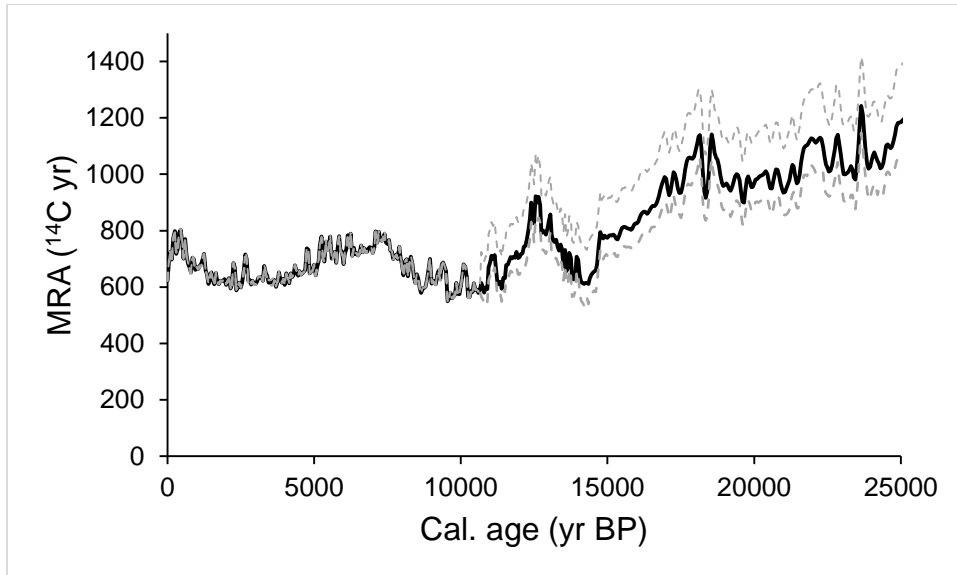


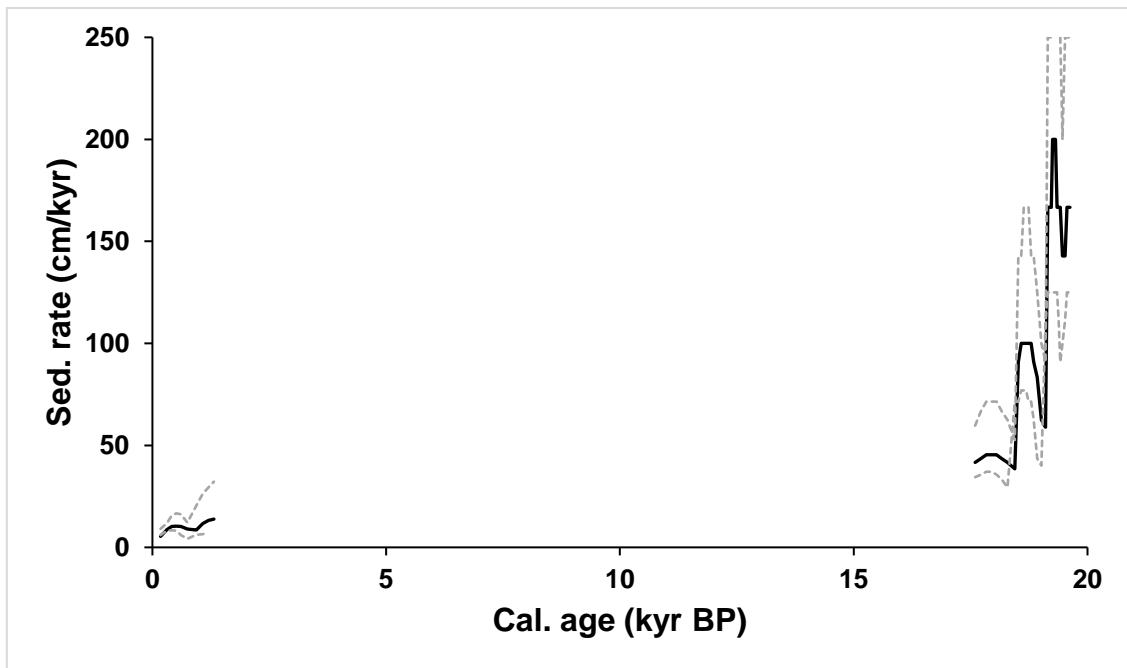
Supplementary figures and tables to Glock et al. “Foraminiferal pore densities reveal similar but weaker Peruvian oxygen minimum zone during Last Glacial Maximum”

Suppl Figures



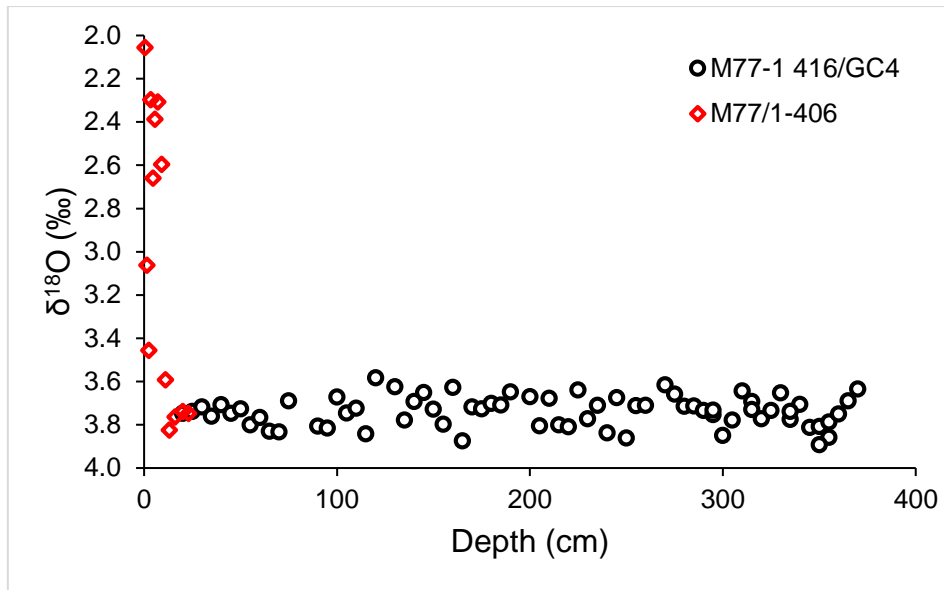
Suppl. Fig. 1:

Marine reservoir ages (MRA) for 18.75°S 75°W for the different time slices from the model output by Butzin et al.^{1,2}.



Suppl. Fig. 2

Sedimentation rates and error bands (95% confidence) for the sedimentation rates in cores M77/1 406-MUC6 and M77/1 416-GC4. Note that the slice during the Late Holocene (LH) is from M77/1 406-MUC6 and the slice from the Last Glacial Maximum (LGM) from core M77/1 416-GC4. The low sedimentation rates during the LH are related to strong erosion by highly energetic non-linear internal waves in this region^{3,4} (see also main text).



Suppl. Fig. 3:

Benthic foraminiferal $\delta^{18}\text{O}$ values for cores M77/1 416-GC4 (black) and M77/1 406-MUC6 (red). Note that there is a step from Holocene to Glacial values in M77/1 406-MUC6 below 10 cm depths, while M77/1 416-GC4 only shows Glacial values.

Supplementary References:

1. Butzin, M., Heaton, T. J., Köhler, P. & Lohmann, G. A Short Note on Marine Reservoir Age Simulations Used in IntCal20. *Radiocarbon* **62**, 865–871 (2020).
2. Heaton, T. J. *et al.* Marine20 - the marine radiocarbon age calibration curve (0 - 55,000 cal BP), simulated data for IntCal20. (2020) doi:10.1594/PANGAEA.914500.
3. Mosch, T. *et al.* Factors influencing the distribution of epibenthic megafauna across the Peruvian oxygen minimum zone. *Deep Sea Res. Part I Oceanogr. Res. Pap.* **68**, 123–135 (2012).
4. Erdem, Z. *et al.* Peruvian sediments as recorders of an evolving hiatus for the last 22 thousand years. *Quat. Sci. Rev.* **137**, 1–14 (2016).
5. Glock, N., Liebetrau, V. & Eisenhauer, A. I/Ca ratios in benthic foraminifera from the Peruvian oxygen minimum zone: Analytical methodology and evaluation as a proxy for redox conditions. *Biogeosciences* **11**, (2014).
6. Glock, N. *et al.* Environmental influences on the pore density of *Bolivina spissa* (Cushman). *J. Foraminifer. Res.* **41**, 22–32 (2011).