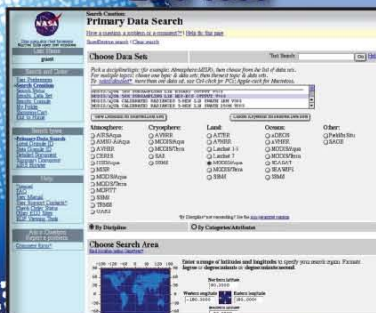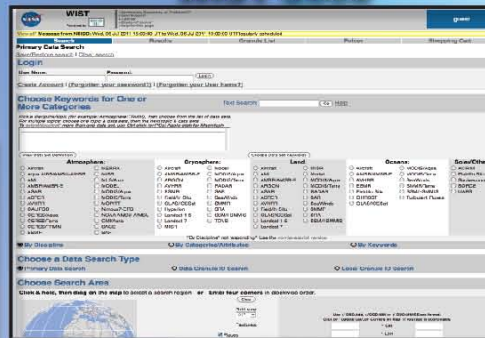# EOSDIS Data Discovery Evolution

Reverb 2011

EDG 1980

The Earth Observing Systems (EOS) Data Gateway (EDG) was the extension of Version O Information Management System (IMS).

Communicated with V0 servers hosted at EOSDIS DAACs via a basic protocol (known as the Version 0 protocol) that consisted of a set of requests constructed in Object Description Language (ODL).

Utilized a federated search client/server system, with multiple EDG clients, or WWW interfaces, allowing users to find and order data from multiple participating archives.

Served as the primary access point to EOSDIS and other Earth science data holdings until the EDG-to-WIST transition.

WIST 2008

The Warehouse Inventory Search Tool (WIST) consolidated the EDG user interface into a single application instance.

Communicates with the Earth Observing System (EOS) ClearingHouse (ECHO) web services via a legacy SOAP API.

Provides centralized search and order capabilities across the full set of data provider holdings in the ECHO catalogue through a consolidated client deployment.

Users are able to submit cross-discipline queries using spatial and temporal criteria, examine search results for relevancy using built-in tools, and submit orders via ECHO to the appropriate data provider(s).

Additional Features Available in WIST:
- 2D Coordinate Searching (e.g. WRS-2)
- Enhanced order capabilities allowing for customized order options
- Order status tracking

Serving as one of the primary access points to EOSDIS and other Earth science data holdings until the WIST-to-Reverb transition.

Reverb takes existing WIST functionality and provides them in an enhanced user experience.

Communicates with Earth Observing System (EOS) ClearingHouse (ECHO) web services via a new REST API.

Continues to support cross-discipline data discovery and order creation.

Developed and tested with modern technologies to improve the quality and testability of the underlying code, along with allowing for a more modern user interface.

Additional features not available in WIST:
- Enhanced User Experience – Users are able to download their data in no more than 3 page transitions.
- Enhanced Data Discovery – Users are able to discover additional datasets that may enhance their research via text keywords and specific metadata fields.
- Integrated Data & Service Discovery and Invocation – Users are able to discover and invoke services associated with their data of interest.
- Bulk Data Downloading – Users are able to perform a bulk download of online available data.

Reverb planned to replace WIST as the primary access points to EOSDIS and other Earth science data holdings by 2012.

http://reverb.echo.nasa.gov/reverb

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