Recommendations from the Alliances Workshop (held in conjunction with the Harmonization Workshop)

On November 11 and 12 2010, a joint Alliances and Harmonization workshop was held at the National Academy of Sciences in Washington DC. The workshop featured a number of presentations from projects that were contributing to Tasks DA-09-01b and DA-09-02a. Specific recommendations coming from the Alliances component of the workshop were as follows:

 1. Given that Alliances have the potential to realize a number of the objectives of GEOSS it is agreed that Alliances should be considered in different categories. In the prototype stage, it is recommended that the Alliances would focus on different areas of development with the following priorities:

> "Data Integration System Development Alliance":
>> 1. Provenance
>> 2. Visualizations
>> 3. Ontologies
> "Information Services Alliance"
>> 1. User requirements
> "Data Product Development and Archival Alliance"
>> 1.   Data transfer from collection point to Global Data Centre

2. Based on a review of the respondents to the Phase 1 Survey the initial focus for a prototype Alliance it is recommended that the initial prototype alliance should involve:
   – Data Integration and Analysis System (DIAS), Japan
   – Ground European Network for Earth Science Interoperations – Digital Repositories (GENESI-DR), ESA
   – NASA Goddard Earth Sciences (GES) Data and Information Services Center (DISC), USA together with Goddard Interactive Online Visualization ANd aNalysis Infrastructure (Giovanni), USA.

3. The purpose of this prototype Alliance is to demonstrate how existing centre's infrastructures could, in the spirit of the Task DA-09-02a:

"Coordinate data management approaches that encompass a broad perspective of the observation data life-cycle – from input to processing, archiving, and *(discovery, access) dissemination, including reprocessing, analysis and visualization* of large volumes and diverse types of data"

This prototype Alliance would:
   – Promote 1 to 1 and 1 to many sharing of data and associated services
   – Meet specifically identified use cases
   Be undertaken with minimum effort and time

4. In its initial stages it is recommended that this prototype Alliance demonstrate, (initially in a bilateral way), services interfaces such as the following:
   - GENESI to DIAS:
     - use of VOMS (Virtual Organisation Management System Service) for User Certification / Data Policy
     - Genesi-fication of selected DIAS datasets
   - DIAS to GENESI:
     - Ontology/semantics for data discovery (to be confirmed)
   - GIOVANNI to GENESI:
     - discovery and access to NASA data sets
   - GENESI to GIOVANNI:
     - On demand processing for selected use case in GRID environment

5. In developing this prototype Alliance, it is recommended that the following template be tested to see how well it would serve as a possible basis for developing future alliances:

   1. The candidate centres will be invited to be part of an alliance. Each alliance will form an Alliance team and name an Alliance coordinator.
   2. The Alliance Team will define a short-term (12-month) project and, as appropriate, several longer term projects that will contribute to GEOSS.
   3. In collaboration with a nominee from the Harmonization Sub Task, each Alliance team will map the structure and activities of each centre against the Harmonization model.
   4. The Alliance will explore the differences between the centres and propose interfaces that could be developed in order to facilitate better collaboration and interoperability.

6. It is recommended that selected data centres will map their structures onto the GEO Harmonization model in order to gain experience in using GEO terminology.

7. The Alliances group is preparing to distribute its Phase II Questionnaire to the Water Cycle Data Centres. The harmonization community is invited to add questions for this survey form (or future survey forms) to solicit information from data centres in different SBAs. (Inputs are now solicited for the Phase III Survey)