

Cyberinfrastructure Opportunities for Antarctic Research

Dan Lubin
Office of Polar Programs
National Science Foundation
4201 Wilson Blvd., Ste. 755
Arlington, VA 20030
(703) 292-8030
dlubin@nsf.gov

New resources are available to the WAIS research community through the NSF Office of Cyberinfrastructure (OCI). The advancement of our understanding in glaciology and high latitude climate change is becoming increasingly dependent on the most modern and capable computational resources. In addition, Antarctic field data sets are invaluable records of ever-changing phenomena, and their proper curation and interoperability among researchers is vital. This talk will review the three overlapping components of OCI - high performance computing, virtual organizations, and data interaction and visualization - and will review new funding opportunities including Cyber-enabled Discovery and Innovation (CDI), Virtual Organizations as Socio-technical Systems (VOSS), and DataNet Partners. This talk will explain how other geophysical science communities have recently been successful with proposals to these programs, and will also cover the NSF pre-proposal process which is frequently used by OCI and elsewhere in the foundation.