

Mercury

Distributed Metadata Management, Data Discovery and Access System

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Introduction to Mercury

Developed by ORNL for NASA to address recurring data access problems Mercury is a Web-based system to search for metadata and retrieve associated data. Mercury incorporates a number of important features:

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Key Features of Mercury

- Provides a single portal to distributed data
- Supports **spatial** searches
- Supports **temporal** searches
- Supports **fielded** searches
- Based on **international** metadata and Internet **standards**
 - Z39.50, FGDC, GILS, Dublin Core, XML...
- Has a very "light touch"
 - Business as usual** for PI's and other data contributors
 - Accessed via web browsers – **no special software**
 - Data providers and users can use **any hardware/software platform**

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....and More

- Stale information is removed with each index update
- Rapid implementation** – weeks or months not years
- Inexpensive** to operate (**automated**)
- Full support of **XML** – eXtensible Markup Language
- Adaptable template metadata collection tools exist
 - ORNL Metadata Editor - OME
- Harvests information from many **different file formats**
 - pdf, word, excel, access, gif, jpg, etc.

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Mercury Projects

USGS nSII EPA South Africa BigFoot NASA CDIAC CPTEC SAFARI 2000 Office of Science ARM ESIP Earth Science Information Partners System Wide Interoperability Layer NASA Project Office LBA-Hydrometeorology

Present Status of Underway pCO₂ Data

- Many different measurements (xCO₂, fCO₂, pCO₂)
- Many different data formats
- Many different storage locations
 - PI sites
 - Data centers
- Highly variable documentation
- No metadata standard

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