

Report from the LTER Climate Committee.

to the LTER Coordinating Committee Meeting, Coweeta, Oct. 18-21, 1994.

Prepared by David Greenland.

The last report of the Climate Committee was given in the minutes of the meeting held at the All Scientists Meeting, September 9th 1993. These minutes were published in Network News Spring/Summer 1994 Issue 15. pp. 16-17. Several action items stemmed from that meeting and the action taken on these is reported below.

Climate as a Core Area

A letter was sent to the Coordinating Committee regarding the possibility of having climate as a LTER core area if the core areas were revised. That letter was sent on Oct. 18, 1993 (copies available).

Review of Climate Activities at the Sites

A review of climate work undertaken at each site has been organized. Doug Schaefer (LUQ) agreed take responsibility for, and be lead author on, a paper which reviews already completed and in progress climatic studies and observations at LTER sites. Doug has sent out a questionnaire to all sites inquiring about collection, management, and accessibility of climate data with respect to the standardization levels previously established. As of Oct. 4th he has received responses from 11 sites with responses still needed from ARC, BNZ, MCM, PAL, CDR, KNZ, and NTL.

Advertisement of the CED

The Climate / Ecosystem Dynamics Bulletin board was advertised in the LTER Network News Spring/Summer 1994 Issue 15. p17.

Submission of Proposal on Climate Analysis and Synthesis

The proposal to update the Climatic Description and Synthesis Document was rewritten and was successfully resubmitted under the title "A Climatic Analysis Of Long-Term Ecological Research Sites". The investigators are David Greenland, Department of Geography, University of Oregon, Eugene, OR 97403-1251. Timothy Kittel, Climate System Modeling Program, University Corporation for Atmospheric Research, Box 3000, Boulder, CO 80307 and Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, Colorado 80523. Bruce P. Hayden, Department of Environmental Science, University of Virginia, Charlottesville, VA 22903. and David S. Schimel, Ecosystem Dynamics and the Atmosphere, Climate and Global Dynamics Division, National Center for Atmospheric Research, Box 3000, Boulder, CO 80307.

The aim of the proposal is to perform a comparative climatological analysis of the LTER sites. The intersite analysis will include four items:

- 1) a systematic time series analysis of temperature and precipitation records of all 19 LTER sites using the same methodology for each site;
- 2) a compilation of projected climate change scenarios from a range of climate model experiments interpolated to LTER sites and regions and a discussion of uncertainties associated with these projections; *dir. by Kittel*
- 3) descriptions of the climate and water budget of the LTER sites;
- 4) a comparative analysis of the climate of all 19 sites, including analyses of regional climates for the sites.

The analysis will be published as an electronic book by means of the LTER Network MOSAIC information system as well as an LTER Network paper and will also be submitted for publication in peer reviewed journals.

An important by-product of the research will be the compilation of a basic comparative climatic data base for sites in the LTER Network.

El Nino Activities

Climate Committee members participated in the El Nino workshop at the LTER All Scientists Meeting at Estes Park. Papers from the workshop were published in Greenland, D. (ed). 1994. El Nino and Long-Term Ecological Research (LTER) Sites. Publication No. 18. LTER Network Office. University of Washington. Seattle, WA. USA. 57. pp. The following sites made contributions to this publication: SEV, NWT, AND, KNZ, NTL. There are plans to make this monograph the basis for a paper to be submitted to BioScience.

Other Activities

As usual, over this reporting period, the Climate Committee has responded to a number of requests from individuals and institutions. Individuals who have made requests include: Cindy Veen (Hubbard Brook), Bill Lauenroth (CPER), Caroline Bledsoe (UC Davis), Stephanie Martin (Network Office), Kathleen Salzberg (NWT).

A growing number of bodies are interested in the LTER Climate Data Base and other LTER data bases. In most of these cases the organizations are referred to Rudolf Nottrott in his role as Network Data Manager and point person for site data managers. The organizations in this category include:

The National Weather and Climate Information System for Agriculture and Natural Resources Research. National Research Support Project Proposal. c/o Joyce Strand, Statewide IPM Project, University of California, Davis, CA 95616-8621.

USDA Global Change Data Assessment and Integration Project. c/o Susan G. Schram, CIESIN Food and Agriculture Program Coordinator, Consortium for International Earth Science Information Network, 1825 K Street. N.W. Suite 805. Washington D.C. 20006.

Interagency Working Group on Data Management for Global Change. c/o. Robert M. Cushman. Carbon Dioxide Analysis Information Center, Oak Ridge National Laboratory, Stop 6335, Oak Ridge. TN. 37831-6335.