

Supporting Information

Deciphering the variability in Mg/Ca and stable oxygen isotopes of individual foraminifera

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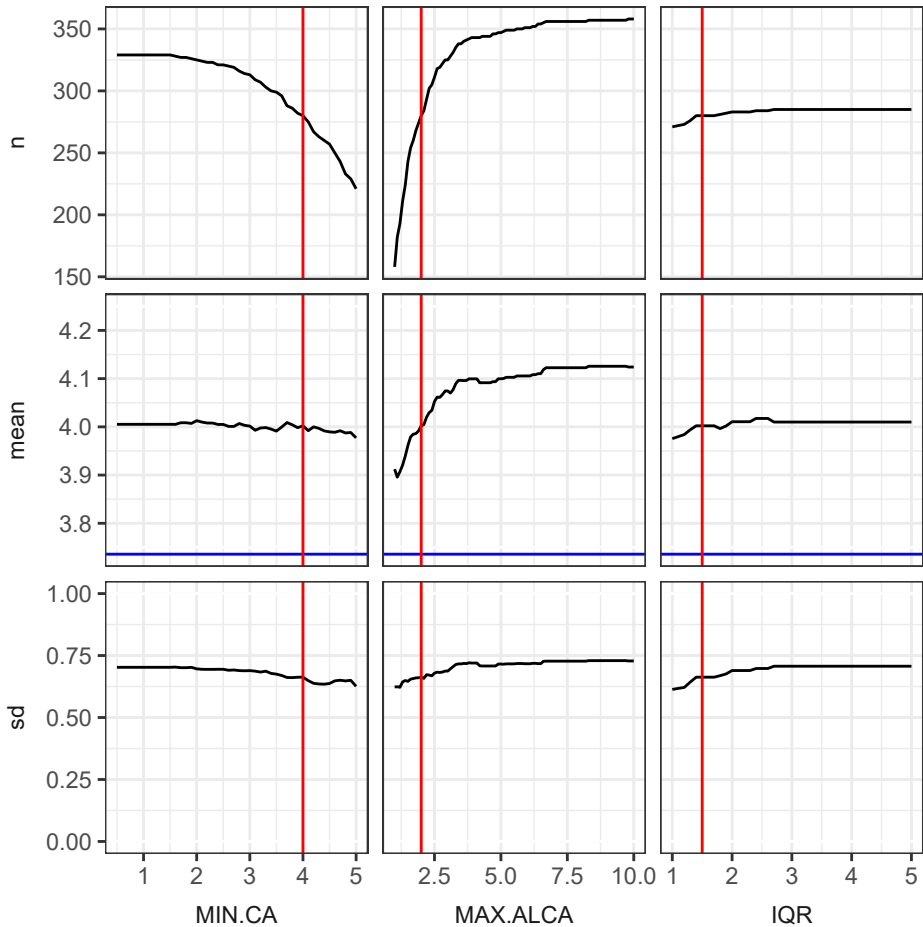
This Supporting Information contains four figures (S1-S4) and their captions.

Figure S1) Sensitivity of the IF Mg/Ca (number of samples retained, mean Mg/Ca and sd(Mg/Ca)) to differing thresholds of the amount of material available for analysis as expressed by the Ca-concentration of the solution, to differing thresholds of possible contamination remaining after cleaning as expressed by the Al/Ca ratio of the solution, and differing outlier definitions expressed as the choice of the Inter Quartile Range (IQR). Vertical lines indicate the threshold used in our analyses.

Figure S2) Sensitivity of the IF $\delta^{18}\text{O}$ (number of samples retained, mean $\delta^{18}\text{O}$ and sd($\delta^{18}\text{O}$)) to differing outlier definitions expressed as the choice of the Inter Quartile Range (IQR) and differing thresholds of minimal signal intensity of the sample analysis in mV. Vertical lines indicate the threshold used in our analyses.

Figure S3) Histograms of surface dwelling *T. sacculifer* and *G. ruber* and thermocline dwelling *N. dutertrei* for $\delta^{13}\text{C}$. Red triangles indicate pooled specimen samples.

Figure S4) Sensitivity of the relationship between sd($\delta^{18}\text{O}$) and sd(Mg/Ca) to differing outlier definitions. The variability of *N. dutertrei* (subsurface dwellers, lower row) seems to be more sensitive on the outlier removal than the variability of the surface dwellers (upper row).



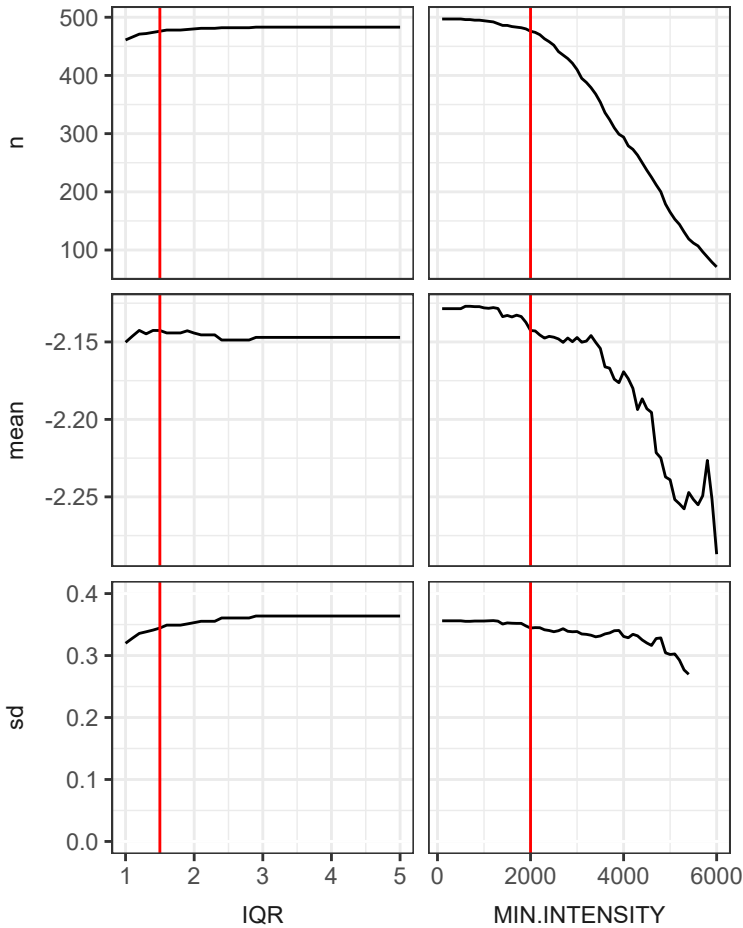


Figure S3)

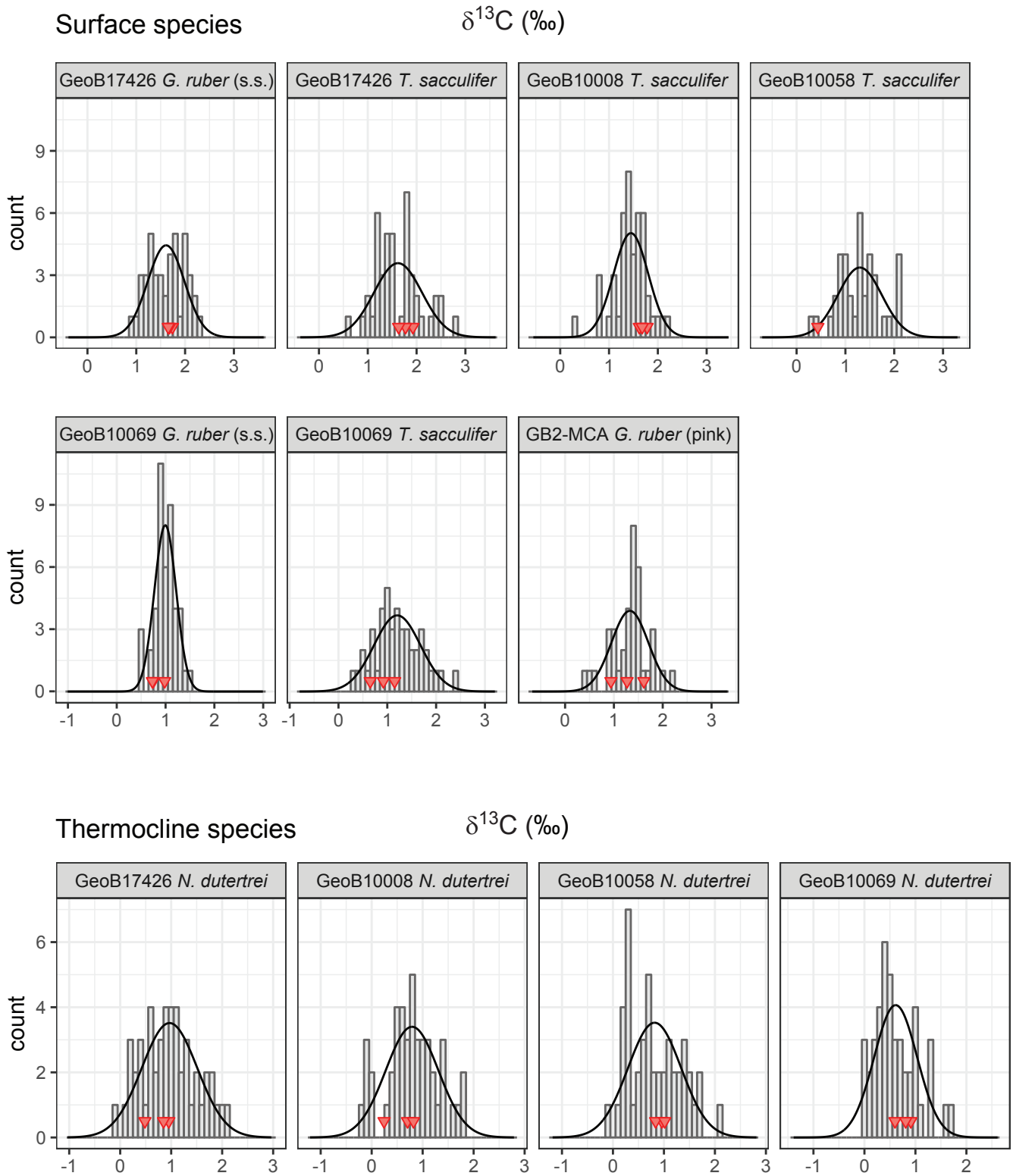


Figure S4)

