Spring 2005

LTER DataBits
Information Management Newsletter of The Long Term Ecological Research Network

Good Reads: Review

Strategies Supporting Heterogeneous Data and Interdisciplinary Collaboration: Towards an Ocean Informatics Environment

- Margaret O'Brien (SBC)

Karen S. Baker, Steven J. Jackson and Jerome R. Wanetick, "Strategies Supporting Heterogeneous Data and Interdisciplinary Collaboration: Towards an Ocean Informatics Environment", in Proceedings of the 38th Hawaii International Conference on System Sciences, Island of Hawaii, Hawaii, January 3-6, 2005.
http://csdl.computer.org/comp/proceedings/hicss/2005/2268/08/22680219b.pdf
Like other earth sciences, oceanography is dominated by interdisciplinary collaborations, in which participants often possess widely varying points of view, research foci, and data management systems. Shifts in the scale of research to global, multi-platform studies, coupled with an increasing interest in diverse partnerships such as those with local stakeholders and educators, have further challenged the current collaborative methods of ocean scientists and their IM systems. In this paper, the authors introduce the "Ocean Informatics Environment (OIE)," a collaboration of researchers, data managers and social scientists involved with several oceanographically oriented projects located at the Scripps Institute of Oceanography. Two of these projects are LTER sites: PAL (Palmer Antarctic LTER), and he newly instantiated CCE (which is closely affiliated with the CalCOFI program, California Cooperative Oceanic Fisheries Investigation). The authors discuss possible strategies to support and improve systems for heterogeneous data management. The goal of the OIE is to design a cooperative environment that is responsive to the varied aspects of its participants' research and data management practices. Their system trades a hierarchical solution for one where diversity and varied needs of collaborators is viewed as an asset to be preserved, rather than an obstacle to be overcome. These challenges are not exclusive to the realm of ocean sciences; all earth and ecological studies are expanding to encompass increasingly heterogeneous data, and so the concepts introduced here are certainly widely applicable.