

## NASA's Global Change Master Directory:

## Discover and Access Earth Science Data Sets, Related Data Services, and Climate Diagnostics

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(Abstract # IN33D-1488) NASA's Global Change Master Directory provides the scientific community with the ability to discover, access, and use Earth science data, data-related services, and climate diagnostics worldwide. The GCMD offers descriptions of Earth science data sets using the Directory Interchange Format (DIF) metadata standard; Earth science related data services are described using the Service Entry Resource Format (SERF); and climate visualizations are described using the Climate Diagnostic (CD) standard. The DIF, SERF and CD standards each capture data attributes used to determine whether a data set, service, or climate visualization is relevant to a user's needs. Metadata fields include: title, summary, science keywords, data center, data set citation, personnel, instrument, platform, quality, related URL, temporal and spatial coverage, data resolution and distribution information. In addition, nine valuable sets of controlled vocabularies have been developed to assist users in normalizing the search for data descriptions. An update to the GCMD's search functionality is planned to further capitalize on the controlled vocabularies during database queries. By implementing a dynamic keyword "tree", users will have the ability to search for data sets by combining keywords in new ways. This will allow users to conduct more relevant and efficient database searches to support the free exchange and re-use of Earth science data. http://gcmd.nasa.gov/

