INTERNATIONAL HYDROGRAPHIC ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

IHO/IOC Form No. 1

UNDERSEA FEATURE NAME PROPOSAL

(See NOTE overleaf)

Ocean or Sea: Scotia Sea Name proposed: Schrick Knoll

Coordinates : **A** - of midpoint or summit : Lat. 55°22'21" S , Long. 42°39'07" W

_____ kilometres in _____ direction from _____

and/or **B** - extremities (if linear feature) :

Lat. _____ } to { Lat. _____
Long. _____ } to { Long. _____

Description (kind of feature) : Knoll

Identifying or categorizing characteristics (shape, dimensions, total relief, least depth, steepness, etc.):

Shape: circular shape Dimensions: about 3.5 km diameter (1.9 M)
Total relief: 2750 to 2020 m Least depth: about 2020 m
Characterized by a rather circular shape, suggesting a vulcano

Associated features :
Feature partially is surrounded by moat. Larger seamount at SW, steep slope and deep in N and NE.
Feature shows a circular and conical shape, shape suggests a submarine volcano.

Chart reference :
Shown with name on chart No. : none
Shown but not named on chart No. : unknown
Not shown but within area covered by chart No. : 511 GEBCO Plotting Sheet 1,000,000

Reason for choice of name (if a person, state how associated with the feature to be named) : Karl Wilhelm Schrick
The professional domain of this person: Position determination at sea, hydrography.
Association: to professional work: Schrick was member of the German Hydrographic Office (Deutsches Hydrographisches Institut), in Hamburg, Germany for more than 20 years, his last position was the Technical Officer and Director for Hydrography and Data Processing. Schrick was involved in position determination at sea, navigation, and hydrography.
The feature lies within an area which is covered by boxed survey of precise swath data of good quality for navigation and sounding data; thus it is an appropriate feature to carry a name in relation to precise hydrography.

Short biography of person (at November 1999):

Prof. Dr.-Ing. Karl Wilhelm Schrick - 26 February 1921 born in Meinerzhagen (30 km NE of Cologne), Germany; retiree in about 1981, living in Hamburg.

Professional activities:

1953 Ph.D. at the university Bonn, Germany. 1953-1958 Research Associate at the Observatory Bonn, Germany; 1958 at Boyden Observatory, Bloemfontein, South Africa; 1958-1967 Technical Officer for Geodetic Astronomy at the Institut fuer Angewandte Geodäsie (IFAG, Institute of Applied Geodesy), Frankfurt am Main, Germany; 1967 - 1977 Technical Officer for Navigation at DHI (Deutsches Hydrographisches Institut, German Hydrographic Office), Hamburg, Germany; 1977-???? (about 1981) Technical Officer and Director for Hydrography and Data Processing at DHI.

Lecturer:
1962-1967 "Astronomy" at the University Mainz, Germany; 1967- ca.1981 "Geodetic Astronomy" and "Positioning at Sea" at the University Hannover, Germany.

Publications inter alia:
Astronomy (1953), Chronometer and position determination by optical measurements of star passages (1959-1973), by Loran C (1970), by artificial satellites (1970), Radio navigation methods in hydrography (1970, 1971), Applied Kalman filter technique (1977), Status of hydrography (1988).

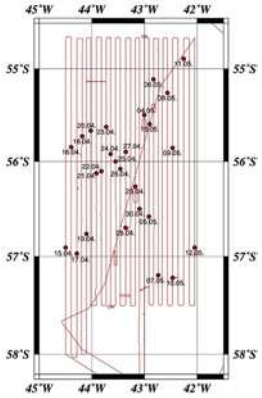
Address:
Schrick, Prof. Dr.-Ing. Karl Wilhelm, Gaensestieg 18, D-22549 Hamburg, Germany.

Discovery facts :
Date 14 April 2005 – 17 May 2005 by (individuals or ship) Research Vessel “Polarstern”
By means of (equipment) : Mapping of swath sonar measurement and compilation of boxed survey
Navigation used : GPS Two frequencies Trimble plus other data (gyro, inertial etc.)
Estimated positional accuracy in nautical miles : 10 m to 30 m (0.005 M to 0.016 M)

Description of survey (track spacing, line crossing, grid network, etc.) : boxed survey

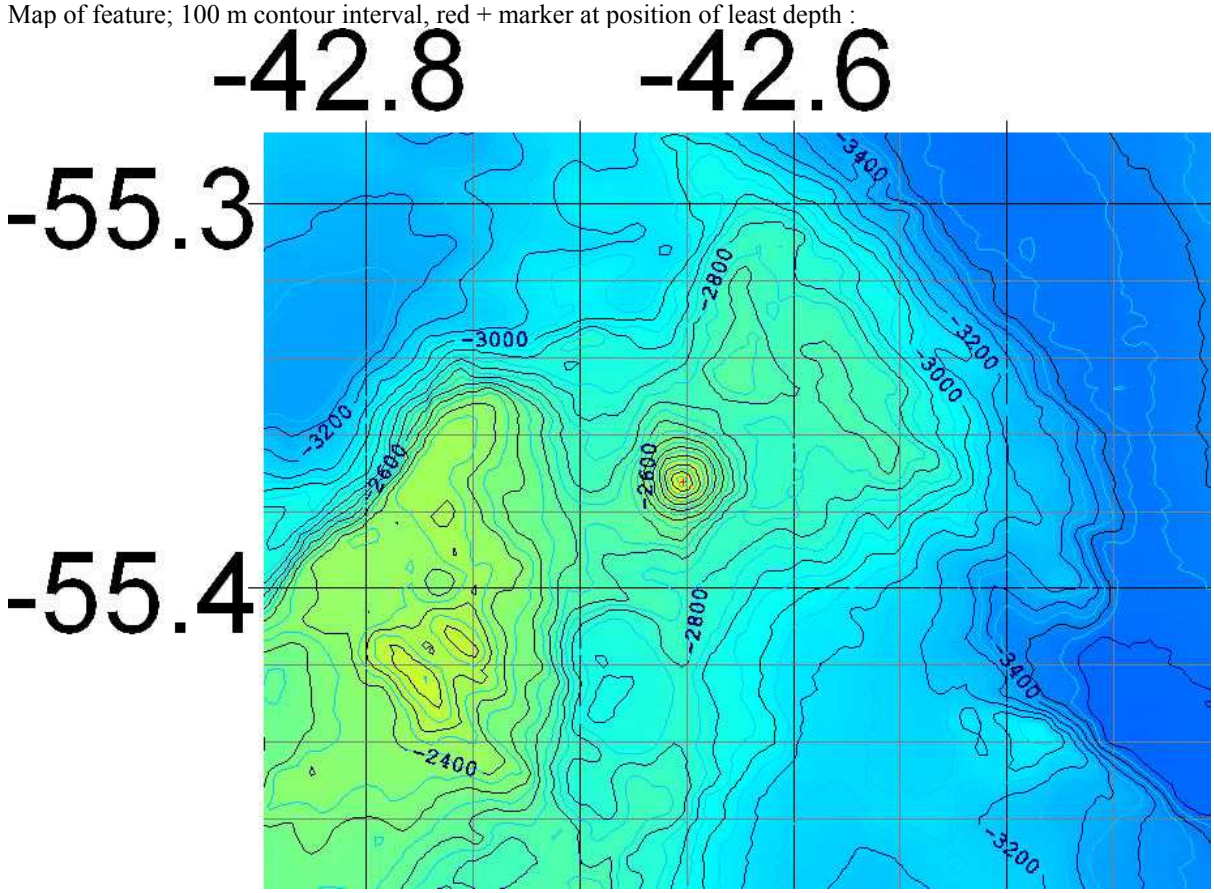
Nature and repository of other survey activities (dredge samples, cores, magnetics, gravity, photographs, etc.) : geophysics: magnetics (ship-born; partially plus helicopter-born magnetics), gravity; oceanography: XBT, CTD; geology: cores

Supporting material : enclose, if possible, a sketch map of the survey area, profiles of the features, etc., with reference to prior publication, if any :
Publication/s: not yet published.
Report about the Antarctic expedition ANT XXII/4 of the research vessel "Polarstern" in 2005 will be published soon; Berichte zur Polarforschung / Reports on Polar Research, Bremerhaven, 2006.
Track plot (also separate files, file names: ANTXXII-4-Kursplot.jpg, ANTXXII-4-Profile.jpg):

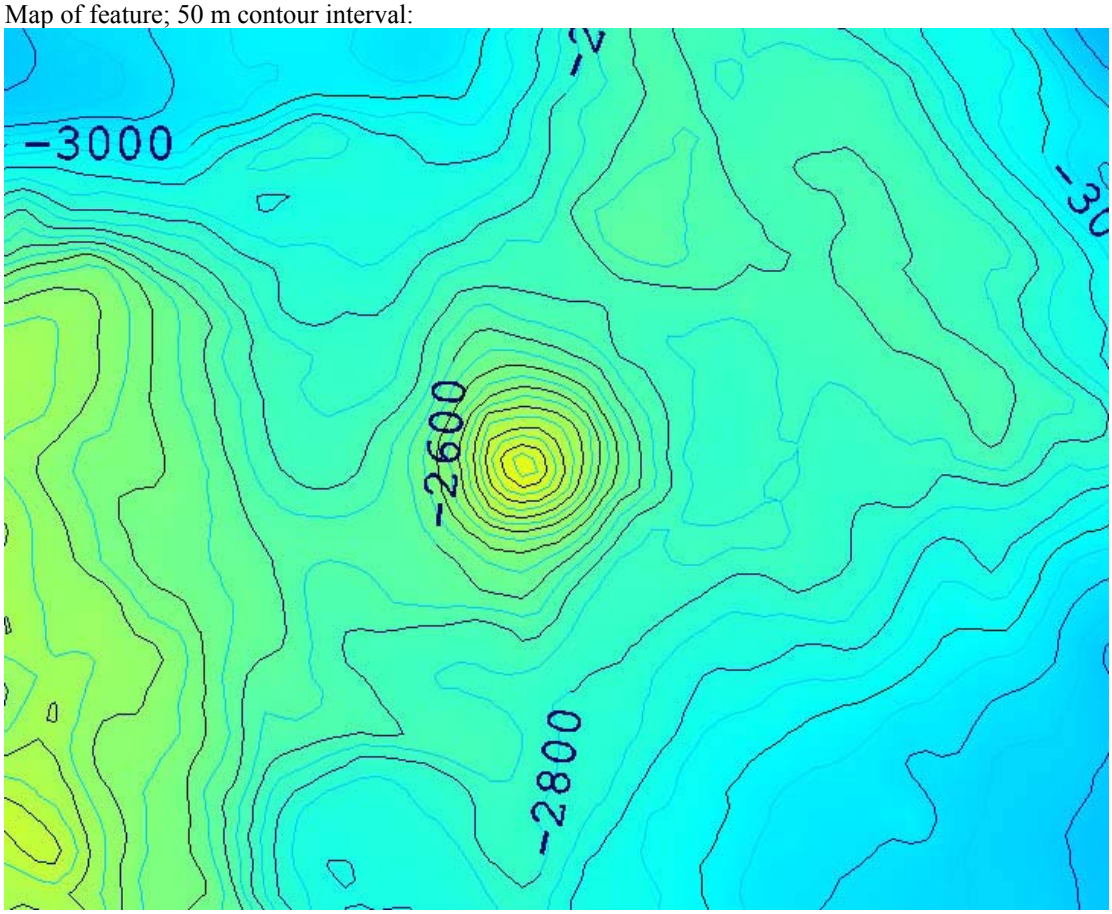


Maps etc. are produced from a DTM of about 300 m grid distance by Surfer and/or Fledermaus software (Golden Software; IVS)); higher resolutions and interpolation (e.g. Delaunay triangulation of swath data) will be processed by AWI soon.

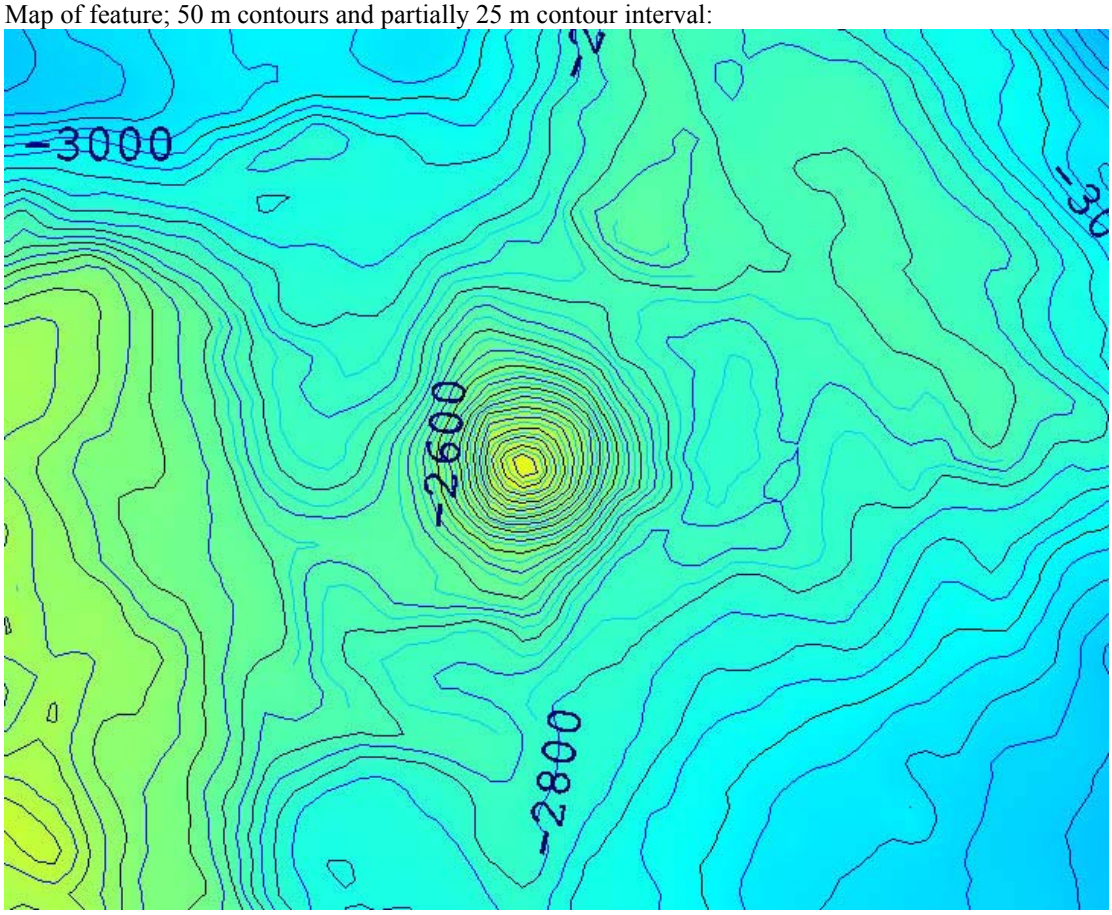
Map of feature; 100 m contour interval, red + marker at position of least depth :



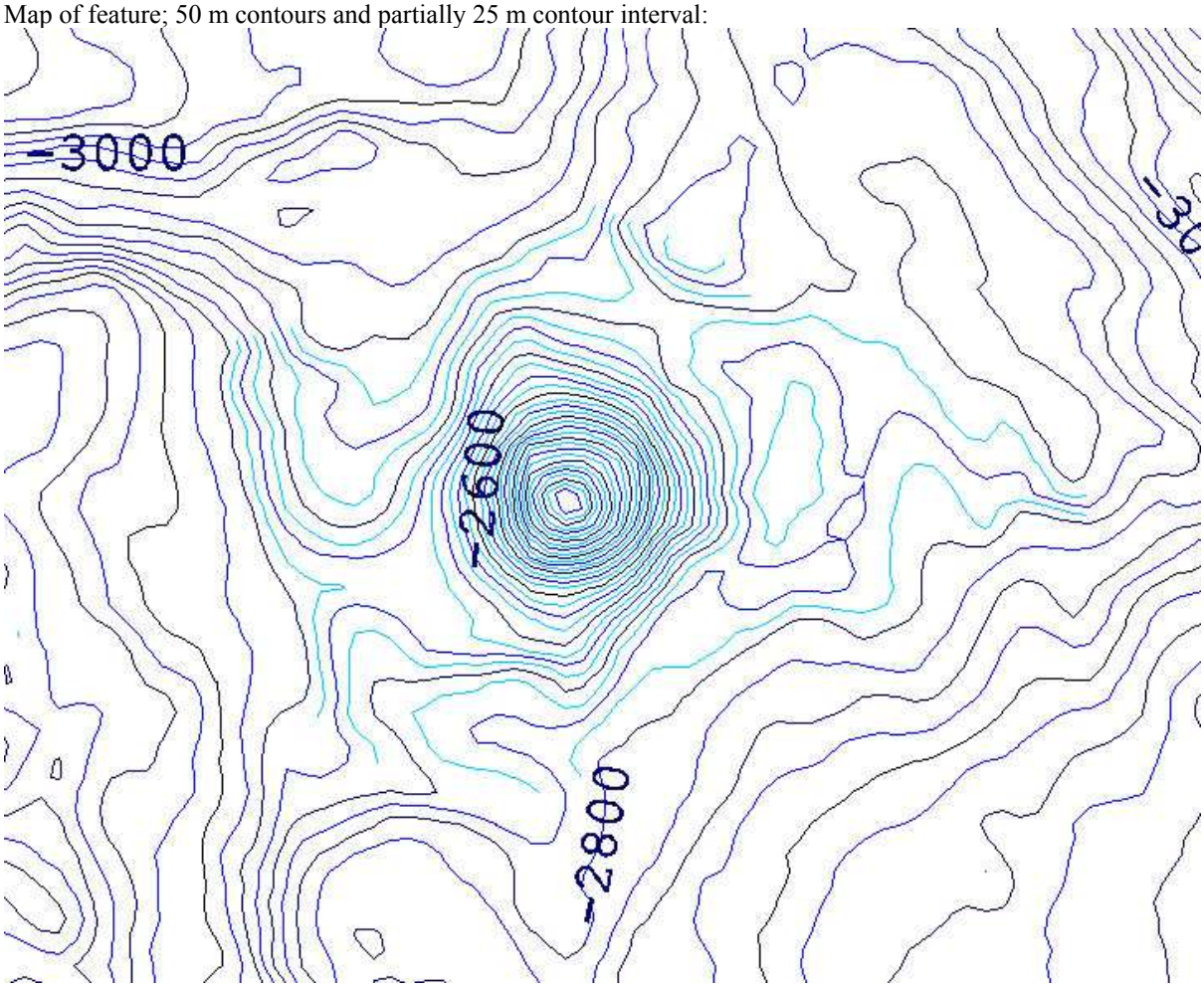
Map of feature; 50 m contour interval:



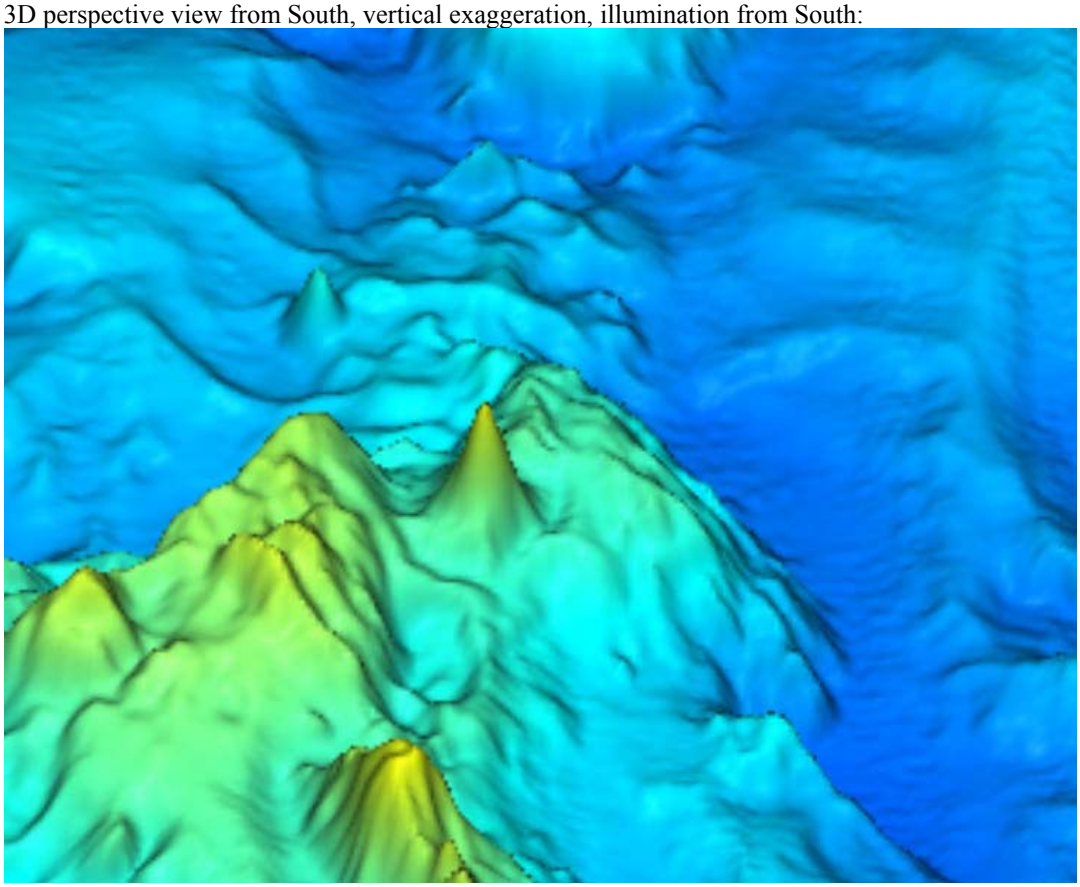
Map of feature; 50 m contours and partially 25 m contour interval:



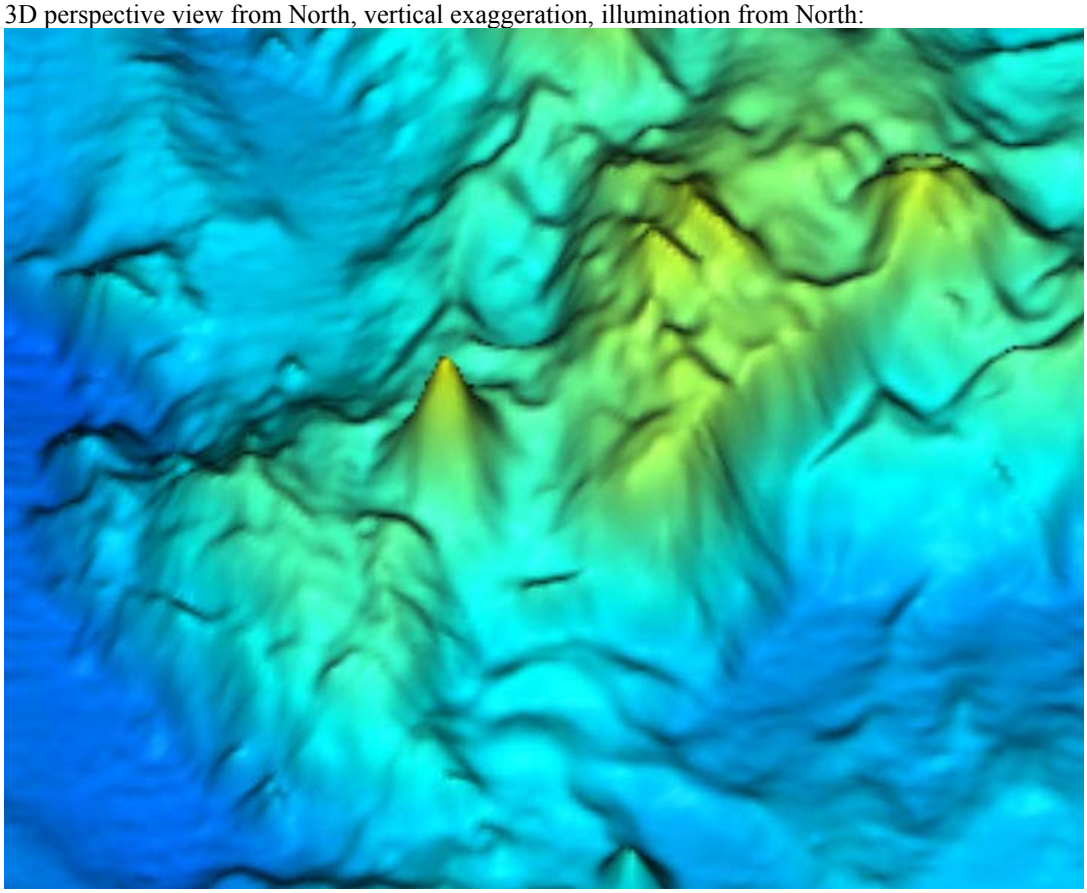
Map of feature; 50 m contours and partially 25 m contour interval:



3D perspective view from South, vertical exaggeration, illumination from South:



3D perspective view from North, vertical exaggeration, illumination from North:



Submitted by : Dr. Heinrich Hinze
Date : 9 May 2006
Address : AWI, Van Ronzelen Str. 2, D-27568 Bremerhaven, Germany

Concurred in by (if applicable) :

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Address :

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National Authority (if any) : Alfred Wegener Institute for Polar and Marine Research (AWI)
Address : AWI, D - 27515 Bremerhaven, Germany

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NOTE : This form should be forwarded, when completed :

a) **If the undersea feature is located in territorial waters** :-
to your "National Authority for Approval of Undersea Feature Names" or, if this does not exist or is not known, either to the International Hydrographic Bureau or to the Intergovernmental Oceanographic Commission (see addresses below);

b) **If the undersea feature is located in international waters** :-
to the International Hydrographic Bureau or to the Intergovernmental Oceanographic Commission, at the following addresses :

International Hydrographic Bureau
4, quai Antoine 1er
B.P. 445
MC 98011 MONACO CEDEX
Principality of MONACO
Fax: +377 93 10 81 40
E-mail: info@ihb.mc

Intergovernmental Oceanographic Commission
UNESCO
Place de Fontenoy
75700 PARIS
FRANCE
Fax: +33 1 45 68 58 12
E-mail : info@unesco.org

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