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PROGRESS AND PLANS IN SUPPORT OF THE POLAR COMMUNITY

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Feedback provided by the Antarctic community has proven instrumental in positively influencing the direction of the GCMD's development. For example, in response to requests for a standalone metadata authoring tool, a new shareable software package called "docBUILDER solo" will be released to the public in March 2006. This tool permits researchers to document their data during experiments and observational periods in the field.

The international polar community has also played a key role in encouraging support for the foreign language character set in the metadata display and tools (10% of the records in the AMD hold foreign characters). In the upcoming release, the full ISO character set, which also includes mathematical symbols, will be supported. Additional upgrades include the ability for users to search for data sets based on pre-selected temporal and spatial resolution ranges. Data providers are strongly encouraged to populate the resolution fields for their data sets, although these fields are not currently required.

In prior versions, browser incompatibilities often resulted in unreliable performance for users attempting to initiate a spatial search using a map based on Java applet technology. The GCMD will offer an integrated Google map and date search, replacing the applet technology and enhancing the geospatial and temporal searches.

It is estimated that 30% of the records in the AMD have direct access to data. A growing number of these records can be accessed through data service links. Related data services are therefore becoming valuable assets in facilitating the use and visualization of data. Users will gain the ability to refine services using the same options as those available for data set searches. Data providers are encouraged to describe available data-related services through the directory. Future plans include offering web services through a SOAP interface and extending semantic queries for the polar regions through the use of ontologies.

The Open Archives Initiative's (OAI) Protocol for Metadata Harvesting (PMH) has been successfully tested with several organizations and appears to be a prime candidate for sharing metadata within the community. The GCMD anticipates contributing to the design of the data management system for the International Polar Year and to the ongoing efforts in the years to come. Further enhancements will be discussed at the meeting.