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Study of Mediterranean Climate Variability based on a high-resolution shallow-water Ionian Sea Core

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A well-dated, high-resolution core (GT90-3), extracted from the Gallipoli terrace in the Ionian Sea, is used to deduce information about climate variability during the last millennia and in particular before 1000 AD, where few proxy records are available. We present the foraminiferal δ^{18}O record measured in this core and covering the last 2200 years, whose spectral analysis, performed by several advanced methods, reveals highly significant oscillatory components with periods of about 600, 350, 200, 125 and 11 years. These components are discussed also in comparison with those deduced from other archives. In particular, the δ^{18}O trend and 200-y components together describe well the long-term NH temperature variability reconstructed by composite-proxy series over the last millennium.