

UNDERSEA FEATURE NAME PROPOSAL

(See NOTE overleaf)

Ocean or Sea: Scotia Sea

Name proposed: Hinz Seamount

Coordinates : A - of midpoint or summit : Lat. 56° 00' 55" S , Long. 42° 40' 00" W

_____ kilometres in _____ direction from _____

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

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

Description (kind of feature) : Seamount

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

Shape: conical, circular shape Dimensions: 7 M (13 km) diameter for seamount,
Total relief: 3500 to 2400 m Least depth: about 2400 m
Characterized by a local deep of about 100 m at the top

Associated features : moat: 8 M (15 km) diameter incl. moat region

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 F. Hinz

The professional domain of this person: Marine geology and geophysics

Association: due to professional work, Karl Hinz also did survey work within the Scotia Sea region.

The feature lies within an area which demands further geophysical research to study the geo-tectonics of the seafloor; thus it is an appropriate feature to carry a name in relation to marine geophysics.

Short biography of person (at September 1999):

Prof. Dr. Karl F. Hinz 1934 born in Klebow, Germany (12 April 1934); 1999 retired

Education:

1953 - 1958 Study of geology at the Humboldt University, Berlin, Germany

1962 - 1964 Advanced study of geophysics and geology at Bergakademie, Clausthal, Germany

Ph.D. in Geophysics / Marine Geology

Professional career and experience:

1958 - 1974 Research scientist at VEB Erdöl & Erdgas, the Geological Survey of Lower Saxony, Germany, and at the Federal Institute for Geosciences and Natural Resources (BGR), Hannover, Germany.

1975 - 1985 Head of Sub-Division Exploration Geophysics at the BGR.

1985 - 1999 Appointment to Director and Professor at the BGR; Head of Sub-Division Marine Geophysics and Polar Research (1985 - 1992); Head of Division Geological and Geophysical Research at the BGR, Hannover, Germany.

Participation in 48 marine expeditions designed to study aspects of geodynamics, plate tectonics, resources and methodical and technical development. Karl Hinz also did research in the Scotia Sea region.

Miscellaneous International Scientific and Advisory Functions.

1968 – 1999 Member of several Advisory Panels and Working Groups of the International Deep Sea Drilling Project/Ocean Drilling Program (DSDP/ODP); Advisor of CCOP (1973 - 1998); Member of the Scientific Committee of IGCP (1987 - 1990); Member of the Editorial Board of Marine and Petroleum Geology.

1997 Member of the UN Commission on the Limits of the Continental Shelf

Publications 140 on different aspects of marine geosciences

Affiliation (until retirement in 1999): Federal Institute for Geosciences and Natural Resources - Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Hannover, Germany.

Over the last 20 years, geoscientific research has demonstrated the presence of a variety of continental margins, which can be grouped into three major categories (Karl Hinz made many substantial contributions to these topics):

- (a) Convergent continental margins are formed along plate boundaries linked to active and inactive subduction zones.
- (b) Rifted (extensional, passive, divergent) continental margins represent a transition zone between continental and oceanic lithosphere.
- (c) Sheared continental margins are found where major oceanic fault zones intersect continental margins.

CV etc. from: PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON TECHNICAL ASPECTS OF MARITIME BOUNDARY DELINEATION AND DELIMITATION (including UNCLOS Article 76 Issues), International Hydrographic Bureau, Monaco, 8-9 September 1999, URL: www.gmat.unsw.edu.au/ablos/ABLOS99Folder/ablos99proc.pdf

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

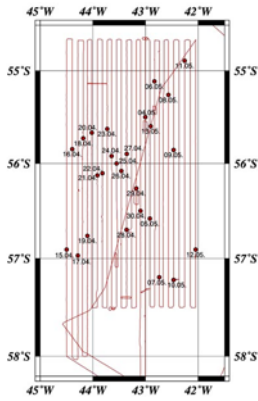
Nature and repository of other survey activities (dredge samples, cores, magnetics, gravity, photographs, etc.) : geophysics: magnetics (ship-born; partially plus helicopter-born magnetics), gravity; oceanography: XBT, CTD; geology: cores

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.

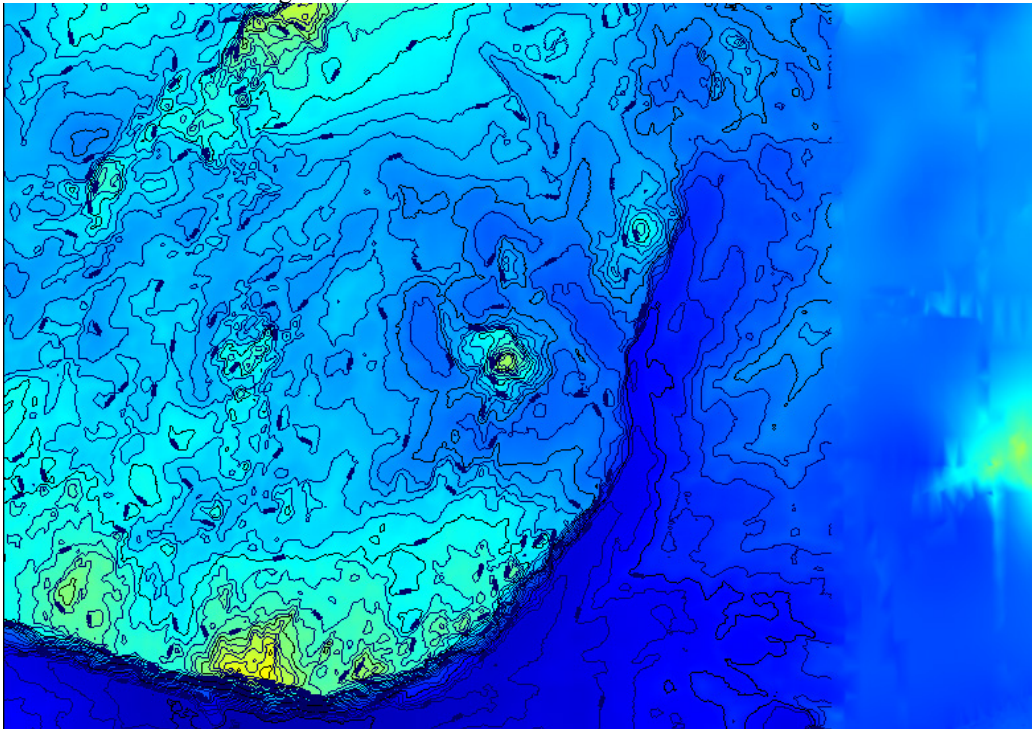
Report about the Antarctic expedition ANT XXII/4 of the research vessel "Polarstern" in 2005 will be published soon; Berichte zur Polarforschung / Reports on Polar Research, Bremerhaven, 2006.

Track plot (also separate files, file names: ANTXXII-4-Kursplot.jpg, ANTXXII-4-Profile.jpg):

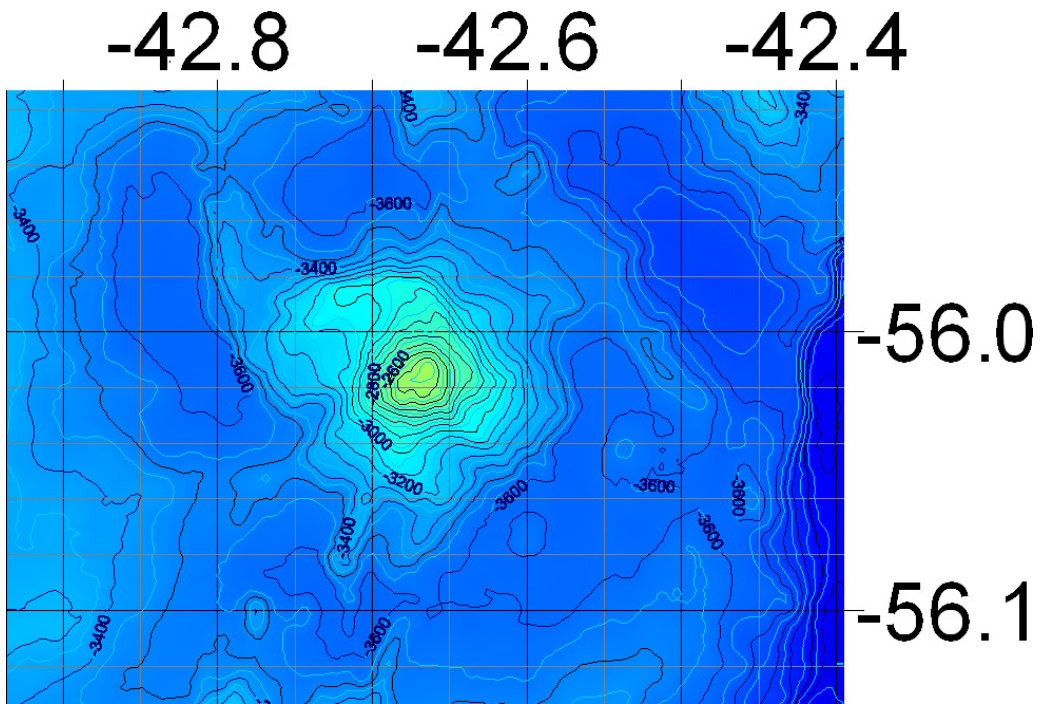


Maps etc. are produced from a DTM of about 300 m grid distance by Surfer and/or Fledermaus software (Golden Software; IVS); higher resolutions and interpolation (e.g. Delaunay triangulation of swath data) will be processed by AWI soon.

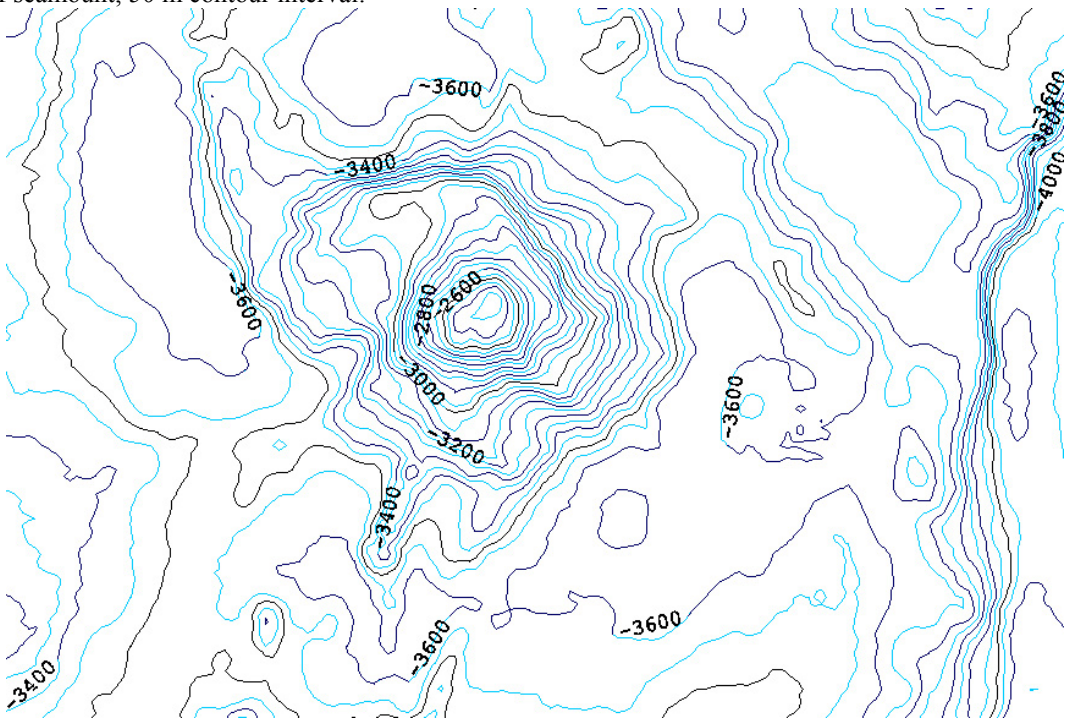
Map of seamount and surrounding area; 100 m contour interval:



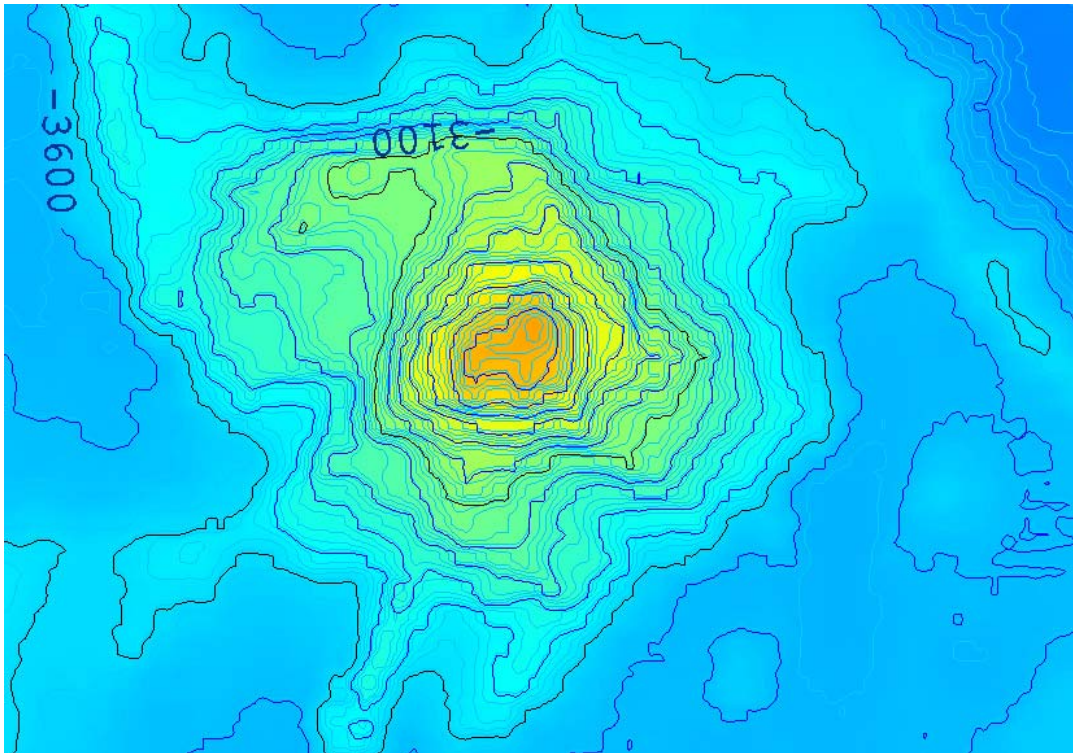
Map of seamount; 50 m contour interval:



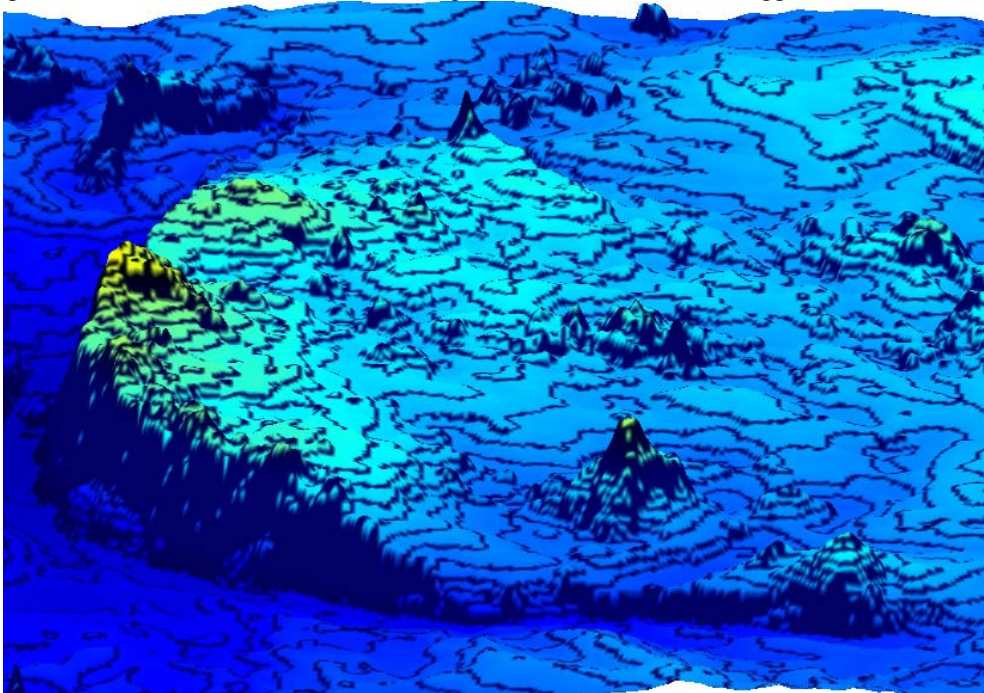
Map of seamount; 50 m contour interval:



Map of seamount; 25 m contour interval:



3D perspective view of seamount and surrounding area from East, vertical exaggeration:



Submitted by : Dr. Heinrich Hinze

Date : 9 May 2006

Address : AWI, Van Ronzelen Str. 2, D-27568 Bremerhaven, Germany

Concurred in by (if applicable) :

Address :

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

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 1^{er}
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
