

PAGES TIMESTREAM 2 – LONG RECORDS

PAST GLOBAL CHANGES

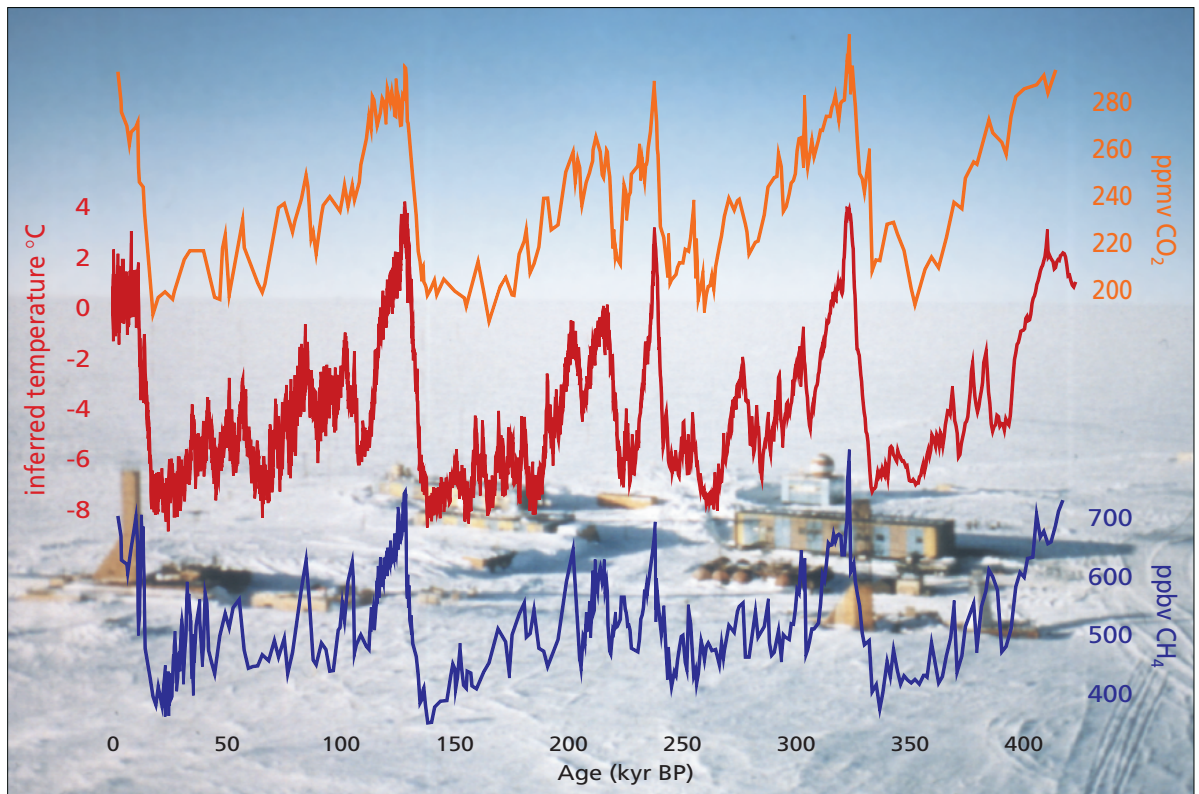


Figure 1: The sequence of changes in atmospheric CO₂, isotopically inferred temperature and CH₄ as recorded in the Vostok ice core. The record is 420,000 years long, comprising nearly 4 complete glacial cycles. Each cycle shows similar structure in terms of its termination as well as glacial period oscillations between relatively stable bounds. The interglacial periods are quite variable in their duration and evolution. The record also shows that modern levels of concentration of the greenhouse gases CO₂ and CH₄ are unprecedented over the entire record. For a detailed report of these measurements see Petit et al., (Nature, 399, 429–36, 1999). A version of this figure is available in the PAGES transparency set (see last page, "Have You Seen...") The background image shows the Vostok research station in Antarctica (Photo: Todd Sowers).

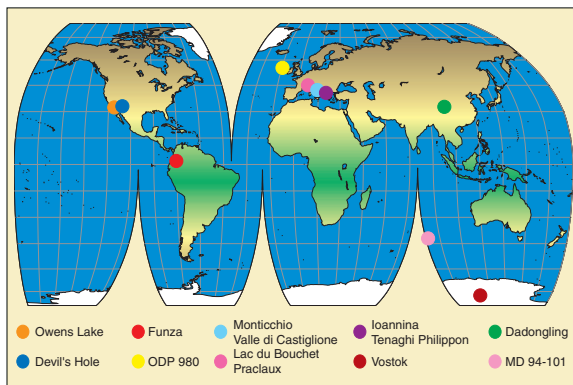


Figure 2: Site map of long records discussed in this issue

The magnificent initial results from the four-cycle Vostok record have prompted us to devote much of the present issue to a variety of long records, each spanning at least one, and usually more than one glacial cycle. The emphasis is perhaps biased towards 'terrestrial' records, partly because they are so diverse in terms of locations, archives and proxies, partly because they reflect the work of a rather dispersed research community, the combined efforts of which are less often gathered together to illustrate their value and interest. The examples chosen (see site map, figure 2) are illustrative and make no claim to be an informed selection of the 'best' records, so we trust those colleagues who feel spurned will both forgive our

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EDITORIAL

National PAGES Meetings

Several countries have organized formal or informal PAGES groups. In some cases, these are linked to the PAGES representative on the national IGBP committee. In other cases, they are less formally linked to the IGBP structure. A recent meeting of the Swedish PAGES community, held near Lund and organized by Barbara Wohlfarth, the PAGES representative on the Swedish national IGBP committee, provided an excellent illustration of the value of such groups and of the kind of meeting that can be organized. Other national meetings are already scheduled:

- as a result of broadly based local initiatives (for example the meeting in Prague, Czech Republic, Sept. 6–9, 2000)
- through the actions of the PAGES representative on the national IGBP Committee (for example the planned UK meeting, March 10, 2000)
- through close collaboration between the PAGES IPO and local organizers (for example that in Pune, India, February 4–5, 2000, linked to a meeting of the PAGES Scientific Steering Committee).

From a personal perspective, based largely on experience of the Lund meeting, I would see as highly desirable elements of any national meeting, at least the following:

- Close involvement of active, young researchers in every aspect of the program
- Liaison in advance with the PAGES Office to ensure the best possible interaction between national initiatives and the PAGES program as a whole
- Enough discussion time during the meeting to allow the airing of new ideas and forward-looking research agendas
- Participation by representatives of the appropriate national funding councils
- Lively, high quality poster sessions

Much funding for PAGES research is obtained at national level so national meetings can help to raise the profile of PAGES-related research and improve the climate of opinion within which judgements on the quality of the research are made – as well as providing a forum for making personal contacts and exchanging views. PAGES welcomes initiatives at national levels and will do all it can to support meetings that arise through such initiatives.

Frank Oldfield

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sins of omission and benefit from the demonstration effect of the records that have been included.

We look forward to being able to present comparable long records from Africa as an outcome of the second international symposium of the IDEAL project, 10–13 January, 2000 in Malawi and the PEP III open science meeting “Past Climate Variability in Europe and Africa”, 27–31 August, 2001 in Aix-en-Provence, France. (www.pages.unibe.ch/calendar/calendar.html). Similarly, inclusion of long marine and continental records from the Austral-Asian region awaits output from the PEP II meeting,

probably to be held in Singapore in September, 2000. One longer term goal must be the refinement of independent chronologies wherever possible (for example Allen and Huntley in this issue, figure 7). Only in this way will it become possible to explore usefully the question of phase lags and response times, the understanding of which is often precluded by our current degree of dependence on ‘tuned’ chronologies.

FRANK OLDFIELD
PAGES IPO, Bern, Switzerland
oldfield@pages.unibe.ch

WORKSHOP ANNOUNCEMENTS

Paleograssland Research 2000

WESTBROOK, CT, USA, 1–3 JUNE, 2000,

A conference on the reconstruction and modelling of grass-dominated biomes

Paleograssland Research 2000 will bring together international researchers to synthesize an informed multi-proxy approach to the reconstruction of past grasslands. The conference will take place over three days and will involve approximately sixty researchers actively involved in studying the reconstruction, biogeography, ecology and physiology of grasslands. Participating disciplines will include: pollen, stable isotopes, grass cuticles, charcoal, phytoliths and environmental modelling. The emphasis of the conference will be a holistic appreciation of paleo-grassland evidence.



www.wesleyan.edu/~kbeuning/PGR2000
Abstract Deadline: 1. March 2000

Monsoon climate, geomorphologic processes and human activities

NANJING, CHINA 25–29 AUGUST, 2000

The main theme of the conference will be monsoon climate, geomorphologic processes and human activities in Asia and Pacific regions. Further information, including session topics and contact information is available in the first circular, which can be viewed on the PAGES website.

www.pages.unibe.ch/calendar/calextras/IAG.html