Prepared in cooperation with the
SCOTT POLAR RESEARCH INSTITUTE, UNIVERSITY OF CAMBRIDGE, UNITED KINGDOM

Maps used in compilation and analysis:

U.S. Geological Survey Satellite Image Map
Ellsworth Mountains, Antarctica, 1973–74, Experimental Printing, 1:500,000 scale

British Antarctic Survey and U.S. Geological Survey Satellite Image Map
Rutford Ice Stream, Antarctica, 1989, 1:250,000 scale

Institut für Angewandte Geodäsie (IfAG)
Glaciological Map of Filchner-Ronne-Schelfeis, Antarctica, 1987, 1:2,000,000 scale

U.S. Geological Survey Antarctica 1:250,000-scale Topographic Reconnaissance Series
Liberty Hills, 1967
Newcomer Glacier, 1962
Union Glacier, 1967
Vinson Massif, 1989

British Antarctic Survey BAS Miscellaneous Series
British Antarctic Territory (North of 82° S) with South Georgia and South Sandwich Islands, 1981, Sheet BAS (Misc) 2, 1:3,000,000 scale
Antarctic Peninsula and Weddell Sea, 2000, Sheet BAS (Misc) 8, 1:3,000,000 scale

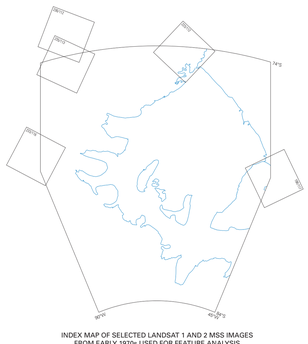
Other information sources:

RADARSAT SAR-1 Image Map Mosaic of Antarctica (RADARSAT Antarctic Mapping Project (RAMP), Byrd Polar Research Center, The Ohio State University; see full reference citation in accompanying pamphlet).

Antarctic digital database user's guide and reference manual (British Antarctic Survey and others, 1993; see full reference citation in accompanying pamphlet). This manual accompanies a CD-ROM. The Antarctic Digital Database (ADD) project provides a digital coastline and other cartographic information of Antarctica.

Map projection parameters have been used in accordance with the recommendations of the Working Group on Geodesy and Geographic Information of the Scientific Committee on Antarctic Research (SCAR). The accuracy of topographic features in relation to the graticule and to the satellite observation stations is approximately 1 mm (equals 1 km on the ground).

Image base from 1997 RADARSAT Image Mosaic of Antarctica (125-meter pixel).



INDEX MAP OF SELECTED LANDSAT 1 AND 2 MSS IMAGES FROM EARLY 1970s USED FOR FEATURE ANALYSIS

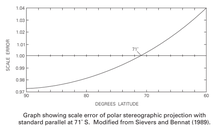
Path/Row	Image No.	EDC[1] Entity No.	Date
198/117	1479-09162	1198117007331890	14 Nov 1973
223/112	2284-11265	2223112007530690	02 Nov 1975
233/116	1568-12344	1233116007404290	11 Feb 1974
235-113	1173-12433	1235113007201290	12 Jan 1973
236-112	2027-12432	2236112007504990	18 Feb 1975

[1] EROS Data Center, U.S. Geological Survey

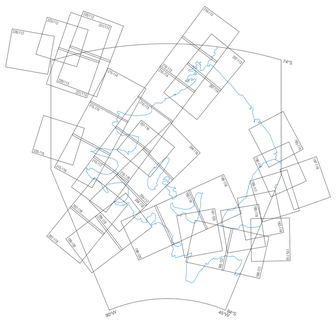
SCALE 1:1,000,000

10 0 10 20 30 40 50 60 70 80 90 100 110 KILOMETERS
10 0 10 20 30 40 50 60 70 STATUTE MILES
10 0 10 20 30 40 50 60 70 NAUTICAL MILES

POLAR STEREOGRAPHIC PROJECTION; STANDARD PARALLEL 71°S
CONTOUR INTERVALS:
200 METERS BELOW 1400 METERS ELEVATION
AND 400 METERS ABOVE 1400 METERS ELEVATION
(Contours modified from RADARSAT Antarctic Mapping Project Digital Elevation Model)
DATUM: MEAN SEA LEVEL



Graph showing scale error of polar stereographic projection with standard parallel at 71° S. Modified from Sievers and Bennat (1989).



INDEX MAP OF SELECTED LANDSAT IMAGES USED FOR FEATURE ANALYSIS: LANDSAT 4 AND 5 MSS AND TM IMAGES FROM MID-1980s TO EARLY 1990s AND LANDSAT 7 ETM+ IMAGES FROM EARLY 2000s

Path/Row	Image No.	EDC[1] Entity No.	Date
166-121	41935-07153	4166121008730690	02 Nov 1987
166-122	41935-07160	4166122008730690	02 Nov 1987
175-119	50356-08200	5175119008505110	20 Feb 1985
180-119	50727-08465	5180119008605710	26 Feb 1986
181/120	50302-08571	5181120008436310	28 Dec 1984
183-118	05716-09052	5183118008604610	15 Feb 1986
186-117	51313-09240	5186117008727810	05 Oct 1987
187-116	50984-09211	5187116008631490	10 Nov 1986
190-116	41927-09413	4190116008729890	25 Oct 1987
190/118	50717-09483	5190118008604710	16 Feb 1986
190/119	50717-09485	5190119008604710	16 Feb 1986
190/120	50717-09492	5190120008604710	16 Feb 1986
195–115	42778-10234	4195115009005310	22 Feb 1990
198/119	50716-10443	5199119008604610	15 Feb 1986
199/120	50716-10450	5199120008604610	15 Feb 1986
204/116	50735-11135	5204116008606510	06 Mar 1986
204/117	50735-11141	5204117008606510	06 Mar 1986
204/118	50735-11144	5204118008606510	06 Mar 1986
207-113	*	4207113008806810	08 Mar 1988
207-113	*	7207113000005350	22 Feb 2000
207-113	*	7207113000200950	26 Jan 2002
207-114	*	4207114008806810	08 Mar 1988
207/116	42062-11313	4207116008806810	08 Mar 1988
207/118	50740-11330	5207118008607010	11 Mar 1986
207/119	50740-11333	5207119008607010	11 Mar 1986
210-112	00860591O	5210112008605910	28 Feb 1986
210-113	00860591O	5210113008605910	28 Feb 1986
210/114	50729-11501	5210114008605910	28 Feb 1986
210/115	50729-11504	5210115008605910	28 Feb 1986
210/116	42387-11571	4210116008902710	27 Jan 1989
210/117	42371-11573	4210117008901110	11 Jan 1989
215/114	*	7215114000001350	13 Jan 2000
215/115	42390-12274	4215115008903010	30 Jan 1989
215/116	42390-12281	4215116008903010	30 Jan 1989
220-112	50718-12513	5220112008604910	18 Feb 1986
220-113	50735-12513	5220113008606510	06 Mar 1986
220/115	50735-12522	5220115008606510	06 Mar 1986
221-112	42384-13033	4221112008902410	24 Jan 1989
221-113	42384-13035	4221113008902410	24 Jan 1989
223-112	42014-13071	4223112008602010	20 Jan 1988
226-112	42035-13263	4226112008604110	10 Feb 1988

[1] EROS Data Center, U.S. Geological Survey
* Image number unknown

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[1]U.S. Geological Survey, Reston, VA 20192.
[2]Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER, United Kingdom.
[3]U.S. Geological Survey, 384 Woods Hole Road, Woods Hole, MA 02543–1598.

COASTAL-CHANGE AND GLACIOLOGICAL MAP OF THE RONNE ICE SHELF AREA, ANTARCTICA: 1974–2002

By
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