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Interactive comment on "Reconciling single chamber Mg/Ca with whole test δ^{18}O in surface to deep dwelling planktonic foraminifera from the Mozambique Channel" *by* J. Steinhardt et al.

M. F. G. Weinkauf

mweinkauf@marum.de

This is a very interesting paper. Upon skimming through it I just stumbled over one little curiosity. You state yourself several times (p. 17268, lines 11–12; Eq. (4); caption of Fig. 4) that the supposed relationship between δ^{18}O temperature and Mg/Ca should be positive exponential. Why then (according to your caption and from the looks of it) are you fitting a polynomial second degree to your data (Fig. 4, right panel)? An exponential function would be much more reasonable on a mechanistical basis (as you state yourself). Unless you have a particular reason to believe that the relationship should have a local minimum at around $8\ ^{\circ}$C and then rise again, but then some of your

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other statements are incorrect and this would have to be discussed.

Best regards, Manuel Weinkauf

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