Fall 2011 AGU
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IN15: Envisioning Improvements for Earth Science Data Access
    http://sites.agu.org/fallmeeting/scientific-program/session-search/528
G19: The Science and Technology of the Global Geodetic Observing System
    http://sites.agu.org/fallmeeting/scientific-program/session-search/320

Improvements in Space Geodesy Data Discovery at the CDDIS

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Include GSAC team as co-authors?

Abstract

The Crustal Dynamics Data Information System (CDDIS) supports data archiving and
distribution activities for the space geodesy and geodynamics community. The main
objectives of the system are to store space geodesy and geodynamics related data
products in a central data bank, to maintain information about the archival of these data,
and to disseminate these data and information in a timely manner to a global scientific
research community. The archive consists of GNSS, laser ranging, VLBI, and DORIS
data sets and products derived from these data. The CDDIS is one of NASA's Earth
Observing System Data and Information System (EOSDIS) distributed data centers;
EOSDIS data centers serve a diverse user community and are tasked to provide facilities
to search and access science data and products.

Several activities are currently under development at the CDDIS to aid users in data
discovery, both within the current community and beyond. The CDDIS is cooperating in
the development of Geodetic Seamless Archive Centers (GSAC) with colleagues at
UNAVCO and SIO. The activity will provide web services to facilitate data discovery
within and across participating archives. In addition, the CDDIS is currently
implementing modifications to the metadata extracted from incoming data and product
files pushed to its archive. These enhancements will permit information about CDDIS
archive holdings to be made available through other data portals such as Earth Observing
System (EOS) Clearinghouse (ECHO) and integration into the Global Geodetic
Observing System (GGOS) portal. This poster will present the prototype implementation

of these GSAC web services at the CDDIS as well as plans for the metadata enhancements to facilitate cross-discipline data discovery.

These data and products sets include Global Navigation Satellite Systems (GNSS, particularly GPS and GLONASS data), laser ranging, Very Long Baseline Interferometry (VLBI), and Doppler Orbitography and Radio-positioning Integrated by Satellite (DORIS).

The distributed data centers serve a large and diverse user community (as indicated by EOSDIS performance metrics) by providing capabilities to search and access science data products and specialized services.

The CDDIS is one of the data centers funded and managed by NASA's ESDIS Project, which manages EOSDIS science operations. The EOSDIS science operations are performed within a distributed system of many interconnected nodes (Science Investigator-led Processing Systems and distributed, discipline-specific, Earth science data centers) with specific responsibilities for production, archiving, and distribution of Earth science data products. The distributed data centers serve a large and diverse user community by providing capabilities to search and access science data products and specialized services.
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