

Announcements

- Editorial: Change at the Poles: A Paleoscience Perspective 2
- PAGES calendar 2
- Inside PAGES 3
- New on the PAGES Bookshelf 38
- PAGES OSM and YSM announcement 47

Science Highlights: Open Section

- Data portal for transient paleoclimate simulations covering the last 21 kyr 4
O. Timm, A. Timmermann and S.H. DeCarlo
- Teleconnections during glacial terminations associated with ENSO-like variability 5
L.D. Pena and I. Cacho
- Accurate dating of Gallipoli Terrace sediments: Historical eruptions and climate 8
G. Vivaldo, C. Taricco, S. Alessio and M. Ghil

Special Section: Change at the Poles: A Paleoscience Perspective

Science Highlights:

- 2000 years of climate variability inferred from Arctic lake sediments 10
D.S. Kaufman
- Holocene paleoclimate of the Canadian Arctic Islands: The ACVAST project 11
K. Gajewski, M. Peros, S. Finkelstein and M. Fortin
- Stable isotopes in tree rings from the Russian Arctic - a winter precipitation proxy? 14
S. Holzkämper and P. Kuhry
- Arctic thermokarst lakes and the carbon cycle 16
M. Edwards, K. Walter, G. Grosse, L. Plug, L. Slater and P. Valdes
- Initial results of HOTRAX address a wide range of Arctic paleoclimate issues 18
D.A. Darby, L. Polyak and M. Jakobsson
- Lake El'gygytgyn's emerging IPY record of Pliocene to recent Arctic change 19
J. Brigham-Grette, M. Melles, P. Minyuk, C. Koeberl and the Science Party
- Antarctic Paleobiology: Constraining reconstructions of past ice-sheet extent 22
L. Newman, P. Convey, J.A.E. Gibson and K. Linse
- Sea-ice proxies in Antarctic ice cores 24
R. Röthlisberger and N. Abram
- Accurate chronology for Antarctic ice cores on orbital timescales 26
K. Kawamura
- Antarctic Ice Sheet and climate history since the Last Glacial Maximum 28
M.J. Bentley and D.A. Hodgson
- Change in the Southern Ocean: Responding to Antarctica 30
L. Carter and G. Cortese
- New records of the role of Antarctic ice sheets in late Cenozoic climate 32
R. Powell, T. Naish, R. Levy and the MIS Science Team

Workshop Reports:

- Cenozoic bi-polar connections over millennia 35
- Recent change in the climate and atmospheric chemistry over Antarctica 36
- Ninth International Conference on Permafrost 37

Workshop Reports

- What causes glacial-interglacial cycles? 39
- CLIVAR-PAGES-WCRP summer school on El Niño 40
- PAGES Focus 4: Past Human-Climate-Ecosystem Interactions (PHAROS) 41
- Paleoclimate Modelling Intercomparison Project Phase 2 42
- Oxygen isotopes as tracers of Mediterranean climate variability 43
- Past climate variability in the Altai 44
- Climate extremes and their impact on Mediterranean societies 45

Impressum

PAGES International Project Office
Zähringerstrasse 25
3012 Bern - Switzerland
Tel.: +41 31 631 56 11
Fax: +41 31 631 56 06
pages@pages.unibe.ch
www.pages-igbp.org/

Editors:

Series Editors:
Louise Newman and Thorsten Kiefer

Guest Editors:

Julie Brigham-Grette and Ross Powell

Text Editing: Leah Witton

Layout: Louise Newman

Hardcopy circulation: 2000

ISSN 1563-0803

Printed on recycled paper by
Läderach AG - Bern, Switzerland

Cover images

Maps:

Antarctica - <http://geology.com>
The Arctic - www.arcticportal.org

Photos clockwise from top left:

Piston corer weight stand - D. Darby
Ice-corer cutting head - C. Gilbert (www.photo.antarctica.ac.uk)
Polar Viking + drill rig - M. Jakobsson
Lake El'gygytgyn UWITEC piston corer + DOSECC, Inc. GLAD-800 - J. Brigham-Grette
Jumbo piston corer barrel - D. Darby
ANDRILL hot water drill - L. Carter
N.B. Palmer + drill rig - J. Wellner
ITASE ice core system - P. Mayewski
Center:
ANDRILL drill rig - S. Nielsen

The PAGES International Project Office and its publications are supported by the Swiss and US National Science Foundations and NOAA.

© 2009