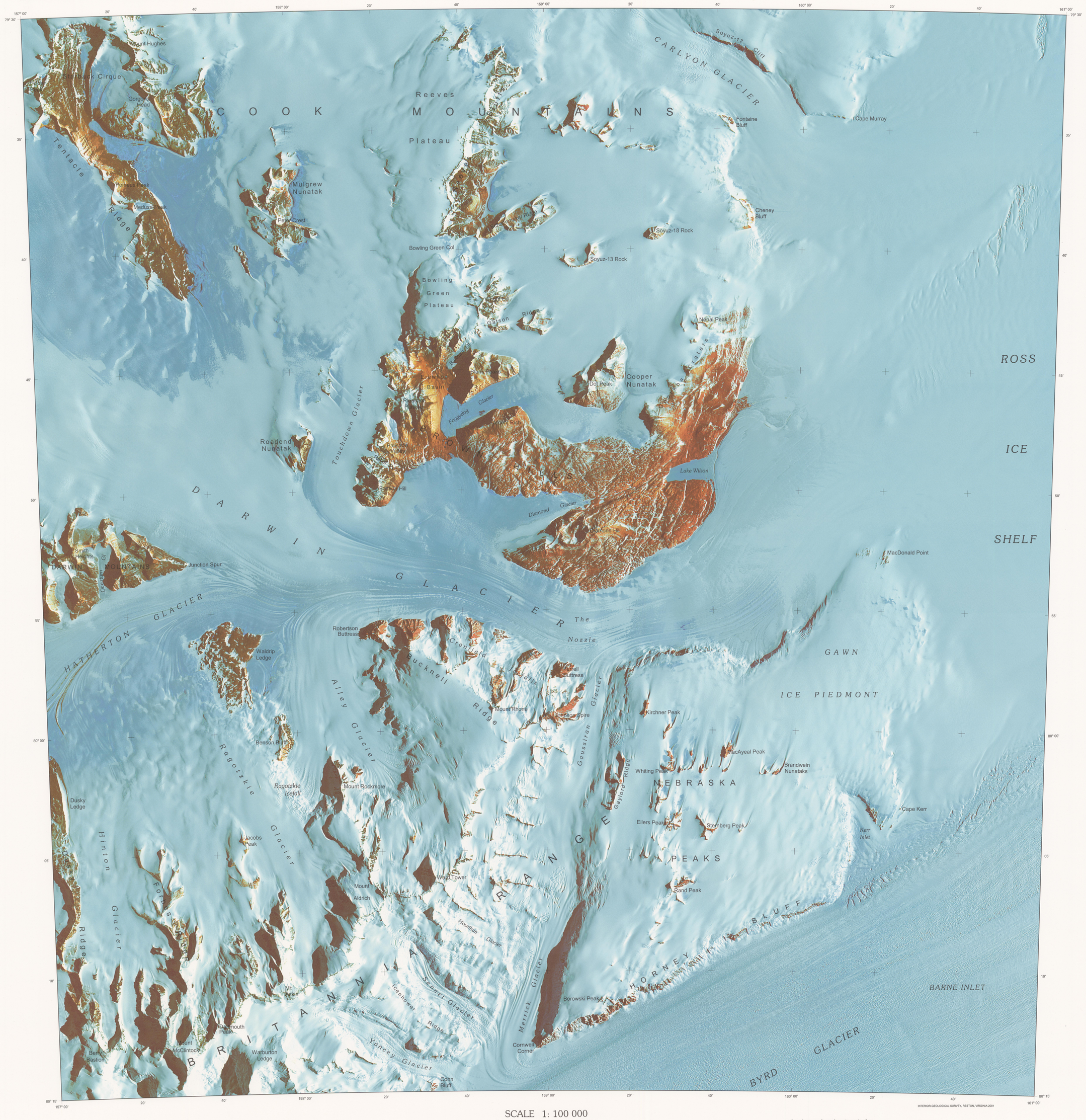
U.S. DEPARTMENT OF THE INTERIOR
U.S.GEOLOGICAL SURVEY

DARWIN GLACIER

ANTARCTICA
SATELLITE IMAGE MAP



INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-2001

SCALE 1: 100 000

KILOMETERS 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
MILES 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13
NAUTICAL MILES 1 0 1 2 3 4 5 6 7 8 9 10 11

Lambert conformal conic projection
Standard parallels 76°40'S and 79°20'S
International Terrestrial Reference Frame 1996

DATA EXPLANATION

The satellite images were recorded by the Enhanced Thematic Mapper on the Landsat 7 satellite in the multispectral and panchromatic modes and are composed of spectral bands 2 (525-605 nanometers, green-yellow), 4 (775-900 nanometers, near infrared) and 7 (2090-2350 nanometers, middle infrared) and of a new panchromatic band (520-900 nanometers, green to near infrared)

The imagery was controlled using geodetic ground control points identified on the panchromatic imagery, most of them being also occupied during field collection of coordinates. Satellite platform modeling was used during the geocorrections of the satellite data to ensure uniform error distribution throughout the scene. The Landsat Enhanced Thematic Mapper Panchromatic imagery was resampled in 7.5 meter cells and filtered using a 27x27 adaptive filter to which 85 percent of the unfiltered data were added back. The geocorrected Enhanced Thematic Mapper bands 2, 4 and 7 were filtered using a 21x21 adaptive filter to which 85 percent of the unfiltered data were added back and registered to the panchromatic data. Both data sets were then merged by adding them with scale and offset factors, and the resulting image was tone enhanced. Panchromatic merged bands 7, 4 and 2 are shown in red, green and blue on the image map.

SATELLITE IMAGE INDEX

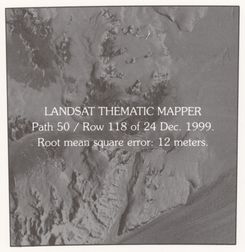
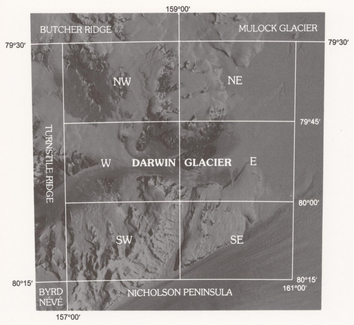


IMAGE MAP INDEX

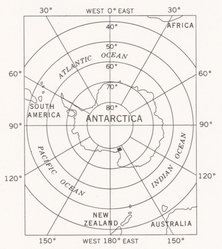


The DARWIN GLACIER quadrangle has been subdivided into six parts that correspond to 1:50 000 scale quadrangles for ease of data handling:

NW . Mount Hughes
NE . Cheney Bluff
W . Touchdown Glacier
E . MacDonald Point
SW . Forbes Ridge
SE . Horney Bluff

The 7.5 meter digital data for the above quadrangles can be found at the U.S. Antarctic Resource Center ftp site under nsf@usgs.gov.

LOCATION DIAGRAM



At the image map location, this diagram and the image map are oriented in opposite directions.

Technical information related to this image map and access to the digital data can be obtained from the Antarctic Resource Center, Mail Stop 515, U.S. Geological Survey National Center, Reston, VA 20192, or www.usarc.usgs.gov.

Produced by the U. S. Geological Survey with support from the National Science Foundation, Interagency Agreement OPP 9114787.

FOR SALE BY THE U.S. GEOLOGICAL SURVEY P.O. BOX 25286, DENVER, COLORADO, 80225

DARWIN GLACIER, ANTARCTICA
SATELLITE IMAGE MAP