

Paroxysmal eruptions tracked by variations of helium isotopes: inferences from Piton de la Fournaise (La Réunion island)

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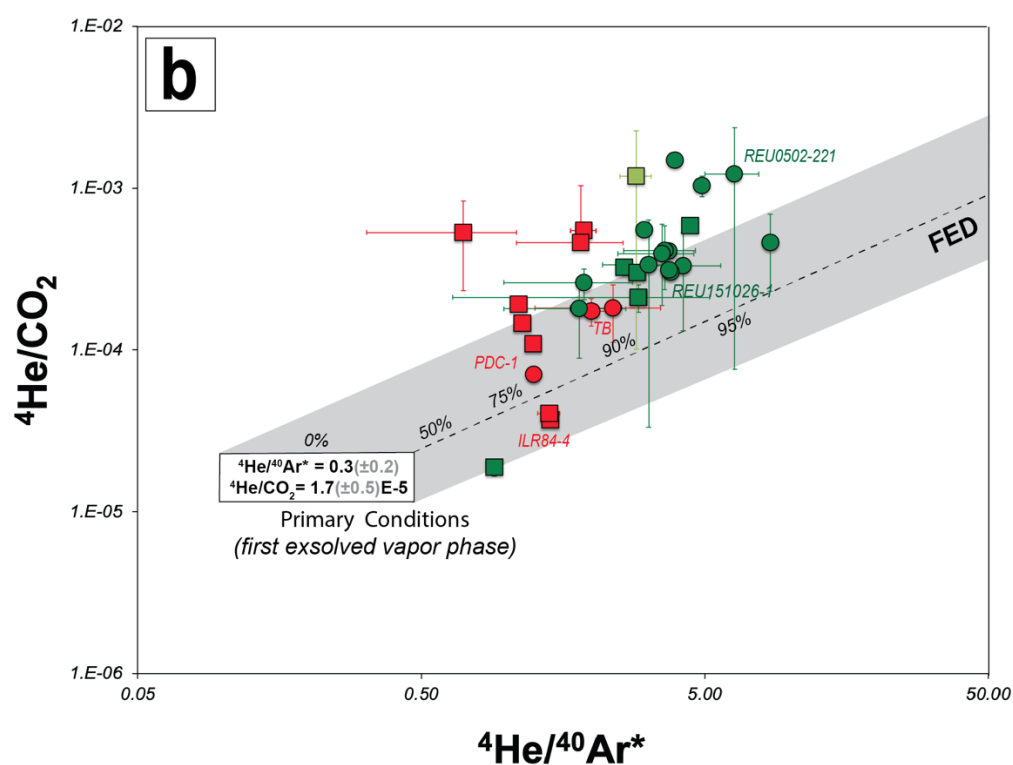
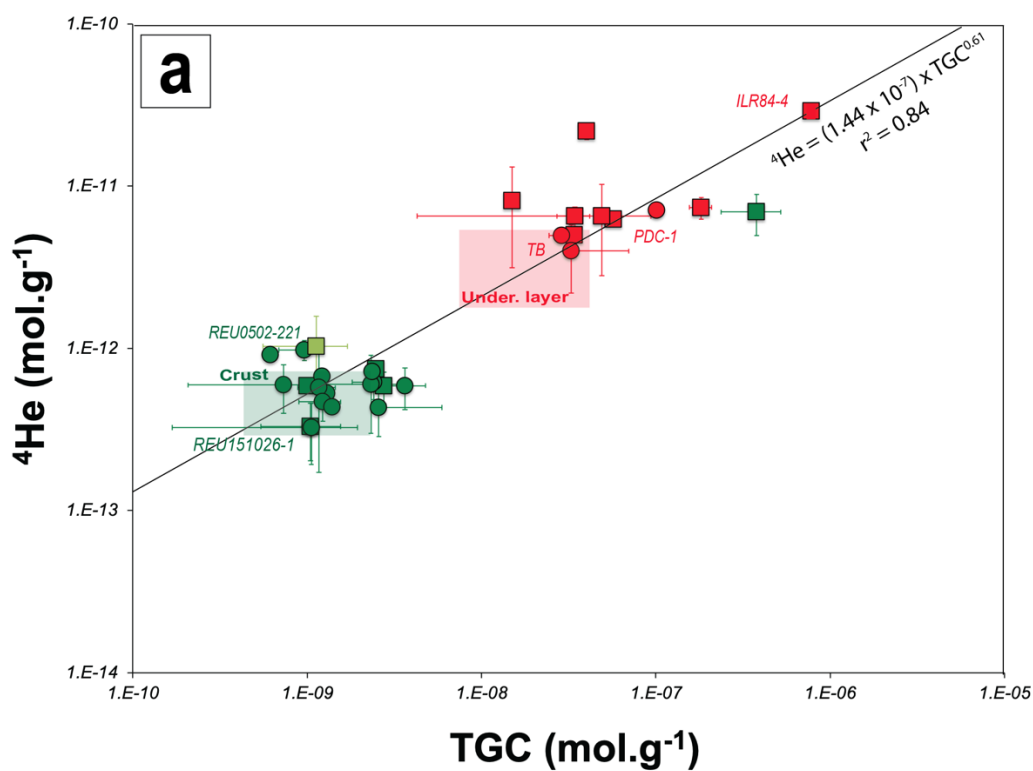


Fig. S1. Gas contents and isotopes ratios obtained by crystal crushing from lavas and cumulates. (a) TGC (Total Gas Content) vs. ^4He . TGC variability as a function of the location of magma ponding in the plumbing system (crust, underplating layer, deep melt horizon)¹⁰: squares for the full ranges of contents. Correlation between TGC and ^4He contents calculated from the whole dataset. (b) $^4\text{He}/^{40}\text{Ar}^*$ vs. $^4\text{He}/\text{CO}_2$ with FED (Fractional Equilibrium Degassing) modeling¹⁰. Grey field for the range of uncertainty related to the primary conditions. Same legend than in Fig. 1 for the samples.