GLOBAL DATA ASSEMBLY CENTER (GDAC) REPORT TO THE GHRSST SCIENCE TEAM

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ABSTRACT

In 2012-2013 the Global Data Assembly Center (GDAC) at NASA's Physical Oceanography Distributed Active Archive Center (PO.DAAC) continued its role as the primary clearinghouse and access node for operational GHRSST data streams, as well as its collaborative role with the NOAA Long Term Stewardship and Reanalysis Facility (LTSRF) for archiving. Our presentation reported on our data management activities and infrastructure improvements since the last science team meeting in 2012.

1. Introduction

The oral presentation reviewed the core functions of the GDAC and its contributions to the operation of GHRSST:

- Ingest, Quality Assurance, Metadata, Distribution, Discovery, Archive, LTSRF interface for +61 GHRSST datasets
- Support operational datastreams for L2P/L3/L4 data from 14 RDACs (30 GB/day; 6K granules/day)
- Maintain linkages to data providers and LTSRF archive
- Develop/improve tools and services for data usage including web services
- Report on user reports and distribution statistics
- User community engagement
- Curate dataset metadata and lifecycle

2. Accomplishments

The major accomplishments of the GDAC revolved around the themes of GDS-2 implementation, tools and services of existing GHRSST datasets, metadata improvements and user services. The highlights include

- GDS-2 tasks:
  - Data handler for ingest implemented
  - Python-based metadata compliance checking improved
  - NetCDF read software in R, IDL, Matlab, Python developed
- Dataset lifecycle implementation. A new “Submission Agreement” required from data providers will improve the capture of dataset quality
- GHRSST Project Office coordination through at joint Dec 2012 meeting at JPL
- Upcoming tools and services including new web services for discovery, extraction, and visualization
- GHRSST L4 spectral analysis “package” released
- NASA sponsored GHRSST webinar

3. Distribution metrics

The following figures show distribution metrics from the GDAC since 2011. Users, data volumes and number of files are all steady or have slightly increased.
Figure 1. Number of unique monthly users via FTP and OPeNDAP

Figure 2. Number of monthly files distributed

Figure 3. Number of monthly files distributed

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