LTER Information Managers Report to the Coordinating Committee
Prepared by IMExec
10 September 2005

1. Annual IM Meeting. The annual IM meeting was held August 4-7, 2005 in Montreal, Canada. The agenda included updates on current projects (items 2-6 below), working group discussions (7-13), and election of new IMExec members (14), as well as a video conference with Henry Gholz and Liz Blood at NSF. For a list of meeting participants and additional details, please see http://gce-lter.marsci.uga.edu/lter_im/2005/. The current issue of DataBits is available online at http://lternet.edu/databits.

2. Cyberinfrastructure Planning. As part of the LTER Network planning grant, information managers from the network science working groups met with NISAC and the newly formed CI Team (Santa Fe, June 16-17, 2005) to initiate work on a strategic plan for LTER Network cyberinfrastructure (contact: Peter McCartney CAP).

3. ClimDB. Twenty-four of 26 sites now participate in ClimDB/HydroDB. Air temperature, precipitation and stream flow are the most commonly harvested variables. Sites are strongly encouraged to add other level-2 variables (especially relative humidity, solar radiation, and wind speed & direction) and data from early years wherever possible (contact: Don Henshaw AND).

4. IM Review Criteria. The IM review criteria approved at the spring 05 CC meeting were used in LTER site reviews this summer. An informal discussion and assessment at the IM meeting identified a few areas where the wording of the guidelines might be clarified, but on the whole the guidelines were found to be quite helpful both for reviewers and for sites preparing to be reviewed (contact: Emery Boose HFR).

5. Data Access Policy. Plans were discussed for implementing the revised LTER data access policy approved at the spring 05 CC meeting. Sites will begin working to modify their data access portals to reflect the changes and accommodate the new standard criteria for data release (contact: Peter McCartney CAP).

6 . EML Implementation & Harvesting. More than 90% of LTER sites have implemented the EML standard for site metadata. About 75% of these sites have made their EML available to centralized servers such as the LTER MetaCat, and most of the remaining sites are close to doing so. There is still much variation among sites with regard to the percentage of datasets in EML, the level of EML implemented, and the percentage of EML harvested (contact: Inigo San Gil LNO).

7. SiteDB. This working group explored the use of the LTER site database (SiteDB; http://www.lternet.edu/sites/) to provide a single portal for uniform access to information, metadata, and data from individual sites. A series of improvements to SiteDB were proposed, including improved access, navigation, content, and links to individual site web pages. Sites are strongly encouraged to check and update the current information in SiteDB for their site (contact: Nicole Kaplan SGS).

8. Web Site Design. This working group continued a project initiated last year to develop recommendations for individual site web pages, especially for new sites and for sites redesigning their existing pages. The primary goals are to improve access to site information and to emphasize membership in the LTER Network. Once completed the recommendations will be circulated for comment, considered by NISAC, and presented to the CC for approval (contact: Nicole Kaplan SGS).

9. Unit Dictionary. This working group continued ongoing efforts to define common measurement units for data integration and synthesis. The Unit Registry Prototype (http://fire.lternet.edu/customUnit/) demonstrates how a dictionary of unit names, types, and definitions at multiple levels (site, working group, community, and domain) might be created by the community to facilitate generation of EML documents and help resolve syntactic and semantic ambiguities and conflicts (contact: Karen Baker PAL).

10. Controlled Vocabularies. This working group explored the use of hierarchical controlled vocabularies to facilitate the browsing and searching of LTER datasets. Keywords used to characterize most LTER datasets are currently uncontrolled and poorly suited for efficient searching. However, controlled vocabularies have been created for most scientific disciplines. The working group developed strategies for evaluating existing resources and possible collaborations to create a controlled vocabulary for the LTER Network (contact: John Porter VCR).

11. Attribute Ontologies. This workshop examined the potential benefits of creating attribute ontologies for LTER datasets. Ontologies are sets of related classes that provide semantic information for knowledge systems. Centrally-shared attribute ontologies could facilitate metadata entry and searching in the short run and data integration and synthesis in the long run. The working group outlined initial steps for creating a prototype to be evaluated in a workshop at the ASM meeting next year (contact: Peter McCartney CAP).

12. Community Standards. This working group discussed the process of creating community standards in information technology and lessons learned from the design and implementation of EML across the LTER Network (contact: Florence Millerand PAL).

13. All-Scientists Meeting 2006. This working group began planning for the ASM meeting in Estes Park next year. Recommendations will be developed for IM-related workshops as well as plenary talks, virtual poster sessions, and IT demonstrations. The IM meeting will likely be scheduled for 1-2 days before and/or after the ASM. Sites are encouraged to send their information managers to the ASM in light of the expected focus on cyber-infrastructure planning (contact: Jonathan Walsh BES).

14. IMExec Committee. Regular members for the coming year include: Emery Boose HFR, Corinna Gries CAP, Nicole Kaplan SGS, Eda Melendez-Colom LUQ, Ken Ramsey JRN, and Jonathan Walsh BES. Ex officio members include: Barbara Benson NTL, James Brunt LNO, and Don Henshaw AND.