

were carried by surface currents, perhaps associated with Gulf Stream eddies that may have strengthened during the Mi-1 glaciation event.

Globigerinoides ruber (w) morpho-specific response on past SSS and SST changes inferred from stable isotopes and geochemical proxies (Mg/Ca, Ba/Ca): A Gulf of Mexico Perspective

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Globigerinoides ruber (w) morphotypes have been shown to pose distinct $\delta^{18}\text{O}$ and Mg/Ca compositions. Application of this information to the sediment core JPC-26 in the Gulf of Mexico (GOM) shows the differential response of *G. ruber* sensu stricto (s.s) and *G. ruber* sensu lato (s.l.) during the last 21 kyr_{cal} B.P., regarding to changes in sea surface temperature (SST) and salinity (SSS).

For palaeotemperature reconstructions we measured Mg/Ca ratios on both morphotypes, with the difference in Mg/Ca-Ts (ΔT) of the “surface morphotype” and the “mixed layer morphotype” to be indicative of the upper water column stratification. For palaeosalinity reconstructions, we present a $\delta^{18}\text{O}_{\text{SEA WATER}}$ ($\delta^{18}\text{O}_{\text{SW}}$) record, reconstructed from Mg/Ca ratios and $\delta^{18}\text{O}$ measurements. Moreover, we also measured Ba/Ca ratios in *G. ruber* s.s. and *G. ruber* s.l., as a proxy for North American riverine discharge. Overall, the reconstructed SST and SSS patterns reveal notable amplitude variations between the two morphotypes, adding valuable insights to previously published *G. ruber* (w, mixed) GOM records. Especially during the deglacial GOM meltwater flooding events (GOMs), the sea surface freshening seems to be more pronounced than the SST reduction. The comparison between the two morphotypes also shows that Ba/Ca and $\delta^{18}\text{O}_{\text{SW}}$ of *G. ruber* s.l. appears to be more sensitive to river water influence, which potentially makes the s.l. morphotypes more opportunistic than the s.s. morphotypes during the largest low-salinity Mississippi flooding events.

Late Quaternary palaeoenvironmental reconstruction of South Evoikos Gulf (east – central Aegean Sea) by benthic foraminiferal assemblages

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The present study is aiming to track the palaeoenvironmental evolution of South Evoikos Gulf during the Holocene, utilizing benthic foraminifera microfauna. South Evoikos Gulf constitutes a shallow epicontinental basin, at the northern prolongation of the Cycladic Platform (Western Aegean Sea, East – Central Greece). The gulf is divided into two sub-basins: a southern deeper basin with a maximum depth of 160 m and a northern shallow one where water depth ranges from 20 to 70 m. The study area is located at the latter. A gravity core of 150 cm total length which sedimentary record covers the last 13540+/-50 cal yr BP, was retrieved from 75.5 m water depth and a benthic foraminiferal analysis was