

CORRIGENDUM

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Thermal history of Mars inferred from orbital geochemistry of volcanic provinces

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An error in the calculation of heat flow contours drawn in Fig. 4 of our Letter was drawn to our attention by J. Ruiz (Universidad Complutense de Madrid). A surface temperature of 200 °C was mistakenly used instead of the correct temperature of 220 K. With the stated value of thermal conductivity ($3.5 \text{ W m}^{-1} \text{ K}^{-1}$), heat flows are about 20% higher than those originally shown. The knock-on effect of this fact is that the calculated Urey ratio is 20% lower than stated, but still comfortably above the terrestrial value. On the other hand, we note that the value of thermal conductivity relevant to planetary mantles is not well constrained, with preferred values covering the range 2.5 to $4 \text{ W m}^{-1} \text{ K}^{-1}$ (ref. 1). A value of $3.0 \text{ W m}^{-1} \text{ K}^{-1}$ and the correct surface temperature leads to calculated heat flow very similar to those shown in our original Fig. 4. A corrected version of Fig. 4, using a surface temperature of 220 K and a conductivity of $3.5 \text{ W m}^{-1} \text{ K}^{-1}$, is shown below.

Figure 4 has also been corrected in the original HTML and PDF.

1. Breuer, D. & Moore, W. B. in *Treatise of Geophysics* Vol. 10, 299–341 (Elsevier, 2011).

