

Coupled changes in western South Atlantic carbon sequestration and particle reactive element cycling during millennial-scale Holocene climate variability

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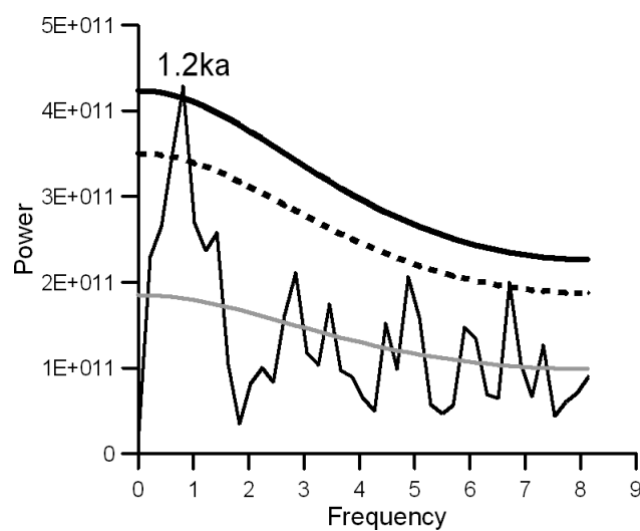


Figure S1. Spectral analysis of Benthic Foraminifera Accumulation Rate (BFAR) for the last 6.0 ka from core CF10-01. Black and dashed lines indicate 95% and 90% significance levels, respectively. Grey line is AR(1).

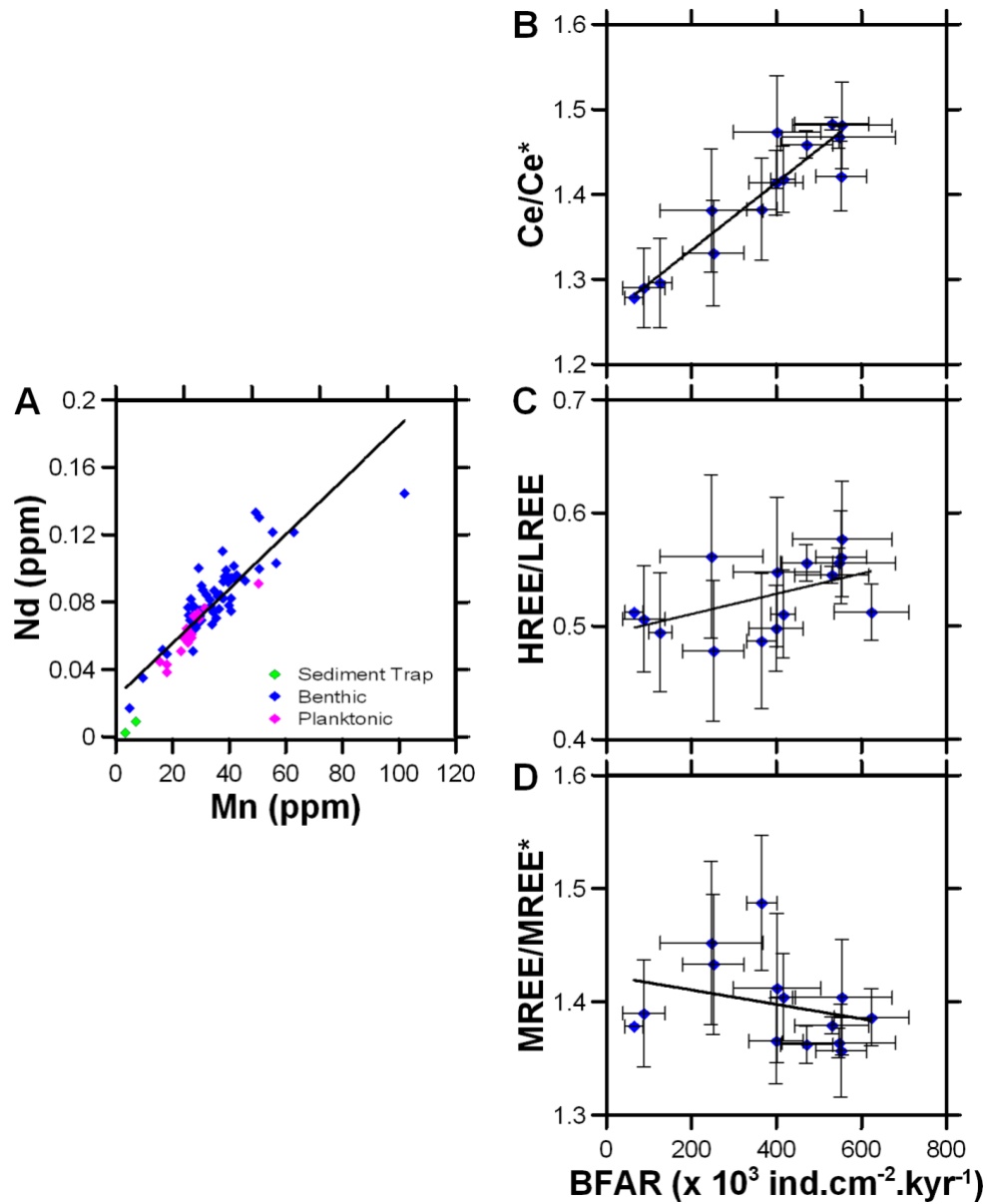


Figure S2. Relations between: (A) Mn and Nd concentrations of sediment trap planktonic foraminifera (green) and foraminiferal authigenic oxide coatings, considering benthic foraminiferal coatings values (blue) and planktonic foraminiferal coatings values (purple); (B) reconstructed Ce anomaly (Ce/Ce*) of benthic foraminiferal coatings and BFAR index; (C) reconstructed HREE/LREE values of benthic foraminiferal coatings and BFAR index; (D) reconstructed MREE/MREE* values of benthic foraminifera coatings and BFAR index.

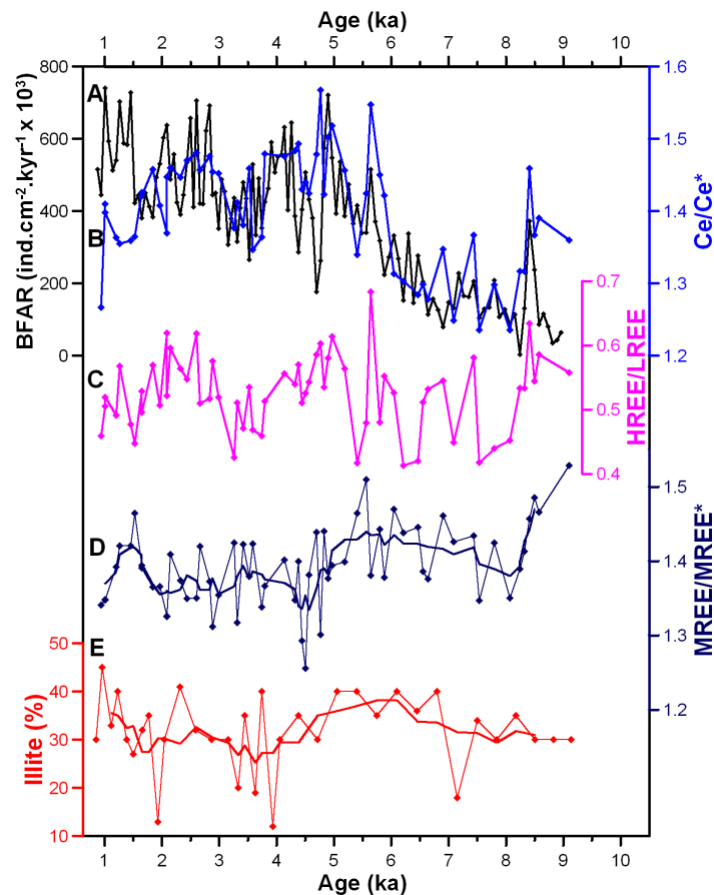


Figure S3. Records of organic carbon export and REE patterns compared to illite abundance in CFUS. (A) BFAR record from core CF10-01, Brazil Margin (black; this study), (B) Ce anomaly (Ce/Ce^*) of benthic foraminiferal coatings from core CF10-01, Brazil Margin (light blue; this study), (C) HREE/LREE of benthic foraminiferal coatings from core CF10-01, Brazil Margin (purple; this study), (D) Middle-REE enrichment ($MREE/MREE^*$) of benthic foraminiferal coatings from core CF10-01, Brazil Margin (dark blue; this study), and (E) illite abundance from the sediment core CF02-02, Brazil Margin (red; Albuquerque *et al.*, 2016).

Reference

Albuquerque, A.L.S., *et al.* Mineral and elemental indicators of post-glacial changes in sediment delivery and deposition under a western boundary upwelling system (Cabo Frio, southeastern Brazil). *Palaeogeogr. Palaeoclimatol. Palaeoecol.* **445**, 72–82. <https://doi.org/10.1016/j.palaeo.2016.01.006> (2016).