

LTER Information Managers Report to the Coordinating Committee

Prepared by IMExec

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Summary of Information Managers Committee (IMC) activities since LTER CC meeting at VCR, September 2005.

1. IMExec Meeting. The winter IMExec meeting was held February 7-8, 2006 at NCEAS. Attending members included Barbara Benson NTL, Emery Boose HFR, James Brunt LNO, Corinna Gries CAP, Don Henshaw AND, Nicole Kaplan SGS, Eda Melendez-Colm LUQ, Ken Ramsey JRN, and Jonathan Walsh BES. Local information managers Sabine Grabner MCR and Margaret O'Brien SBC and NCEAS scientists Josh Madin and Mark Schildhauer also participated. The meeting included conference calls with Henry Gholz NSF, Peter McCartney NSF, and John Porter VCR. Highlights from this meeting and IMExec conference calls are noted below.

2. IMC & ASM Meetings. The IMC will meet in conjunction with the All-Scientists Meeting (ASM) in Estes Park. The first day (Sep 19) is intended for LTER information managers and invited guests (especially ILTER information managers) and will include reports from the LNO and current working groups (unit dictionary, controlled vocabulary, website design, IMC web pages), updates on site activities, technology demos, and a possible conference call or visit with Henry Gholz. A business session will include elections for the IM chair and the IMExec and NISAC committees. The second day (Sep 20, ASM ancillary day) will include three workshops open to the larger LTER community: controlled vocabularies and the query interface to the LTER data catalog, information management in the Trends project, and cyberinfrastructure planning for LTER Network synthetic science. An agenda and reading materials for the meeting will be posted on the meeting web page no later than July (contacts: Nicole Kaplan SGS – meeting logistics, Barbara Benson NTL – meeting agenda).

LTER information managers are also directly involved in many of the workshops planned for the All-Scientists Meeting, including sensor networks, high performance GIS systems, ecosystem informatics education and research, information management for social sciences, and ILTER (contacts: Jonathan Walsh BES – workshop coordination, Kristin Vanderbilt SEV – ASM planning committee).

3. CI Planning. Four cyberinfrastructure (CI) focus groups met last fall as part of the LTER Network planning process. Each group created a white paper for its assigned topic (cross-site experiments, data integration, modeling, and human resources). The white papers form the basis for the CI strategic plan currently under development by the CI Team (Barbara Benson NTL, James Brunt LNO, John Porter VCR, and John Vande Castle LNO). A progress report on CI planning was presented to NSF and the Executive Committee in March. The CI strategic plan will be reviewed by NISAC and IMExec in May, integrated with the research strategic plan, and presented to the LTER community at the ASM in September.

Some interesting questions that have arisen in the course of this planning effort include: How could advances and standardization of cyberinfrastructure facilitate cross-site experiments? How should computer models be documented and archived? How can models be made reusable? What approaches are most useful for facilitating data integration? From a funding perspective, should sites advance incrementally or should all sites advance to some fairly high level? (contact: Barbara Benson NTL).

4. Web Site Design. An IMC working group has prepared a document containing recommendations for the design and content of LTER web sites. The recommendations are intended especially for new sites or sites redesigning their web pages and focus on improving navigation, access to information, and a sense of network identity. The document has been widely circulated for comment in the LTER community. NISAC will consider next steps at its May meeting (contact: Nicole Kaplan SGS).

5. Trends. The LNO, IMC, and NISAC are discussing the cyberinfrastructure required to support the new Trends project. The creation of a dynamic web page for Trends provides an opportunity to develop a general model for future NIS modules. Current thinking involves the use of EML to configure and load datasets, and a robust numerical scripting language such as R to transform datasets to a global framework that can be queried using web-based tools. Challenges include ensuring that site data are adequately documented and registered in MetaCat, and reconciling the need to access data directly with the need for user registration and adequate security. The plan is to develop a prototype for the ASM (contact: James Brunt LNO).

6. Controlled Vocabulary. An IMC working group formed last summer is developing a controlled vocabulary that will greatly improve the ability to search and browse LTER datasets (e.g., via the new LTER Data Catalog; see <http://metacat.lternet.edu/query/>). This effort will build on existing vocabularies (e.g., NBII and GEMET) as well as keywords currently found in LTER EML documents. The current keyword list can be viewed on the LTER CVS (<http://cvs.lternet.edu>). The plan is to develop a prototype for the ASM (contact: John Porter VCR).

7. ClimDB. The ClimDB database (hosted by AND) was recently moved to a department production server at Oregon State University. The new location will cost about \$500 per year but will save considerable project staff time otherwise required for system administration. AND and LNO are exploring options for moving the database to a server at LNO. NISAC will consider the question of whether individual sites that host NIS modules should receive network resources, and whether NIS modules should ultimately reside at the LNO (contact: Don Henshaw AND).

8. All-Site Bibliography. The All-Site Bibliography is one of several network databases residing at the LNO that have been improved and updated with input from the IMC. Though users are not tracked, the number of hits the Bibliography receives is currently in the top ten for the LTER Network website. The LNO and NSF use the Bibliography to identify possible new publications for news releases. For more details see the LTER Intranet under "LTER network databases." (contact: James Brunt LNO).

