



<http://www.pangea.de/Projects/MARGO/>

MARGO newsletter

19 December 2003

Dear MARGO members,

The second year of the MARGO project is drawing to an end and it seems appropriate to sum up the activities of our group. All of us who went to the second workshop in Barcelona would agree that it was a most exciting time where after days of lengthy and difficult discussions, we have managed to break the apparent deadlock of differences among individual proxies and techniques and agreed on a completely new and rather unanticipated way of depicting the final results of the compilation. The Phase 2 of MARGO is now nearing to completion, albeit in a slightly extended schedule, and we are excited to report on the progress since the last meeting.

On behalf of MARGO convenors, I would like thank to all of you for contributing and analysing data, writing manuscripts, maintaining databases and promoting the group. Without the effort and enthusiasm of individual members, MARGO would not have got where it is now. An ambitious project aimed at summarising the collective wisdom and data generated over several decades, at first MARGO seemed as a dream difficult to reach. Yet, thanks to your hard work and dedication, this dream is now becoming reality.

Best wishes for the holiday season!

Michal Kucera

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1. MARGO at ICP8

The organisers of the 8th International Conference on Paleoceanography (Biarritz, France, 5-10 September 2004) have recognised the importance of MARGO for understanding of past climate dynamics. Thanks to Ralph Schneider who liaised with the organisers, MARGO results will be aired at the conference through an invited talk by Michal Kucera. In addition, there will be a dedicated MARGO poster session and we would like to invite all members of the group to take up this opportunity to present the latest results of individual proxies, regional comparisons and new techniques. Given the signals we have received so far, there will certainly be substantial interest for the project.

Visit ICP8 web site at: <http://www.icp8.cnrs.fr>

2. MARGO QSR volume

From the co-editors – many thanks to all authors and reviewers for your hard work in the past two months (and sorry for all the various arm-twisting techniques we have practiced on you)! We are now in a very strong position with 11 out of 13 papers being submitted, 5 papers accepted and 3 papers revised and ready. I am in constant contact with Jim Rose, editor-in-chief of QSR, in order to secure the earliest possible publication slot. The table at the end of this newsletter details the contents of the QSR volume. As you will see, we have produced a number of excellent and important papers and the volume has a good chance to become a milestone for paleotemperature studies in past oceans.

3. Data collection and progress of Phase 2 publication

We have set an ambitious schedule in Barcelona and as you can imagine, we are slightly lagging behind. By no means does this suggest we have had no progress. On the contrary – I am happy to report that *ALL proxy-specific data are now in place*. Please visit the project website (address below the logo) to see the new data and proxy-specific maps created using the templates devised in Barcelona. We are currently analysing the data with the aim of having a manuscript ready by April or earlier.

Quaternary Science Reviews – contents of MARGO special issue

Introduction/Preface

Multiproxy approach to reconstructions of the glacial ocean surface Kucera, M., Rosell-Melé, A., Schneider, R., Waelbroeck, C., Weinelt, M.

Part one - proxy specific reconstructions using harmonised parameters

- The surface ocean at middle to high latitudes of the Northern Hemisphere during the Last Glacial Maximum (LGM) - estimates from dinoflagellate cyst assemblages De Vernal, A., Eynaud, F., Henry, M., Hillaire-Marcel, C., Londeix, L., Mangin, S., Matthiessen, J., Marret, F., Radi, T., Rochon, A., Solignac, S., Turon, J.-L.
- Glacial sea-surface temperatures from assemblages of planktonic foraminifera: a framework for regional reconstructions based on multi-technique consensus Kucera & Weinelt, Kiefer, Pflaumann, Hayes, Weinelt, Barrows, Chen, Cortijo, Duprat, Waelbroeck
- Glacial Mediterranean sea surface temperatures reconstructed from planktonic foraminifer assemblages Angela Hayes, Michal Kucera, Nejib Kallel, Laura Scaffi, Eelco Rohling
- Last glacial maximum sea-surface temperatures around the Australian margin and Indian Ocean Barrows, T.T, Juggins, S., and Cortijo, E.
- Sea surface temperature and sea ice distribution of the last glacial Southern Ocean – A circum-Antarctic view based on siliceous microfossil records Rainer Gersonde, Xavier Crosta, Andrea Abelmann and Leanne Armand
- Planktonic foraminiferal Mg/Ca as a proxy for past oceanic temperatures: A methodological overview and data compilation for the Last Glacial Maximum S. Barker, I. Cacho, H. M. Benway and K. Tachikawa
- Sea surface temperatures during the last glacial maximum in the world's oceans as estimated from UK₃₇' A. Rosell-Melé and R. Schneider

Part two - comparison and evaluation of proxies and new techniques

- Harmonized global planktonic d¹⁸O data set: relation to surface water temperature and d¹⁸O C. Waelbroeck, S. Mulitza, H. Spero, T. Dokken and T. Kiefer
- Constraints on SST estimates for the northern North Atlantic/Nordic Seas during the LGM Marius Meland, Eystein Jansen, Harry Elderfield
- Testing sea-surface temperature estimation techniques against new MARGO-compiled western Pacific surface sediment planktic foraminifer faunal assemblage data M.-T. Chen, Huang, Pflaumann, Waelbroeck and Kucera
- Perspectives on mapping the MARGO reconstructions by variogram analysis/kriging and objective analysis Christian Schäfer-Neth, André Paul, Stefan Mulitza
- The deglacial warming in the Pacific Ocean: A review with emphasis on Heinrich event 1 Thorsten Kiefer and Markus Kienast
- Planktonic Foraminiferal Assemblages Preserved in Surface Sediments Correspond to Multiple Environmental Variables Ann E. Morey, Alan C. Mix and Nicklas G. Piasias



Happy Holidays!