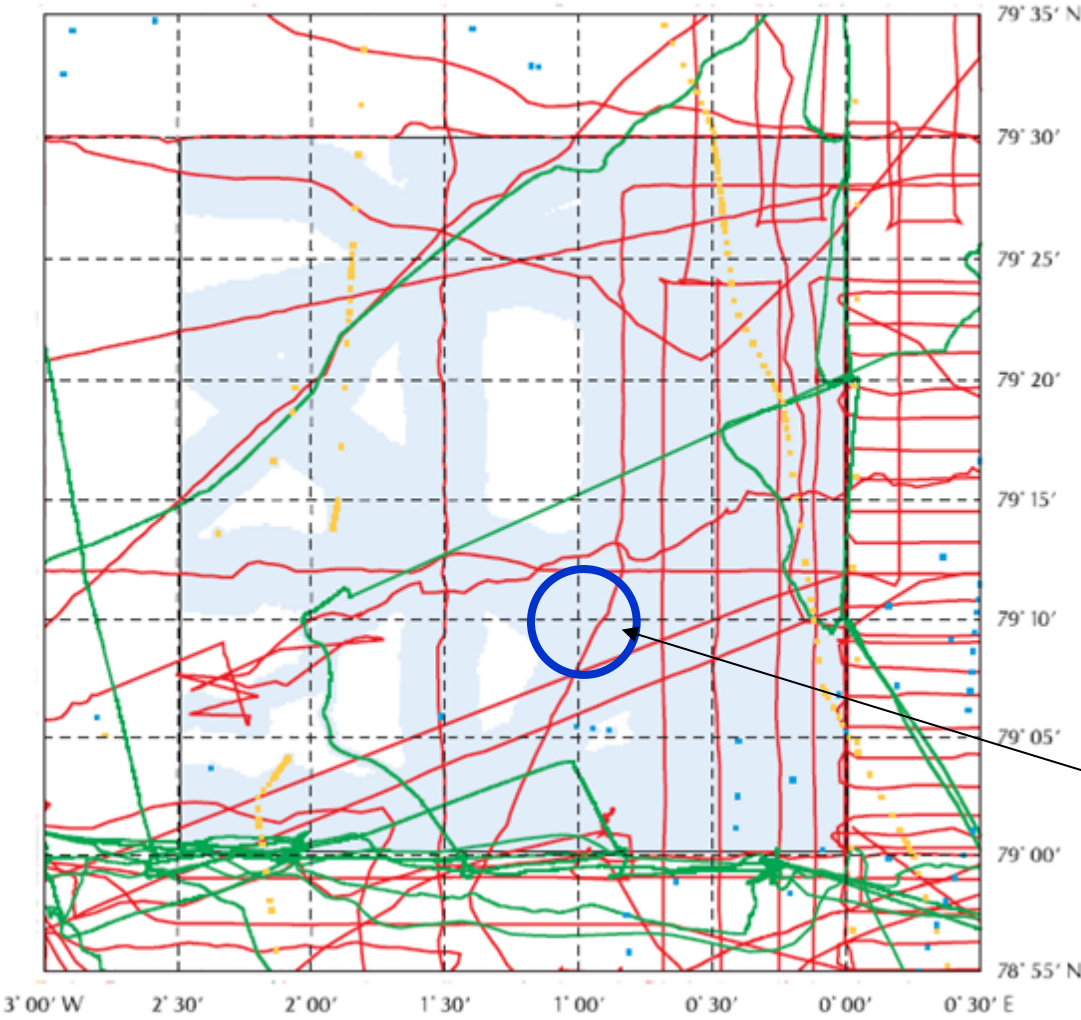
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AWI BCFS 581-20-4

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Data Sources



Covered Area

BCFS Sheet 581-20-4

Cruises

Multibeam

Singlebeam

Geodas Data

NRL Data

Varenus Hills

Mercator Projection

Scale 1:700,000 at 79° N

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 581-20-4 (AWI BCFS 581-20-4), 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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Undersea Feature Name:
Varenius Hill

R/V Polarstern Tracks

- arkxviii2
- arkiv3

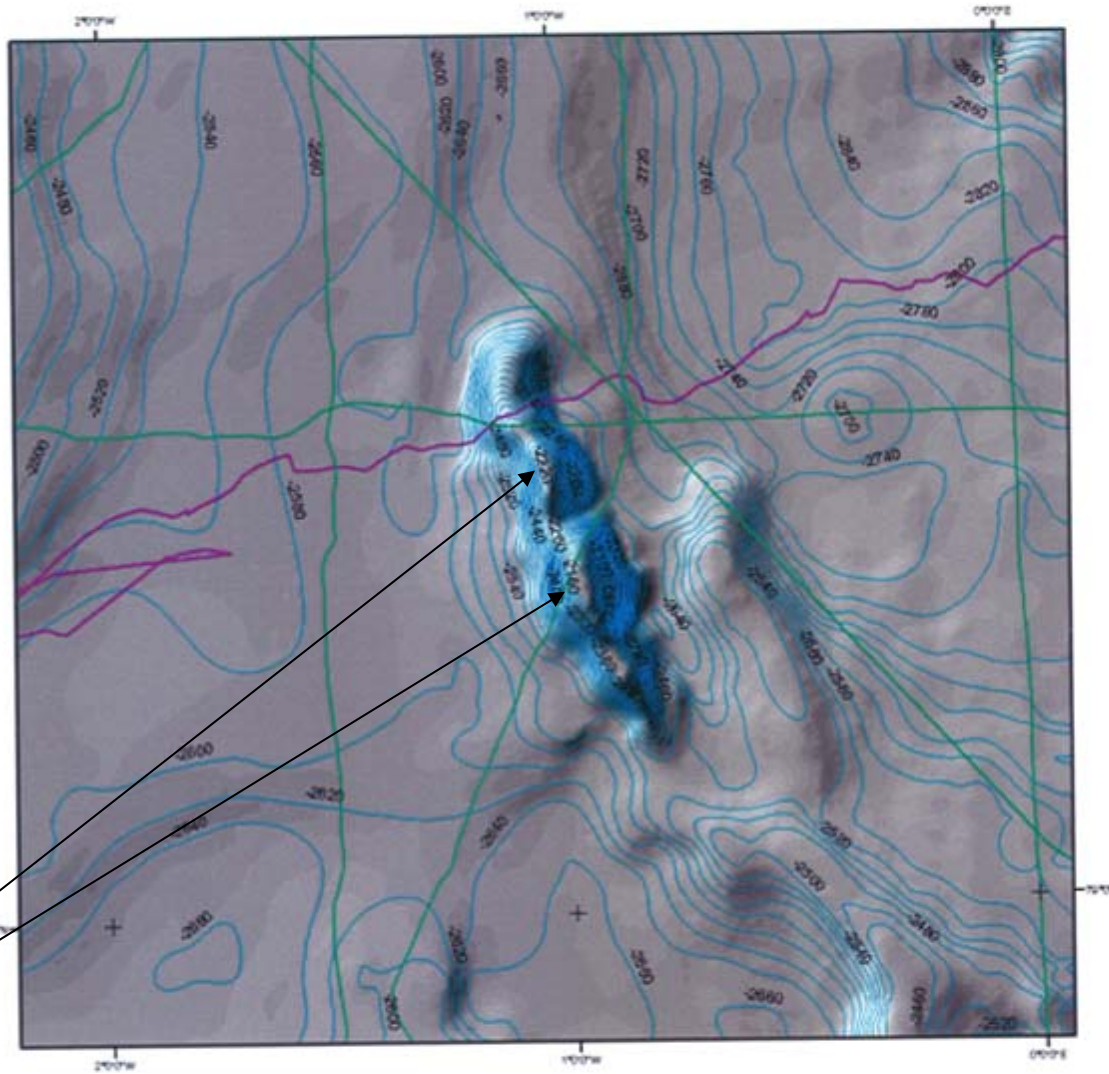
Hillshade



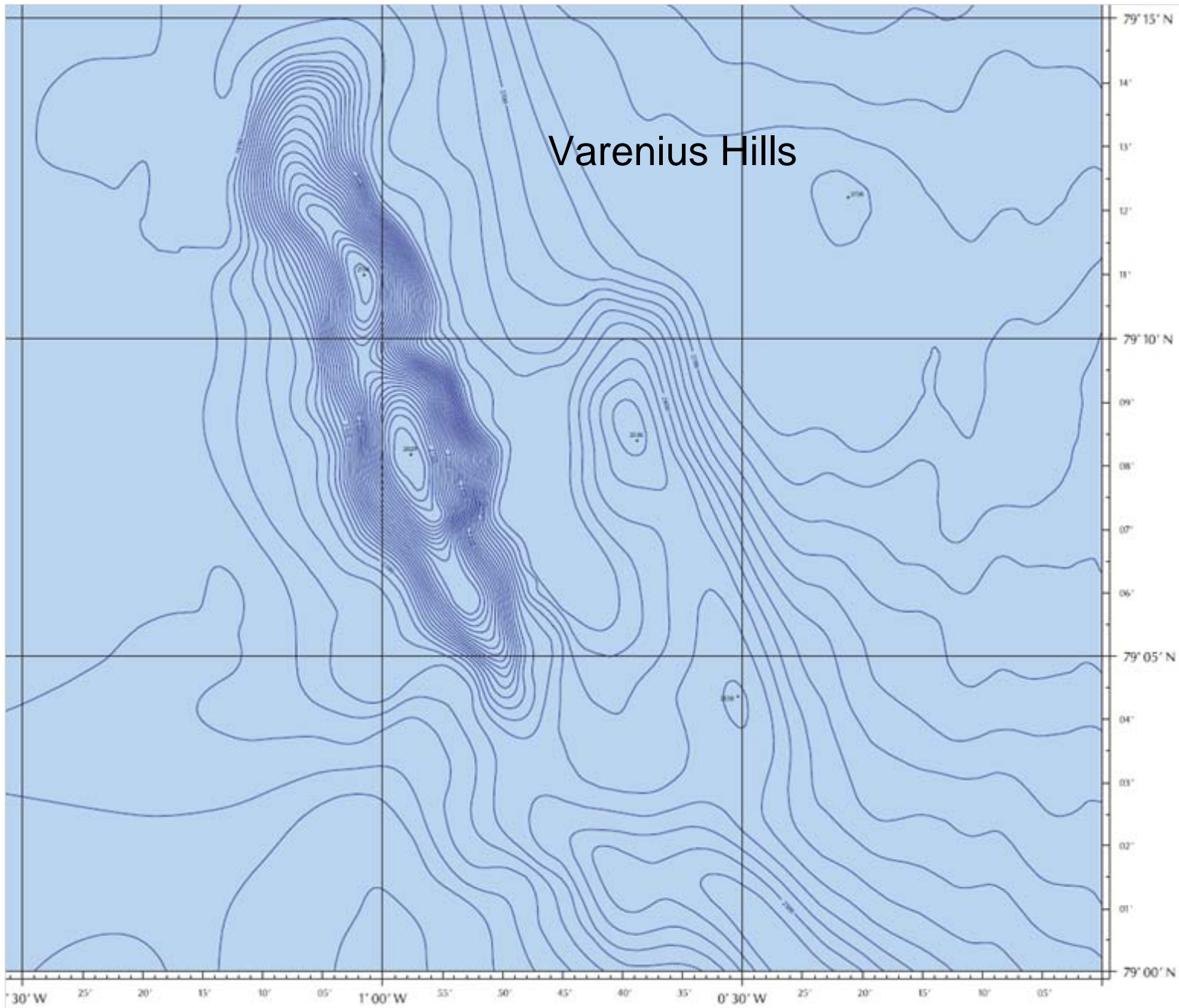
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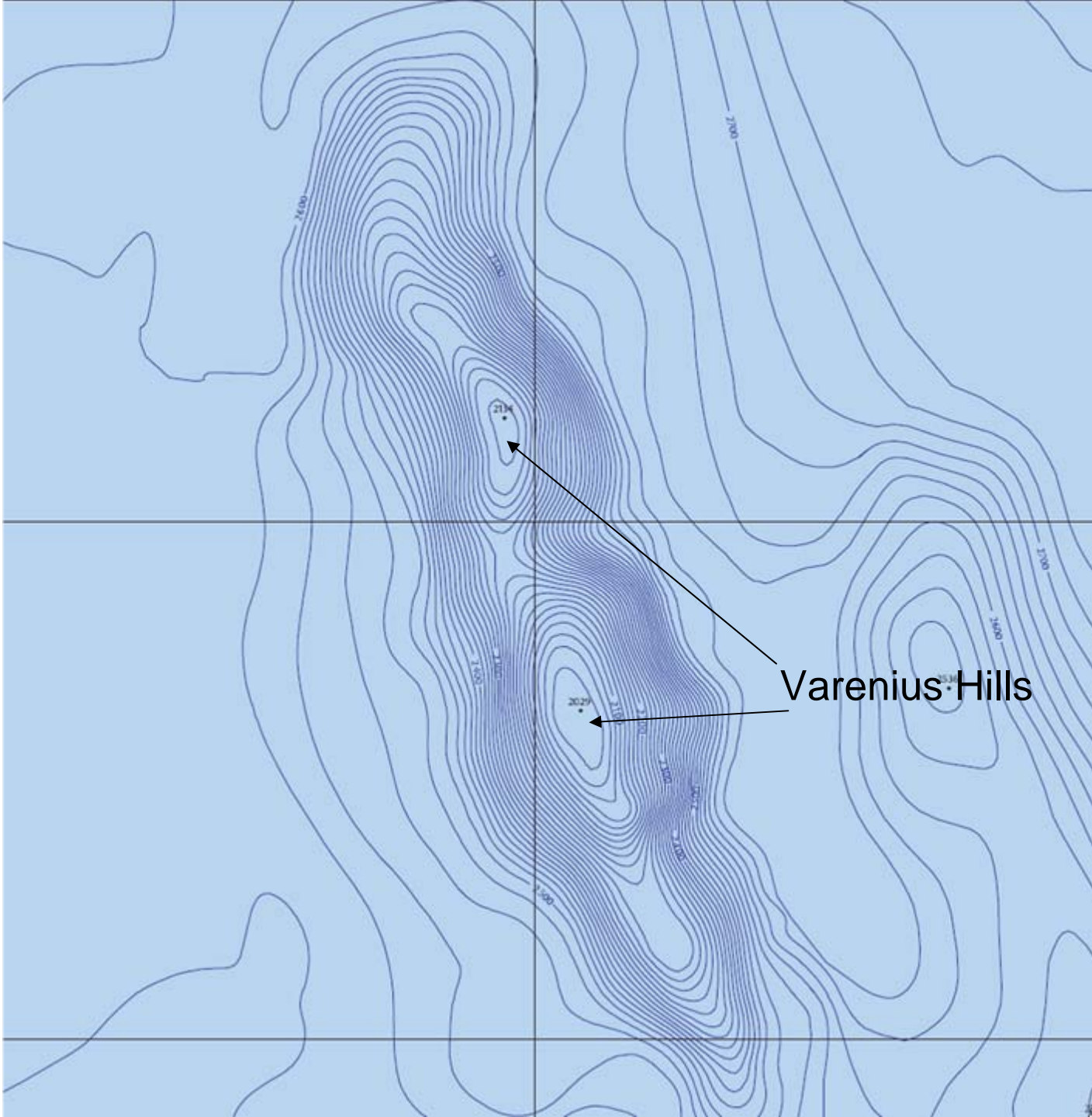
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Contour Interval: 20m



Varenius Hills





Varenius Hills

