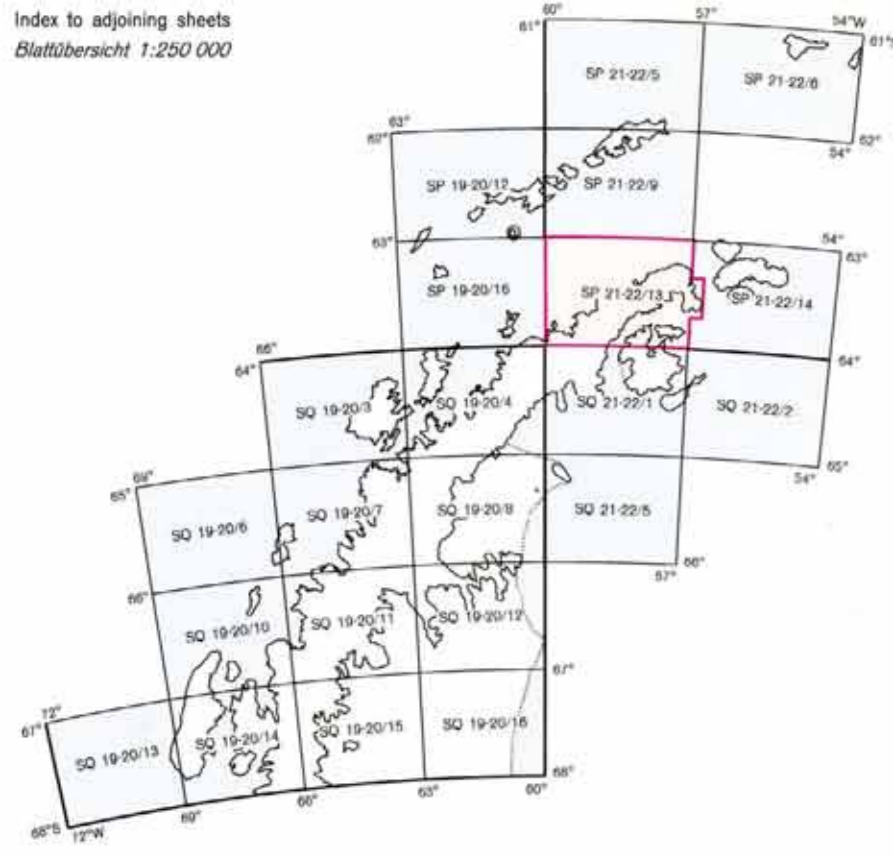


Index to adjoining sheets
Blattübersicht 1:250 000

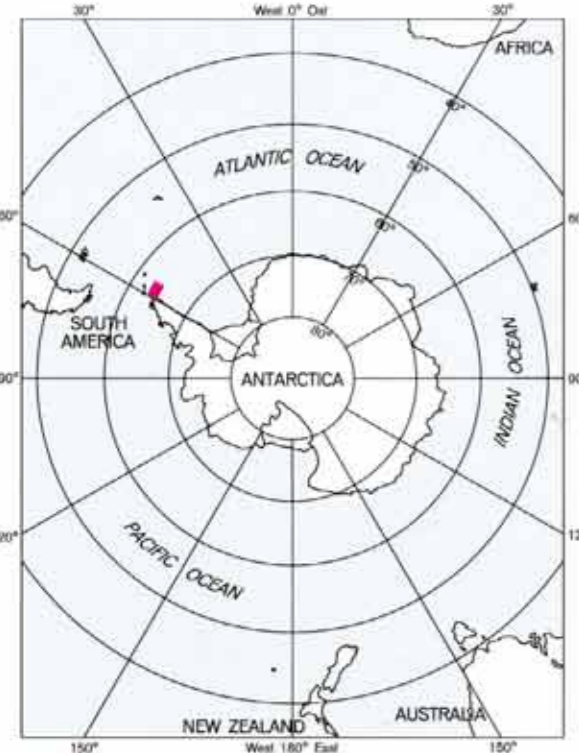


Sheet numbering system based on International Map of the World 1:1 000 000
Blattbezeichnung nach Internationaler Weltkarte 1:1 000 000

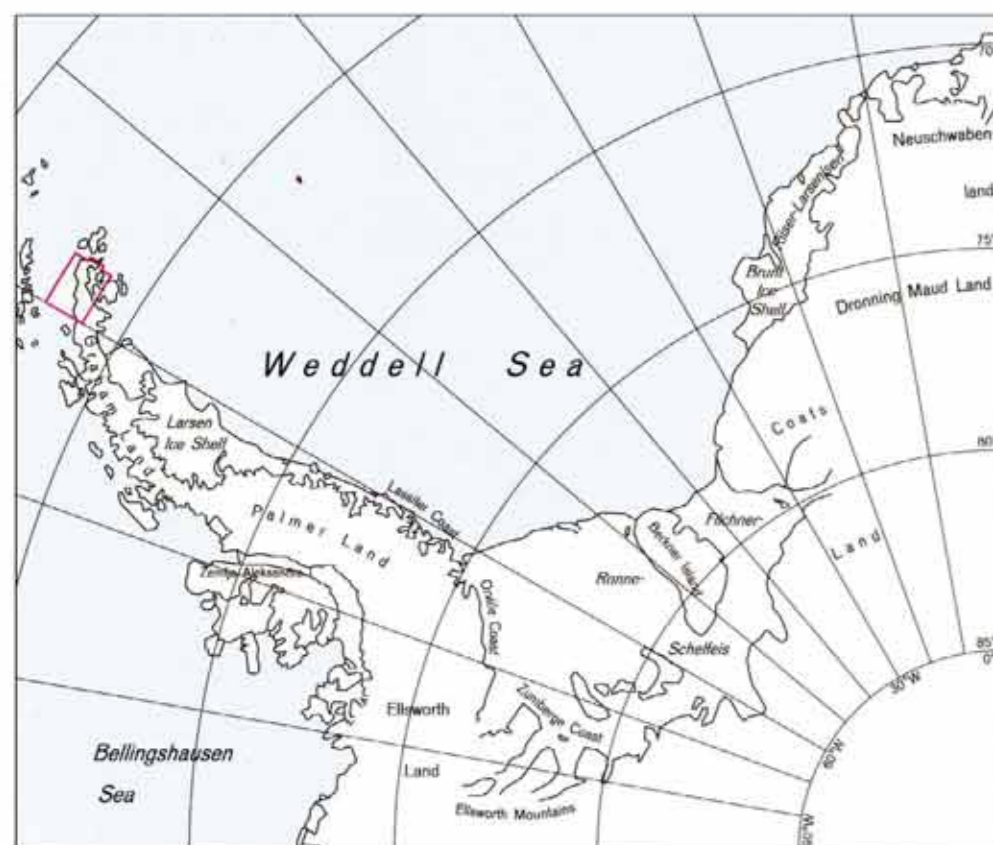
Sheet numbering system 1:250 000
Blattbezeichnung 1:250 000

British Antarctic Survey, Cambridge, UK
Institut für Angewandte Geodäsie, Frankfurt am Main, Germany

Location diagram
Lage diagramm



Geographical names diagram
Geographische Namensübersicht



Satellite image mosaic / Satellitenbildmosaik

The image mosaic of this map consists of four Landsat TM scenes (see diagram) digitally merged at their edges by grey level assimilation. The four scenes are part of a block of 41 Landsat TM scenes covering the whole Antarctic Peninsula (from about 62°S to 76°S). All images were assembled geometrically into a single block by means of image block triangulation: 78 ground control points and 433 homologous points ('tie points') in the overlapping parts of adjacent scenes were identified and measured on the imagery. Standard deviations σ_x and σ_y of the coordinates of these adjusted tie points, and of the ground control used, are about ± 75m.

Ground control / Geländefestpunkte

The ground control used for the image mosaicking was positioned by a terrestrial survey network acquired between 1944 and 1976 and by Doppler satellite positioning carried out by British and American field survey campaigns in 1976-79. All data were fitted together by means of a least square adjustment. Standard deviations σ_x and σ_y of this adjustment for the ground control is ± 11 m.

Elevation / Höhen

Contours and spot heights were derived from published maps^{1,2,3} (see 'Sources used for map compilation'). Systematic position errors on the 1:250 000 scale source maps^{1,2} were corrected by fitting the contours and spot heights interactively to the topography visible on the satellite image mosaic. It is possible that, in some areas, the reliability of contours may be no better than ± 100 m in height.

Topography / Topographie

In the south-eastern part of the map, topographic features were taken from a recently published map⁴. In the area not covered by this map such features were interpreted and classified on the geo-referenced Landsat TM data using the vertical aerial photography listed below:

Falkland Islands and Dependencies Aerial Survey Expedition 1956-57: 17/FID/3, 6 & 7, 26/FID/10, 24, 27, 32-34, 40-42, 45-47, 50, 55, 56, 58, 75-81, 97, 103-106, 109, 110 & 124.

Islands smaller than 500 metres in length, particularly those along the western coast of Trinity Peninsula, and offshore rocks were derived from an earlier map⁵ and fitted to the satellite image mosaic.

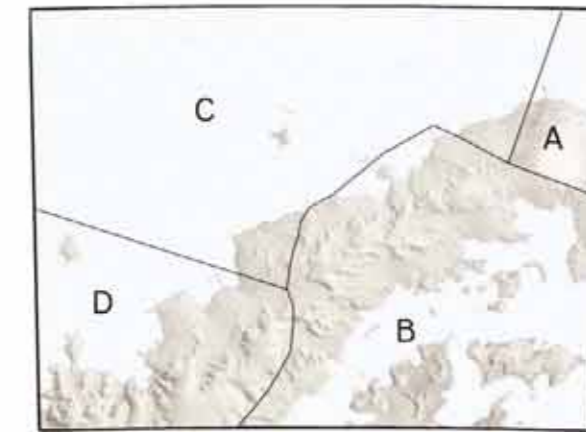


Image Identification
Bildaufnahmedaten

Landsat-4, -5
Thematic Mapper (TM)

Table with columns: Path/Row, Date, Spot/Row, Datum. Rows A, B, C, D.

Topographic and satellite image data / Topographische und Satellitenbilddaten

Unprocessed digital raw data of Landsat TM purchased from EOSAT, Lanham, USA. Digital image processing and mosaicking by Institut für angewandte Geowissenschaften (IFG), Offenbach am Main, Ingenieurbüro für Fernerkundung, Photogrammetrie und Kartographie (FPK), Berlin, and Institut für Angewandte Geodäsie (IFAG), Frankfurt am Main. This work is part of a project which was financially supported by the German Federal Ministry of Research and Technology under project identification number POI 0034.

Scientific investigation of geographical names
Wissenschaftliche Bearbeitung der geographischen Namen

U. Bachmann and J. Sievers, Frankfurt am Main, J. Thomson, Cambridge

Topographic satellite image interpretation
Topographische Satellitenbildinterpretation

A. Fox, Cambridge

Digital image processing (final compilation) and cartography
Digitale Bildverarbeitung (Schlußbearbeitung) und Kartographie

D. Heideich, Frankfurt am Main

Geographical Names / Geographische Namen

At present there are more than 40 signatory countries to the Antarctic Treaty, and geographical names appear in 15 or more languages and five scripts. Unintentional multiple naming of features, and other translations of Antarctic geographical names have caused ambiguity and confusion in the past, particularly in the Antarctic Peninsula region where many nationalities undertake scientific research. Although internationally agreed guidelines for proposing new geographical names and for using existing ones have yet to be set up, space on a map is limited and it is difficult to show more than one name per feature.

This map has been produced jointly by the Institut für Angewandte Geodäsie, Germany, and the British Antarctic Survey, United Kingdom, in accordance with the provisions of the Antarctic Treaty. The geographical names given on the map are used in their original language according to guidelines relating to historical priority and they do not necessarily imply acceptance by all Antarctic Treaty Contracting Parties. These guidelines are under discussion by the Scientific Committee on Antarctic Research.

Sources used for map compilation / Quellen für die Kartenbearbeitung

- a) Gazetteers and geographical names indexes / geographische Namenbücher und verzeichnisse
- Hattersley-Smith, G. (1961): The history of place names in the British Antarctic Territory. British Antarctic Survey Scientific Reports, No. 113 (Parts I and II). British Antarctic Survey, Cambridge, 670 pp.
- Antarctic Place-names Committee (1995): Gazetteer of the British Antarctic Territory, 2nd edition. Her Majesty's Stationery Office, London, 45 pp.
- United States Board on Geographic Names (1981): Geographic Names of the Antarctic (compiled and edited by F. G. Adams). National Science Foundation, Washington, 959 pp.
- United States Board on Geographic Names (1989): Gazetteer of the Antarctic, fourth edition. National Science Foundation, Washington, 145 pp.
- Servicio de Hidrografía Naval (1963): Nomenclador Antártico Argentino (compiled by M.C. Morand). Publication H 920, Buenos Aires, 67 pp.
- Servicio de Hidrografía Naval (1962): Índice Toponímico, Buenos Aires (digital data).
- Servicio de Hidrografía Naval (1970): Toponimia del Sector Antártico Argentino (compiled by E.J. Pierrou). Publication H 914, Buenos Aires, 746 pp.
- Servicio de Hidrografía Naval (1982): Toponimia del Sector Antártico Argentino. Tomo II (compiled by E.J. Pierrou). Publication H-914, Buenos Aires, 281 pp.
- Instituto Hidrográfico de la Armada de Chile (1974): Documento de Nombres Geográficos de la Costa de Chile. Volumen II. Tomo Antártico, 1ª edición. Publicación 3029, Valparaíso, 312 pp.
- Main Administration of Geodesy and Cartography (1987): Slovar geografskih nazvanih Antarktiki (index of geographical names of the Antarctic). CNIGAK, Moscow, 408 pp.

b) Maps and charts / Kartenmaterial

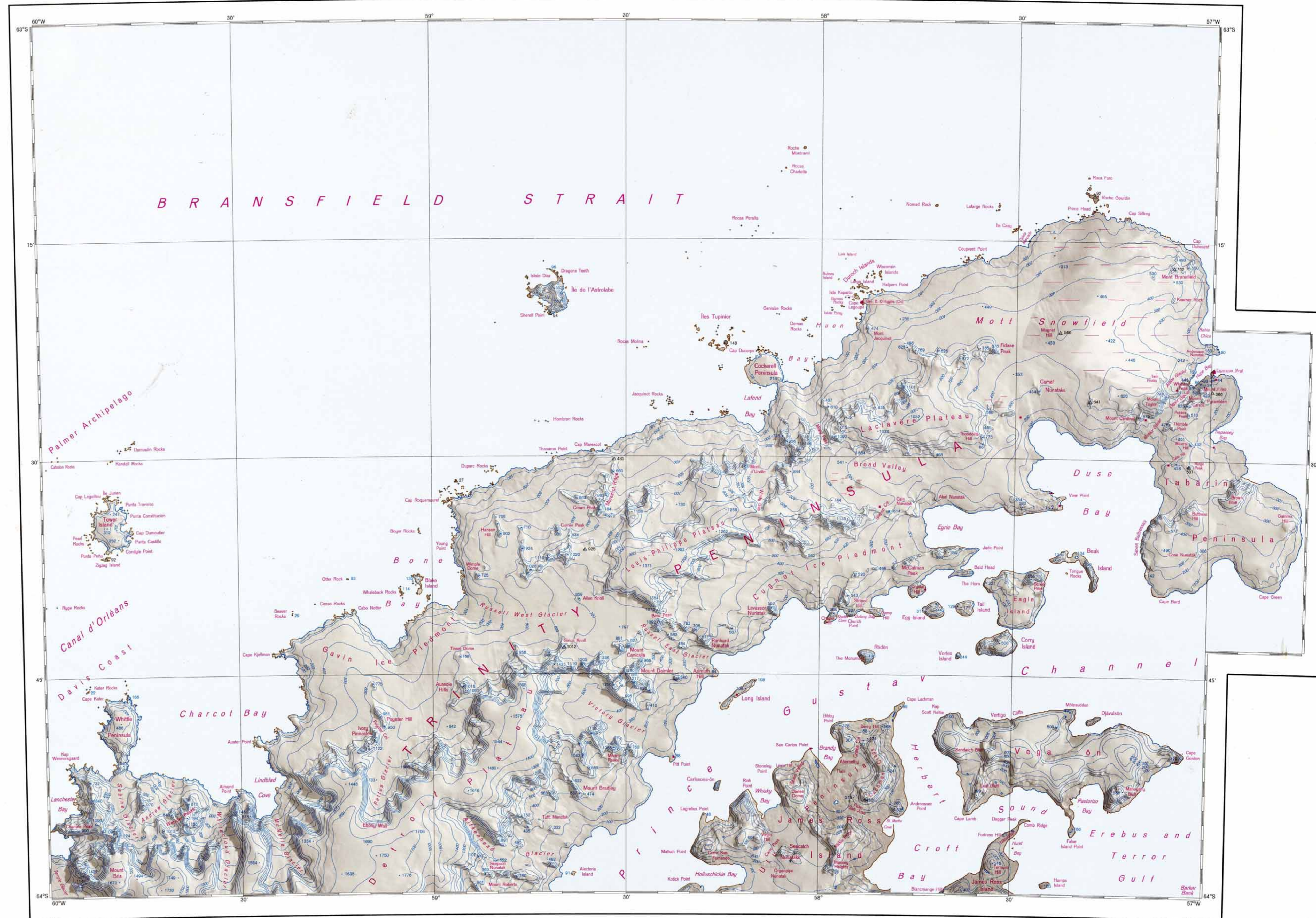
- 1. James Ross Island, 1:100 000 scale. Sheet 2, BAS 100 Series (topographic maps). British Antarctic Survey, Cambridge, 1995.
2. Trinity Peninsula, 1:250 000 scale. Sheet SP 21-22/13. Edition 1, BAS 250 Series. Directorate of Overseas Surveys, Tolworth, 1974.
3. James Island, 1:250 000 scale. Sheet SP 21-22/14. (Extended), Edition 1, BAS 250 Series. Directorate of Overseas Surveys, Tolworth, 1973.
4. British Antarctic Territory, Sheet SP 21-22/13, APC (Jan 1994), 1:250 000 scale. Antarctic Place-names Committee, Foreign and Commonwealth Office, London, 1994.
5. Hope Bay, Trinity Peninsula, Graham Land, 1:250 000 scale, APC Misc. 49, 3rd edition. Antarctic Place-names Committee, Foreign and Commonwealth Office, London, 1988.
6. Peninsula Trinidad, 1:300 000, 1:713, 2ª Edición 1984, Oficina Corrección 1990. Servicio de Hidrografía Naval de la Armada Argentina.
7. Isla Estrella a Isla Trinidad, 1:500 000, N° 1400, Edición 1971, Última Corrección 1990. Instituto Hidrográfico de la Armada de Chile.
8. Isla Trinidad a Estrecho Mañá, 1:500 000, N° 1500, Edición 1973, Última Corrección 1991. Instituto Hidrográfico de la Armada de Chile.

English equivalents of generic forms of geographical names
Englische Äquivalente von Gattungsbearbeitungen geographischer Namen

Table with columns: English name, German name, Abbreviation. Rows: Bahis, Cabo, Caleta, Canal, Cerro, Isla(s), Isla, Islet, Kap, Mount, Pass, Punta, Rocca(s), Roca(s), -udden.

ARG, Argentina; CHL, Chile; FRA, France; SWE, Sweden

TRINITY PENINSULA



Legend / Legende

- Coastline / Küstenlinie
Contour, 100m interval / Höhenlinie, 100m-Aquidistanz
Spot height (in metres) / Gipfelhöhe (in Metern)
Lake / See
Scientific station / Forschungsstation
Hut, depot / Hütte, Depot
Cloud or cloud shadow / Wolke oder Wolkenschatten
Survey control station (height in metres) / Vermessungspunkt (Höhe in Metern)

Scale/Maßstab 1:250000



Map projection: Lambert Conformal Conic Projection
Kartenabbildung: Konforme konische Abbildung
Standard parallels: 60°40'S and 63°20'S
Geographical datum: World Geodetic System 1984
Benennungssystem: (WGS84)

Heights in metres, vertical datum is mean sea level.
Höhenangaben in Metern, bezogen auf mittleren Meeresspiegel.

Map projection parameters have been used in accordance with the recommendations of the Working Group on Geodesy and Geographical Information of the Scientific Committee on Antarctic Research (SCAR)

Die Parameter der Kartenabbildung wurden in Übereinstimmung mit den Empfehlungen der Arbeitsgruppe 'Geodesy And Geographic Information' des Scientific Committee on Antarctic Research (SCAR) verwendet.

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