Recent collaboration with other Arctic Programs
Circumpolar Active-layer Permafrost System (CAPS-2 CD ROM)

(Example 1)

ADCC distributes data on-line and by CD-ROM.

- The ADCC has collaborated with Frozen Ground Data Center to collect and publish a new 2nd edition CAPS-2 set of three CD-ROMs.

- This CD set will contain 16 ARCSS data sets 12 newly published on ADCC Web and four data sets from the original CAPS-1.

- Published and distributed at the International Conference on Permafrost in Zurich, July 2003.
Collaboration with other Arctic Programs

ADCC will present geospatial data

- High-Resolution Imagery and Terrain Model for Collaborative Research of Environmental Change at Barrow, Alaska (ARCSS/HARC)

- Hi-res images will be distributed via DVD (restricted to NSF researchers)

- Hi-res DEM and imagery for interdisciplinary research, including value-added layers in ArcInfo format: Aspect, Shaded Relief, Slope Angle, Contours, etc.

- Lo-res images will available as open data on the ADCC Web site
Collaboration with other Arctic Programs

(Example 3)

ADCC is an NSDI Clearinghouse Node

• Barrow Arctic Science Consortium (BASC)
  - BASC to develop a regional Spatial Data Infrastructure (SDI) (a compilation of maps and metadata) via a Cooperative Agreement Program (CAP)
  - ADCC is a clearinghouse node
    - National Spatial Data Infrastructure
    - Serving Federal Geographic Data Committee (FGDC) metadata
Federal Geographic Data Committee (FGDC)

Clearinghouse Node

ADCC prepares DIF and FGDC metadata formats

- FGDC metadata is a **must** for thoroughly describing geospatial data
- ADCC authors DIFs for submission to Global Change Master Directory (GCMD)
- ADCC serves FGDC formatted metadata via NSDI Clearinghouse Node
ADCC is a geospatial data server

- ADCC already archives and presents a number of geospatial (map) data sets

- **Metadata** for new Barrow data will soon be on the ADCC Clearinghouse Node at NSDI

- **Actual data** associated with both Barrow projects will also be available at ADCC
NSIDC also has spatial data sets of interest

• The **Frozen Ground Data Center** serves about 14 maps (data sets) at:  
  http://nsidc.org/fgdc/maps/

• NSIDC also serves **satellite imagery** in a format that can be imported into ArcInfo. Instructions about importing these images can be found at:  
  http://arcss.colorado.edu/data/gismo/gis.html.

  This includes:
  - AVHRR Polar Pathfinder Twice-Daily 5 km EASE-Grid Composites
  - AVHRR Polar Pathfinder Twice-Daily 25 km EASE-Grid Composites
  - DMSP SSM/I Pathfinder Daily EASE-Grid Brightness Temperatures
  - Nimbus-7 SMMR Pathfinder Daily EASE-Grid Brightness Temperatures
  - TOVS Pathfinder Path-P Daily Arctic Girded Atmospheric Parameters

• NSIDC also serves **Sea Ice Concentration** for both the northern and southern hemispheres in ArcInfo formats at:  
Long Term Archive (LTA)

ADCC is a Long Term Archive

• What is required of a successful LTA?

ADCC provides redundant remote storage

– Daily downloads onto back up tapes on main CU campus
  » Archive original data submission
  » Maintenance of all correspondence and actions taken
  » Capture of the final ADCC Web published product
  » Establish data provenance
Long Term Archive

What is a remote off-site location?

• Not merely an institutional tape backup
• Doc-u-Vault of Denver provides for:
  – A remote site several miles away from the site of origin
  – Environmental controls
  – Security
  – Accessibility
  – Emergency access
• ADCC transfers DLT or 8mm tapes to Doc-u-Vault on a regular basis
Long Term Archive

• These two LTA services are provided by ADCC in cooperation with NSIDC’s LTA program
Productivity

- ADDC has published 21 data sets during 2002
- In 2003, ADCC has placed 107 SHEBA data sets on-line
- In 2004, ADCC will be transferring from JOSS, ATLAS and ITEX data sets, to be followed by SBI data sets when available
ADCC user statistics

ADCC is an active provider of Arctic data and metadata

- In 2003, ADCC has the following registered users:
  - 85 registered users of ARCSS ftp products
  - 754 for GISP2/GRIP CD
  - 976 for Into the Arctic CD
  - 74 for SHEBA Reconnaissance Imagery Web site
  - 131 for R-ARCTICNET CD
  - 7 for Physical and Chemical Properties from Selected Expeditions in the Arctic Ocean