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OPEN Author Correction: Noble gas isotopes reveal degassing-derived eruptions at Deception Island (Antarctica): implications for the current high levels of volcanic activity

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Correction to: Scientific Reports https://doi.org/10.1038/s41598-022-23991-3, published online 15 November 2022

The original version of this Article contained an error in the y-axis labels of Figure 2(c), where

"100000"

now reads:

"100"

"10000"

now reads:

"10"

"1000"

now reads:

"1"

The original Figure 2 and accompanying legend appear below.

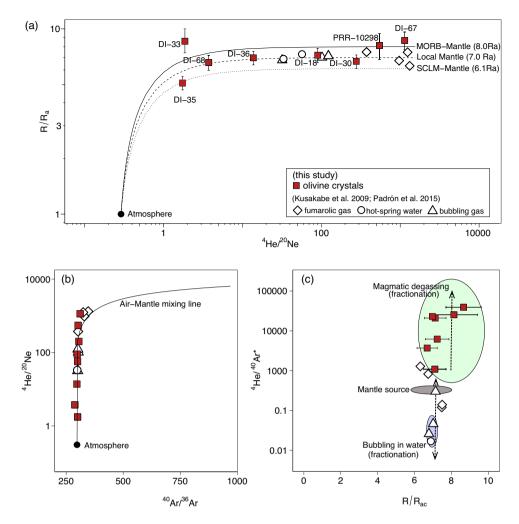


Figure 2. (a) ³He/⁴He versus ⁴He/²⁰Ne diagram for Deception Island samples, showing mixing curves between low and high ⁴He/²⁰Ne values of atmospheric, MORB and SCLM components (e.g.,⁵⁷); (b) samples with the lowest ⁴He/²⁰Ne values also have lowest ⁴⁰Ar/³⁶Ar values indicative of air contamination (see text and Table 1 for more details); (c) ⁴He/⁴⁰Ar* versus ³He/⁴He highlighting the mantle source area and the two main fractionation fields, i.e., magmatic degassing and bubbling in the waters (dashed arrows). Fumaroles and hot spring samples shift from the mantle source value (2–5) to (i) higher values due to magma degassing (as the olivines), and (ii) to lower values by fractionation during degassing from magma or dissolving in water followed by bubbling. Note that the noble gas isotopic ratios from the olivine crystals are plotted together with those from fumaroles and hot spring waters, which already represent fractionated noble gas elemental ratios.

The original Article has been corrected.

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