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# **WTF-CEOP NASA Implementation Status**

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# Activities

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- **Support on Provision of Satellite Data**
  - Professor Koike made direct requests to data providers.
  - WGISS representatives asked to facilitate process of data delivery.
  - Professor Koike agreed to prioritize data sets of interest.
- **Network Testing**
  - NASA supporting use of Ensign tool to monitor network performance.
  - First results available between NASA/GSFC and University of California at San Diego (UCSD).  
<http://ensight.eos.nasa.gov/Organizations/ceop/index.shtml>
  - Still working on POCs at Univ. of Tokyo and Max Planck Institute
- **Data Integration Tool Development**
  - Focus of NASA effort.

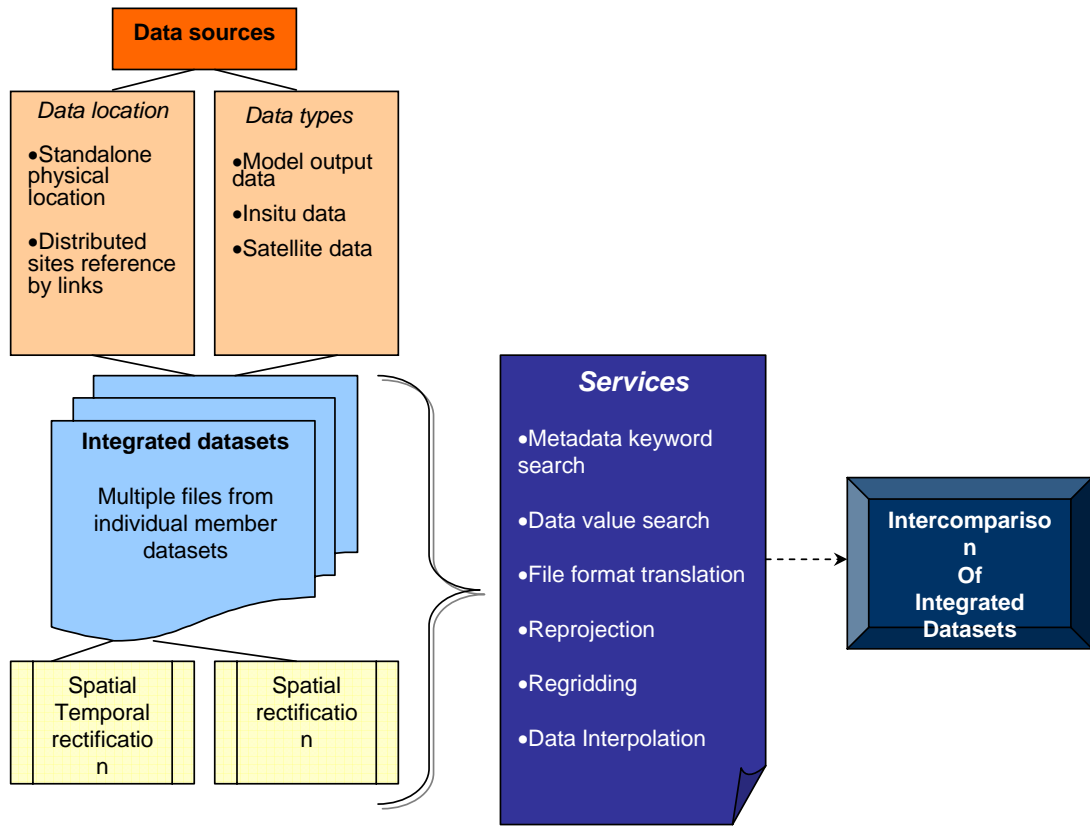


# Tool Development Planning

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- Worked with U.S. CEOP science representatives to clearly define data integration.
- Discussed barriers to data access and use at the Third CEOP Implementation Planning Meeting at Univ. of California/Irvine.
- Organized a workshop to investigate tool capabilities at the Center for Oceans, Land and Atmosphere (COLA).
  - GRADS/DODS Server - Brian Doty, Jennifer Adams/COLA
  - OPeNDAP Transport Protocol - Dan Holloway/URI
  - NASA Web-based GIS Software Suite (NWGISS) - Liping Di/GMU
  - Earth Systems Grid (ESG) - Jose Garcia/NCAR
  - NASA CEOP Scientists - Mike Bosilovich and Christa Peters-Lidard
- Based on discussions, identified tool enhancements that support the data integration process.

# Data Integration Diagram





# Tool Capabilities

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- DODS/OPeNDAP - Serves gridded data (in situ, gridded satellite, model output) to various clients using CF (netCDF Climate and Forecast Metadata) and/or COARDS (Cooperative Ocean Atmosphere Research Data Service) conventions.
- NWGISS - Provides WCS access to satellite data, including swath data, along with associated services (e.g. subsetting, reprojection, etc.).
- Grads/DODS Server - A client/server package to provide access and services to gridded data.
- ESG - Grid-enabled access to data.

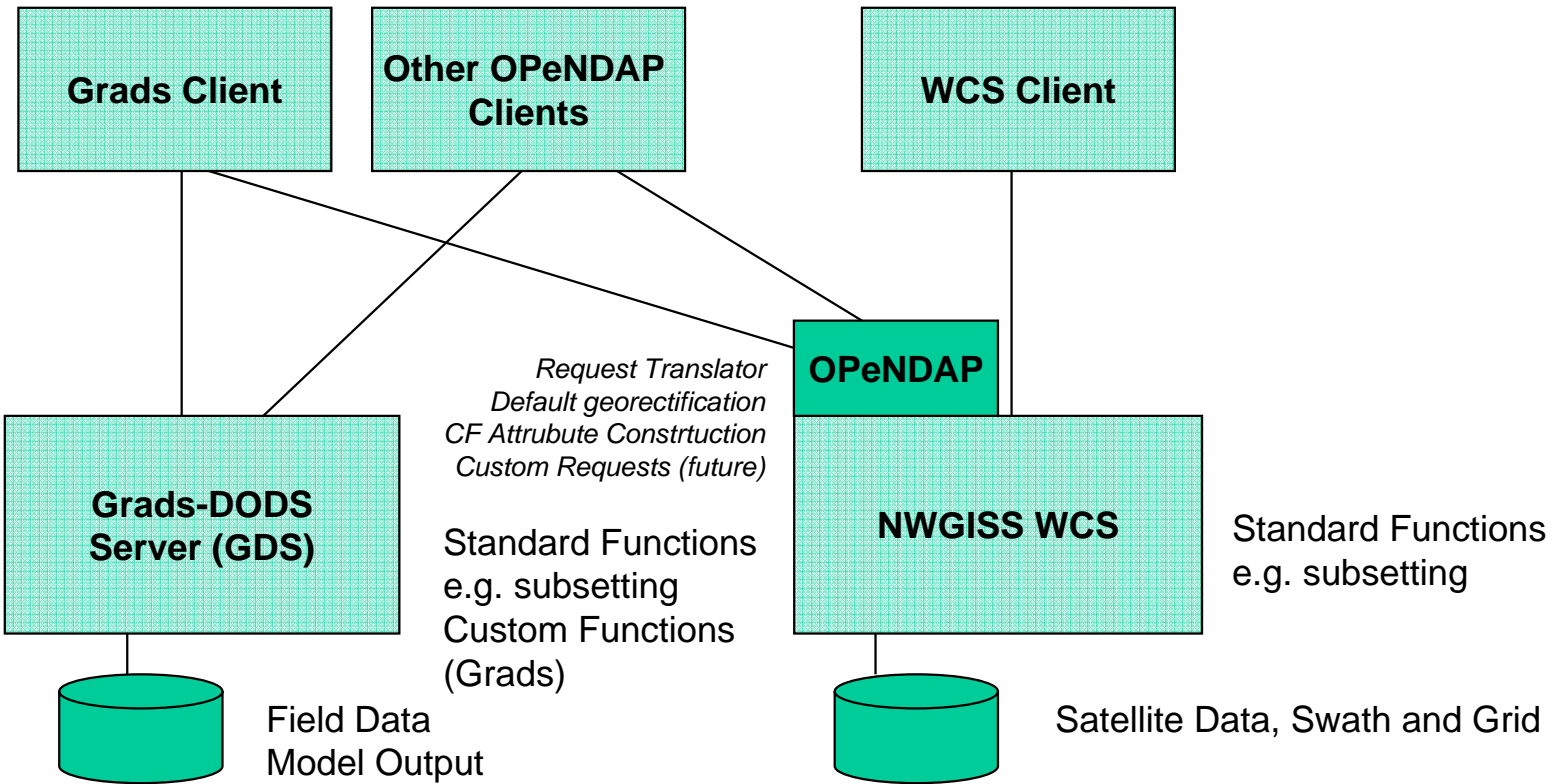


# Draft Implementation Plan

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- Focus on integration/interuse of swath data with in situ and model output data.
- Enhance NWGISS to serve swath data according to OPeNDAP conventions.
  - Generate gridded data on the fly.
  - Produce CF metadata.
- Initially use default functions but later enhance a client (e.g. Grads) to provide custom functions.

# Design Diagram



# Prototype Plan

- May – July : high level design and detailed design of NASA prototype
- July – Sept : implementation
- Sept : developer testing of prototype
- Oct : CEOP & COLA science user testing
- Nov/Dec : test prototype with other CEOP users and identify additional needed capabilities
- Jan-March: Discussion of future iteration of prototype
- Feb 2005: prototype demonstration at CEOP Plenary meeting in Japan