

# United States Antarctic Resource Center (USARC)



The U.S. Antarctic Resource Center (USARC) is our Nation's depository for Antarctic maps, charts, geodetic ground control, satellite images, aerial photographs, publications, slides, and video tapes. These resources are items produced by Antarctic Treaty nations in support of their activities in Antarctica and provided to the USARC in compliance with a standing resolution of the treaty providing for exchange of information. The U.S. Geological Survey (USGS) maintains these materials through an interagency cooperative agreement with the National Science Foundation (NSF), which also supports the USGS Antarctic Mapping Program.

The USARC develops and maintains the Antarctic Web site (usarc.usgs.gov) and its supporting data bases, as well as providing access to other online digital data bases, such as the Atlas of Antarctic Resources.

Located at the USGS National Center in Reston, Va. the USARC is open to the public from 9:00 a.m. to 3:00 p.m. Monday through Friday or by appointment (call 703-648-6010). Written inquiries can be sent to:

Antarctic Resource Center USGS National Center Mail Stop 515 12201 Sunrise Valley Drive Reston, VA 20192

## **Aerial Photographs**

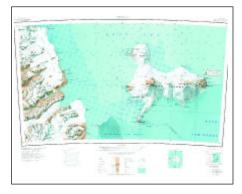
The USARC maintains all U.S. aerial Antarctic mapping photographs and USGS flight indexes of the Antarctic.

The collection contains more than 500,000 photographs. Most photographs are 9" x 9" black-and-white images taken with three Fairchild cameras, each with a metrogon lens resulting in trimetrogon photographs (left oblique, vertical, and right oblique photographs). Special-purpose photographs showing sites of specific scientific interest-vertical and handheld oblique as well as photographs taken from helicopters-are also on file. Some color photographs are also available. Line indexes to identify coverage are available for most aerial photographic missions. Contact prints in either matte or glossy finish are available for inspection or stereoscopic viewing.

Certain feature options, such as ice and rock enhancements, may be special ordered.

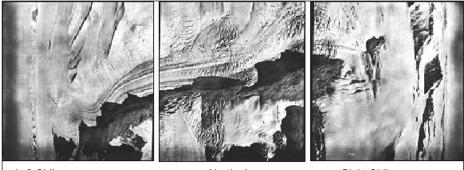
#### Maps and Charts

The USARC has an extensive collection of Antarctic maps and charts produced by the United States and other nations that are members of the Scientific Committee on Antarctic Research (SCAR). An online index for Antarctic maps and charts can be viewed at usarc.usgs.gov.



#### Satellite Imagery/Satellite Image Maps

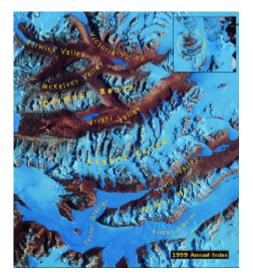
The USARC maintains Antarctic data from Landsats 1 and 2, formerly called the Earth Resources Technology Satellite (ERTS). These data represent the first systematic attempt to collect Landsat imagery of the continent. Negative film transparencies at scales of 1:1,000,000 and 1:369,000 are available for viewing. Similar data and products are also on file for some areas in the Arctic region.



Left Oblique

Vertical

**Right Oblique** 



Also available are satellite image maps of the Antarctica, especially McMurdo Sound region of the Transantarctic Mountains in 1:25,000, 1:50,000, 1:100,000 and 1:250,000 scale produced mostly from Landsat thematic mapper and SPOT imagery.

## **Geodetic Control Data**

Since the late 1950s the USGS has been establishing geodetic control to support the polar mapping program and scientific investigations. The geodetic control data base contains information on each occupied ground control station in Antarctica. Gravity data are available for a few stations in the McMurdo Dry Valley area.



The USGS is improving the accuracy of the initial geodetic surveys by adjusting the earlier data to an Earth-centered geodetic satellite reference system.

#### Publications

An extensive collection of technical reports and other materials published under the auspices of the SCAR is available in the USARC. A list of these publications can be viewed on the USARC Web page.



#### U.S. Antarctic Visual Image Collection and Archive

This collection contains approximately 19,500 35-mm slides, 8,000 photographs (color and black-and-white), and 230 video tapes and other film items showing scientific activities at Antarctic stations and camps, including support work, vehicles, aircraft, ships, and documentary photographs of wildlife, mountains, and ice.



## **USARC Web Page**

Information regarding the USARC is available through its Web page at usarc.usgs.gov. This Web page describes the archival and technical services provided through the USARC and provides links to Antarctic data bases, such as the USGS Antarctic Atlas, and to other Antarctic Web sites.



# Information

For information on other USGS products and services, call 1-888-ASK-USGS, use the Ask.USGS fax service, which is available 24 hours a day at 703-648-4888, or visit the general interest publications Web site on mapping, geography, and related topics at mac.usgs.gov/mac/isb/pubs/pubslists/index.html.

For additional information, visit the ask.usgs.gov Web site or the USGS home page at www.usgs.gov.