

Arctic Project Support and Data Management Activities at NCAR's Earth Observing Laboratory (EOL)

The EOL provides multi-disciplinary international field project support to the scientific community. This support includes all aspects of Data Management activities including the development of a project strategy, web services including customized data visualization and the collection, processing, quality control, integration, and archival of project datasets (both research and operational), as well as the long-term data access and stewardship

	Data Table			
	ARCSS Datasets: Chemistry			
all works and	Author/PI	Classification	Dataset Title	Documentatio
habetical by lead PI	Christensen, John P.	Chemistry Oceanography Ship Based	Arctic Ocean Section Porewater Chemistry Data, 1994	Documentation
tive Layer/Permafrost	Cooper, Lee W.	Chemistry Oceanography	Chemical and Isotopic Tracers from the Arctic Ocean	Documentation
cillary ogeochemical	Devol, Allan H.	Chemistry Oceanography	Sedimentary Denitrification Rates from the Bering, Chukchi, and Beaufort Seas	Documentation
ology oy emistry IX	Falkner, Kelly K.	Chemistry CTD Oceanography Water Sampling	North Pole Environmental Observatory (NPEO) Seawater Chemistry	Documentation
s torical Collection drography drology	Falkner, Kelly K., Christopher Guay, a Tim Wagner	nd Chemistry Submarine Water Sampling	SCICEX Dissolved Barium Data, 1993-1997	Documentation
nd Based nd Characterization teorology del	Gonzalez, Grizelle, William A. Gould, and Martha K. Raynolds	Chemistry Land Characterization Soils Vegetation	Canadian Transect of Soils and Vegetation for the Circumpolar Arctic Vegetation Map	Documentation
oring vigation trient	Holmes, Robert M. and Bruce J. Peterson	Chemistry Flux Hydrology	Eurasian River Historical Nutrient and Sediment Flux Data	Documentation
eanography diation a Ice	Mayewski, Paul A. and Sallie Whitlow	Chemistry Land Characterization Snow	Regional Survey of Greenland, 1988 - Snow Pit Data	Documentation
ls restrial Ecosystems	Mayewski, Paul A. and Sallie Whitlow	Chemistry Snow	Snow Pit Data from Greenland Summit, 1987	Documentation
per Air letation	Mayewski, Paul A. and Sallie Whitlow	Chemistry	Snow Pit Data from Greenland Summit, 1989 to	Documentation

Example of ARCSS Data Archive http://www.eol.ucar.edu/projects/arcss



Example of prototype interactive on-line Metadata Form used for CADIS

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EOL Supported NSF Arctic Projects:

- Surface Heat Budget of the Arctic Ocean (SHEBA)
- Western Arctic Shelf-Basin Interactions (SBI)
- The Bering Sea Ecosystem Study (BEST)
- Arctic System Science (ARCSS)
- Arctic Transitions in the Land-Atmosphere System (ATLAS)
- International Tundra Experiment (ITEX)
- Advanced Cooperative Arctic Data Information System (ACADIS)

EOL Metadata Database And Cyberinfrastructure (EMDAC)



Data Flow – Ingest to Final Archive



Example of EOL Field Catalog with GIS Mapserver Display (BEST Project) http://www.eol.ucar.edu/projects/best

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Key Data Management Considerations: Data Policy, Protocol, and Plan Standardized Metadata and Interoperability Common Formats and Units (e.g. time) Data Processing and Quality Control **Data Integration and Synthesis** Data Compression, Subsetting, and Transfer Long-term data access and Stewardship





