

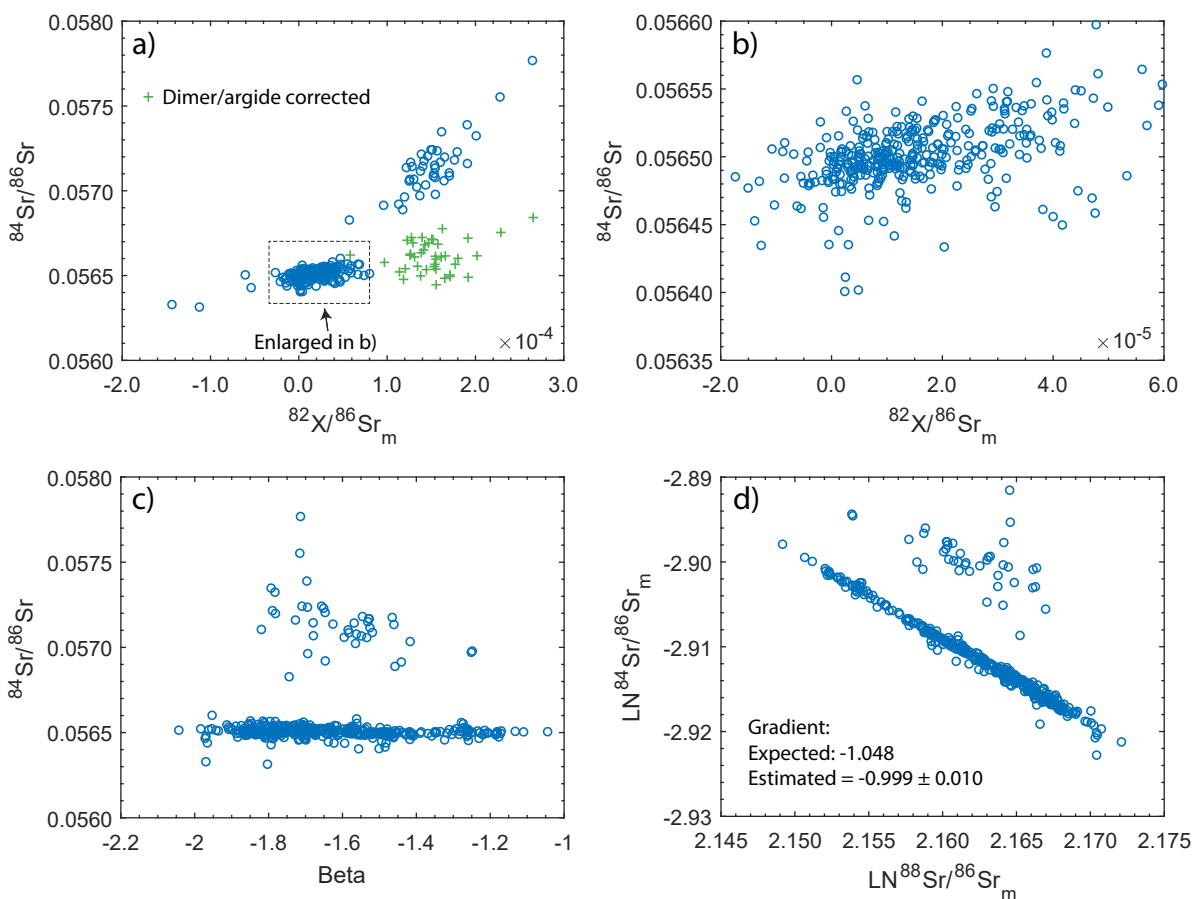


Figure S1. Summary of laser ablation MC-ICPMS Neptune measurements of $^{84}\text{Sr}/^{86}\text{Sr}$ ratio: (a) $^{84}\text{Sr}/^{86}\text{Sr}$ vs. $^{82}\text{X}/^{86}\text{Sr}_m$; High $^{84}\text{Sr}/^{86}\text{Sr}$ values result from Ca dimer/argide interferences. Green crosses represent corrected data; (b) Enlargement of the main dataset marked by the black rectangle in (a); (c) Beta fractionation factor vs. $^{84}\text{Sr}/^{86}\text{Sr}$, elevated values are due to dimer/argide interferences; (d) Natural logarithm of measured $^{84}\text{Sr}/^{86}\text{Sr}_m$ vs. natural logarithm of measured $^{88}\text{Sr}/^{86}\text{Sr}_m$ (subscript m denotes ratios corrected for amplifier gains, baseline, and interferences), shows a fractionation trend, slightly deviating from the exponential mass bias law.