



Correction to: Partitioning of Fe₂O₃ in peridotite partial melting experiments over a range of oxygen fugacities elucidates ferric iron systematics in mid-ocean ridge basalts and ferric iron content of the upper mantle

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1. Published Eq. (2) contains a typo. The correct version of Eq. (2) should be:

$$\ln(D_{\text{Fe}_2\text{O}_3}^{\text{spl/melt}}) = a \frac{10000}{T} + b + c \ln(C_{\text{Fe}_2\text{O}_3}^{\text{spl}}) \quad (2)$$

where T is temperature in Kelvin and $C_{\text{Fe}_2\text{O}_3}^{\text{spl}}$ is wt.% of Fe₂O₃ in spinel. Fits are $a = 0.87 \pm 0.07$, $b = -4.6 \pm 0.4$, and $c = 0.24 \pm 0.02$. We used the correct version of the equation in all our calculations, models, and figures; our results, discussion, and conclusions remain unchanged.

2. We did not provide the duration of the piston cylinder experiments. Each experiment had a run duration of 24 h after reaching the run temperature.
3. In the abstract, the line beginning, “If we allow $D_{\text{Fe}_2\text{O}_3}^{\text{opx/melt}}$ and $D_{\text{Fe}_2\text{O}_3}^{\text{cpx/melt}}$ to also vary with temperature...” should instead be, “If we allow $D_{\text{Fe}_2\text{O}_3}^{\text{opx/melt}}$ and $D_{\text{Fe}_2\text{O}_3}^{\text{cpx/melt}}$ to also vary with temperature...”
4. The green and orange lines in Fig. 9 are mineral/melt partition coefficients estimated by Mallmann and O’Neill (2009) for $D_{\text{Fe}_2\text{O}_3}^{\text{cpx/melt}}$ and $D_{\text{Fe}_2\text{O}_3}^{\text{opx/melt}}$, respectively.

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Reference

Mallmann G, O’Neill HSC (2009) The crystal/melt partitioning of V during mantle melting as a function of oxygen fugacity compared with some other elements (Al, P, Ca, Sc, Ti, Cr, Fe, Ga, Y, Zr and Nb). *J Petrol* 50:1765–1794

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