

Figure S1

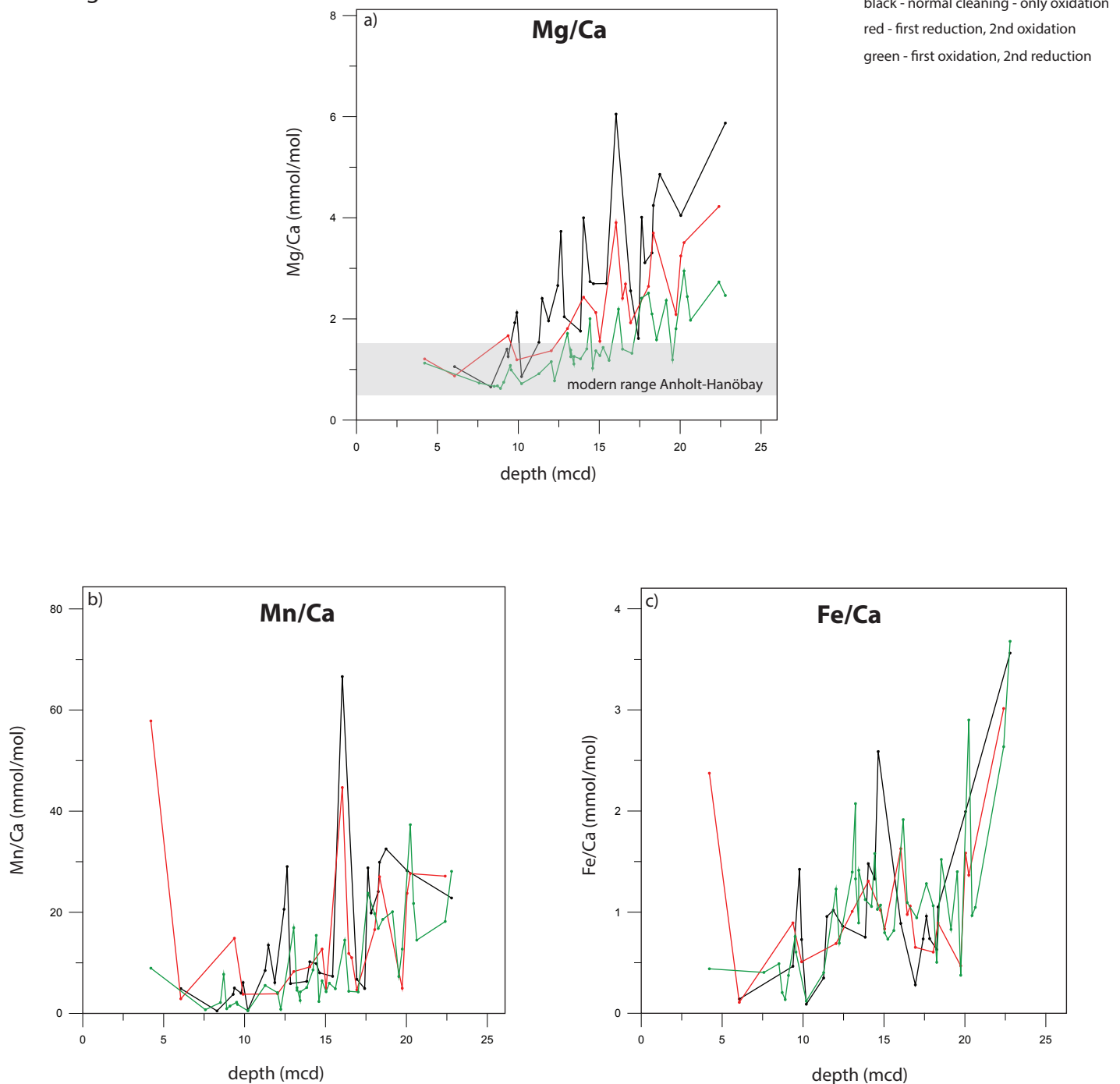


Fig. S1: Downcore trace metal/calcium results for Mg/Ca (a), Mn/Ca (b), and Fe/Ca (c) vs depth (mcd) for Site M0059. Black curve represents regular cleaning of the foraminiferal tests with oxidation (Barker et al., 2003), the red curve represents reduction cleaning followed by oxidation (Martin and Lea, 2002), and the green curve first oxidation followed by reduction cleaning (this study). Grey bars in a) indicate the range of values analysed for core top foraminifera from the Baltic Sea, Skagerak, and Gullmar Fjord (Groeneveld and Filipsson, 2013).

Barker, S., Greaves, M., Elderfield, H.: A study of cleaning procedures used for foraminiferal Mg/Ca paleothermometry. *Geochem., Geophys., Geosys.*, 4, doi:10.1029/2003GC000559, 2003.

Groeneveld, J., Filipsson, H.L.: Mg/Ca and Mn/Ca ratios in benthic foraminifera: the potential to reconstruct past variations in temperature and hypoxia in shelf regions. *Biogeosciences* 10, 5125-5138, 2013.

Martin, P.A., Lea, D.W.: simple evaluation of cleaning procedures on fossil benthic foraminiferal Mg/Ca. *Geochem., Geophys., Geosys.* 3. 1-8. Doi:10.1029/2001GC000280, 2002.