Geophysical Research Abstracts, Vol. 8, 05548, 2006
SRef-ID: 1607-7962/gra/EGU06-A-05548

Compositional and micropaleontolgic record in Southern Adriatic cores during the Late Pleistocene: paleonvironmental inferences

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A multidisciplinary study on compositional and micropaleontologic proxies is in progress on Southern Adriatic cores collected within the EUROSTRATAFORM project. In this study, the main goal is to get new information about the climatic history and the paleocirculation during the last 125ka in the Adriatic region based on changes in the composition of clay minerals, bulk rock mineralogy, dark minerals, oxygen and carbon stable isotope records, trace elements in foraminifera as well as in the pollen record. Particular attention is paid to the Pre-Boreal interval, characterised by a temperate-humid climate, where at least two short-term (sub-millennial) cold oscillations are detected. The preliminary results suggest that: 1) the Quartz curve shows higher values in correspondence of cold intervals, 2) the Calcite curve displays relative decrease during particular oceanographic events, such as the Sapropels deposition, probably related to the decrease of the calcareous benthic foraminifera component, 3) Sheet silicate seem to be more abundant during warm intervals, such as Holocene and MIS 5. Moreover, minor oscillations during MIS2 are present and apparently show a negative correlation with the oscillations recorded by the planktonic foraminifer *Neogloboquadrina pachyderma* (an intermediate-deep water cold species requiring the presence of a Deep Chlorophyll Maximum in the water column) 4) clay minerals, analysed for the pre-Boreal interval, show significant oscillations, in par-

ticular for Illite and Smectite, in correspondence of oscillations detected also by the planktic foraminifera assemblage.

Acknowledgements: this study is granted by CNR-IGG as a companion project of the joint Euro-US “EUROSTRATAFORM” project