Geophysical Research Abstracts,
Vol. 10, EGU2008-A-06740, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-06740
EGU General Assembly 2008

Preliminary geochemical assessment of the suitability of near-coastal Mediterranean sediments for detailed climate reconstruction (MOCCHA project)

B. Robert, T. Jilbert, G.J. Reichart, and G.J. De Lange

Department of Earth Sciences – Geochemistry, Faculty of Geosciences, Utrecht University, The Netherlands (b.robert@geo.uu.nl / Fax: +31-(0)30-2535302 / Phone: +31-(0)30-2534991)

High sedimentation rate sites are ideal for the study of short-time scale paleoclimate variability in marine sediments, offering the possibility for high resolution geochemical profiling. Such sites are often found on continental shelves, one example being the Gallipoli terrace in the bay of Taranto, eastern Mediterranean. Pilot cores recovered from two sites on the terrace have been analyzed by novel XRF and color-scanning techniques, potentially providing a detailed climate variability throughout the Holocene. In addition, sections of particular interest are being prepared by resin-embedding for ultra-high resolution elemental analysis and optical microscopy. The complex influence of external (solar), teleconnected (ENSO, monsoon) and regional (NAO) climate phenomena will be investigated so as to assess if this site is suitable for prolonged high-resolution paleo-climate reconstruction using IODP drilling tools.

This work is supported by the EUROCORES/EUROMARC Program of the European Science Foundation (NWO.817.01.002 MOCCHA project).