



Supplementary Figure 1. USGS rock standards AGV-2 and BCR-2 were dissolved and underwent the same wet chemistry and mass spectrometry procedures as the basaltic samples analyzed in this study. During each measurement session on the Neptune MC-ICP-MS, these rock standards were run together with the lavas reported in this study, and the reproducibility of our isotopic analyses on the USGS rock standards are compared to *Weis et al.* [2006] results. For comparison with our data, the *Weis et al.* [2006] data shown here are re-normalized to our preferred standard values: SRM987 $^{87}\text{Sr}/^{86}\text{Sr}$ = 0.710240, La Jolla $^{143}\text{Nd}/^{144}\text{Nd}$ = 0.511847, and NBS 981 from *Todt et al.* [1996] ($^{206}\text{Pb}/^{204}\text{Pb}$ = 16.9356, $^{207}\text{Pb}/^{204}\text{Pb}$ = 15.4891, $^{208}\text{Pb}/^{204}\text{Pb}$ = 36.7006). Data shown in this figure are listed in Table 3. Blue symbols are from *Weis et al.* [2006] while yellow symbols are from this study. See Supplementary Table 1 for values.