Geophysical Research Abstracts,
Vol. 11, EGU2009-9024, 2009
EGU General Assembly 2009

Practical Considerations when Scoping and Implementing a Data Discovery, Visualization and Access System for Heterogenous Datasets

P.M Breen, T.D Barnes, and P.J Kirsch

British Antarctic Survey, Natural Environment Research Council, Cambridge, United Kingdom (pjki@bas.ac.uk)

The British Antarctic Survey (BAS) undertakes multi-disciplinary Polar research across a broad spectrum of scientific fields including Biology, Geology, Oceanography, Meteorology, Atmospheric Chemistry and Space Physics. Data is collected across many platforms, be they remote deep field autonomous instruments, loggers at permanently manned stations, research vessels or floating buoys. These data are collected over various temporal scales (from short intensive campaigns, through seasonal to long term continuous monitoring) and significant spatial extent. Current technology also allows near real-time return of data.

The challenge was to develop a framework capable of allowing scientists and their collaborators timely discovery, visualization and access of the data and associated meta-data (using meta-data in its broadest sense to include experimental documentation, field reports, manuals and experiment specific software as well as quality control and quality assurance indicators).

The implementation of a data access framework recently developed and installed at BAS will be described; detailing the background technologies, discussing the future proofing aspects of design that allows new complementary web-based technology to be embedded in a straightforward way, and consider the scoping of the requirements for a single interface onto a system in which the specific visualization and data retrieval needs of a science PI (or community) can be defined and incorporated.