An Update on the CDDIS

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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.

The CDDIS data system and its archive have become increasingly important to many
national and international science communities, in particular several of the operational
services within the International Association of Geodesy (IAG) and its project the Global
Geodetic Observing System (GGOS), including the International DORIS Service (IDS),
the International GNSS Service (IGS), the International Laser Ranging Service (ILRS),
the International VLBI Service for Geodesy and Astrometry (IVS), and the International
Earth Rotation Service (IERS).

The CDDIS has recently expanded its archive to support the IGS Multi-GNSS
Experiment (MGEX). The archive now contains daily and hourly 30-second and sub-
hourly 1-second data from an additional 35+ stations in RINEX V3 format. The CDDIS
will soon install an Ntrip broadcast relay to support the activities of the IGS Real-Time
Pilot Project (RTPP) and the future Real-Time IGS Service. The CDDIS has also
developed a new web-based application to aid users in data discovery, both within the
current community and beyond. To enable this data discovery application, the CDDIS is currently implementing modifications to the metadata extracted from incoming data and product files pushed to its archive.

This poster will include background information about the system and its user communities, archive contents and updates, enhancements for data discovery, new system architecture, and future plans.