



## **Assessment of climate variability since 1300 AD based on alkenone and oxygen climate proxies**

A. Leider (1), A.L. Grauel (2), G.J.M. Versteegh (1), and S.M. Bernasconi (2)

(1) Department of Geosciences, University of Bremen, 28359 Bremen, Germany (ar\_le@uni-bremen.de), (2) Geological Institute, ETH Zürich, 8092 Zürich, Switzerland

Within this study, embedded into the ESF-MOCCHA Project (Multidisciplinary study of continental/ocean climate dynamics using high-resolution records from the eastern Mediterranean), we combine available high-resolution downcore Sea Surface Temperature reconstructions for the last 700 years based on the alkenone derived  $U_{37}^{K'}$  Index and oxygen isotopic composition of planktic foraminifera on the Gallipoli shelf (Gulf of Taranto, S Italy). A calibration of these two proxies based on surface sediment samples indicates that alkenones dominantly reflect spring temperatures whereas foraminifera are representative of summer temperatures. With the combination of these proxies we will discuss changes in hydrography and seasonal patterns of temperature in this area.

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