

Providing Tools and Services for Data Usability as well as Accessibility

Sara J. Graves

Global Hydrology Resource Center

sgraves@uah.edu

A challenge for international data centers is providing open access to their data holdings. An even more complex challenge is providing tools and services to enable users to more easily 'use' the data for meaningful research and applications. Many factors contribute to the complexity such as the scope of the types of data in a repository, spectrum of potential user communities, and increasing volumes of data.

This presentation will describe some of the tools and services being used in the Global Hydrology Resource Center (GHRC) Distributed Active Archive Center—established in 1991 as a United States National Aeronautics and Space Administration (NASA) Earth science data center, and managed jointly by the Earth Science Department at NASA's Marshall Space Flight Center and the University of Alabama in Huntsville's Information Technology and Systems Center. GHRC is a full-service science data center, performing data ingest, processing, archive, cataloging, documentation, distribution, and user services. GHRC is a member of national and international data organizations including the Federation of Earth Science Information Partners, NASA's Earth Science Data and Information System, and the International Council for Science – World Data System.

The GHRC is organized thematically around climate and water- and energy-cycle science expertise. The Center ingests, processes, archives, and distributes data related to these themes, including global lightning data from satellites, as well as ground-based lightning detection networks; long-term climate data records from numerous passive microwave instruments; and airborne and ground-based observations from hurricane science field campaigns and Global Precipitation Measurement Ground Validation experiments.

Some of the tools and services to be briefly described will be Metadata and Data Discovery Services, the Coincidence Search Engine Tool, Data Mining Services, the Polaris Interactive Explorer, and Curated Data Albums.