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Paleotemperature Estimates for the Alboran Sea based on *Globigerina bulloides* and *Globigerinoides ruber* Mg/Ca

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Samples studied in this work belong to core ODP 977, retrieved at a depth of 1984 m in the Alboran Sea (Western Mediterranean Sea; 36º 01.907´N, 1º 57.319´W). The time interval studied here is the marine isotope stage 7. For paleotemperature estimates, Mg/Ca was measured on *Globigerina bulloides* and *Globigerinoides ruber* shells from the 250-300 μm fraction, around 20 specimens per analysis. The cleaning procedure was the established by Barker et al. (2003). The analysis of minor elements was carried out on an ICP-AES (Varian Vista AX CCD simultaneous) in the University of Cambridge. The studied samples do not present either dissolution features or persistent contamination after the cleaning procedure. The calibration equations used here were the established by Elderfield and Ganssen (2000) for *Globigerina bulloides* and the equation by Anand et al. (2003) for *Globigerinoides ruber.*

Mg/Ca amplitude in *Globigerinoides ruber* is twice the amplitude in *Globigerina bulloides* during warm substages, since the former occupies more superficial water masses, which vary significantly throughout time in terms of temperature and salinity (there is no *Globigerinoides ruber* record during cold substages because there were not enough individuals in those samples). Surface water temperature estimates based on *Globigerinoides ruber* are around 2 ºC higher than *Globigerina bulloides* estimates, however both curves seem to be closer during cold periods due to more vertical water mixture. Substage 7.2 is not clearly visible in *Globigerina bulloides*, although in *Globigerinoides ruber* an important temperature decrease is shown (more than 3ºC).