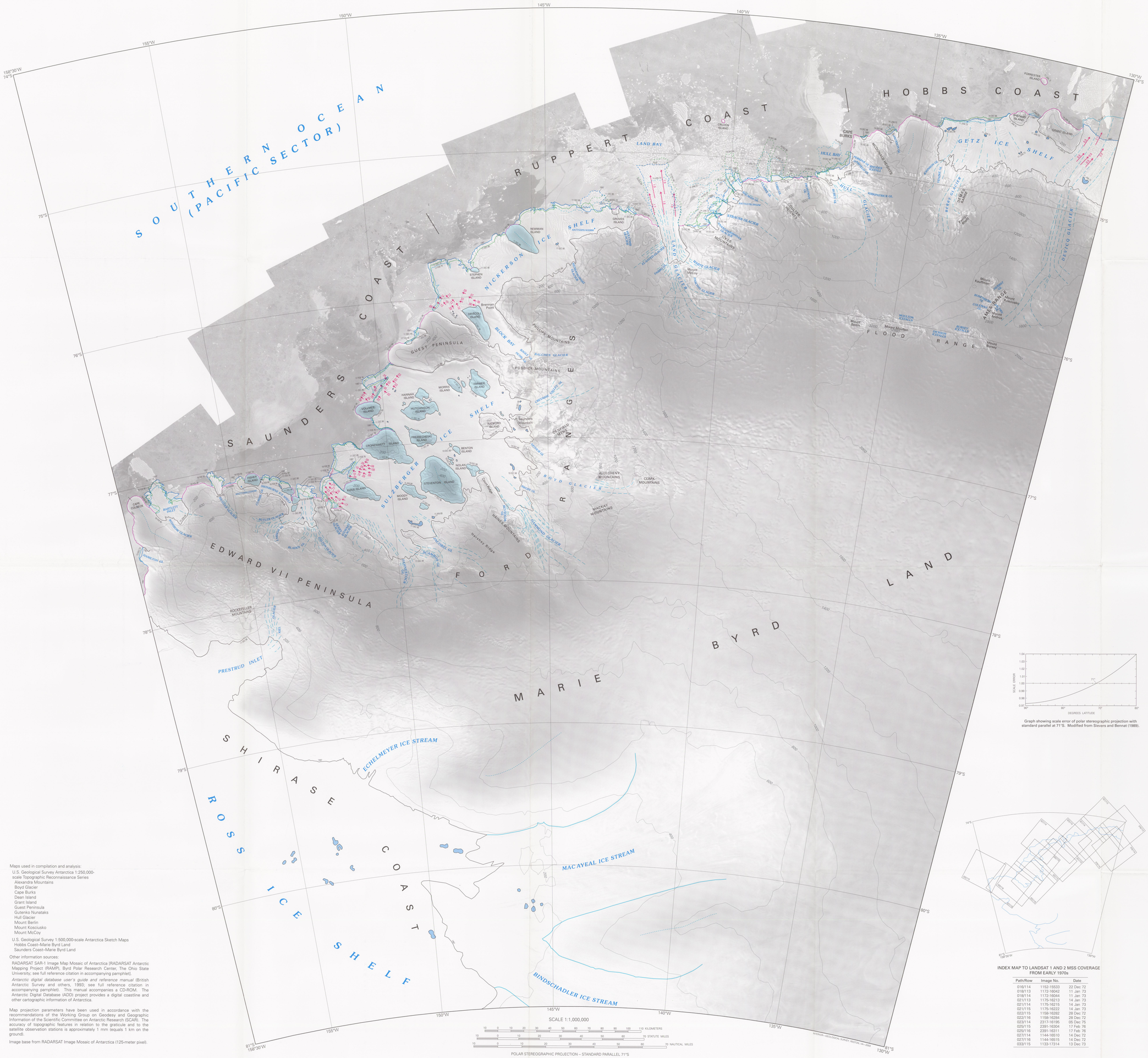
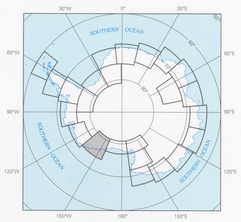
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

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

GEOLOGIC INVESTIGATIONS SERIES
MAP I-2600-G
Explanatory pamphlet accompanies map

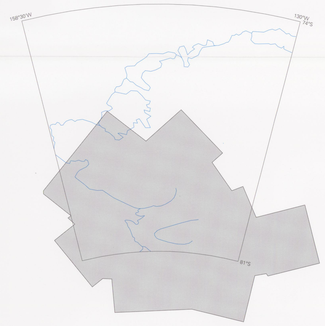




Index map of the planned 24 coastal-change and glaciological maps of Antarctica at 1:1,000,000 scale. Saunders Coast area map is shaded.

EXPLANATION

- **Ice front**—RADARSAT imagery; image acquisition dates: 9 September–20 October 1997
- **Ice front**—Middle 1980s to early 1990s imagery; date of observation shown
- **Ice front**—Early 1970s imagery; date of observation shown
- **Iceberg tongue**—RADARSAT imagery; image acquisition dates: 9 September–20 October 1997
- **Iceberg tongue**—Middle 1980s to early 1990s imagery; date of observation shown
- **Iceberg tongue**—Early 1970s imagery; date of observation shown
- **Thin ice shelf front**—1990 image; date of observation shown
- **Thin ice shelf front**—1976 image; date of observation shown
- **Ice wall**—Date of observation shown
- **Grounding line**—Date of observation shown
- **Ice rumple**—Within a grounding line and (or) ice wall
- **Ice rise**—Within a grounding line and (or) ice wall
- **Flow line**
- **Ridge line on ice**
- **Ice stream flow-edge**
- 1400 **Topographic contour, in meters**—Modified from RAMP digital elevation model (Byrd Polar Research Center)
- AN7752N1401E68 **Unnamed outlet glacier or ice stream**—Identified by World Glacier Monitoring Service geographic location code (AN7) and by latitude and longitude. See table 2 in pamphlet for description
- BALCHEN GL. **Named outlet glacier or ice stream**
- 1.3 **Ice-velocity vector**—Number shows ice velocity in kilometers per year (km a^{-1})

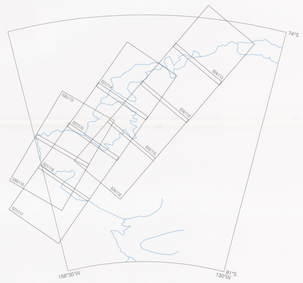


INDEX MAP TO LANDSAT TM IMAGE MOSAIC COVERAGE OF THE SHIRASE AND SIPLE COASTS (DECEMBER 1984 TO FEBRUARY 1990)

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

INDEX MAP TO LANDSAT 1 AND 2 MSS COVERAGE FROM EARLY 1970s

Path/Row	Image No.	Date
016/114	1152-15533	22 Dec 72
018/113	1172-16042	11 Jan 73
018/114	1172-16044	11 Jan 73
021/113	1175-16213	14 Jan 73
021/114	1175-16215	14 Jan 73
021/115	1175-16222	14 Jan 73
022/115	1158-16282	28 Dec 72
022/116	1158-16284	28 Dec 72
023/114	2317-16195	05 Dec 75
025/115	2391-16304	17 Feb 76
025/116	2391-16311	17 Feb 76
027/114	1144-16510	14 Dec 72
027/116	1144-16515	14 Dec 72
033/115	1123-17314	13 Dec 73



INDEX MAP TO LANDSAT 4 AND 5 MSS AND TM AND LANDSAT 7 ETM+ COVERAGE FROM MID-1980s THROUGH 1999

Path/Row	Image No.	Date
024/113	42348-16455	19 Dec 88
024/114	42348-16481	19 Dec 88
024/115	42348-16464	19 Dec 88
024/116	42364-16472	04 Jan 89
027/114	51015-16513	11 Dec 86
027/115	51015-16515	11 Dec 86
027/116	51015-16522	11 Dec 86
027/117	51015-16524	11 Dec 86
030/115	42774-17240	18 Feb 90
030/116	L71030116_16199912 12	12 Dec 99

Maps used in compilation and analysis:

U.S. Geological Survey Antarctica 1:250,000-scale Topographic Reconnaissance Series
Alexandra Mountains
Boyd Glacier
Cape Burks
Dean Island
Grant Island
Guest Peninsula
Gutenko Nunataks
Hull Glacier
Mount Berlin
Mount Kosciusko
Mount McCoy

U.S. Geological Survey 1:500,000-scale Antarctica Sketch Maps
Hobbs Coast–Marie Byrd Land
Saunders Coast–Marie Byrd Land

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

COASTAL-CHANGE AND GLACIOLOGICAL MAP OF THE SAUNDERS COAST AREA, ANTARCTICA: 1972–1997

By
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