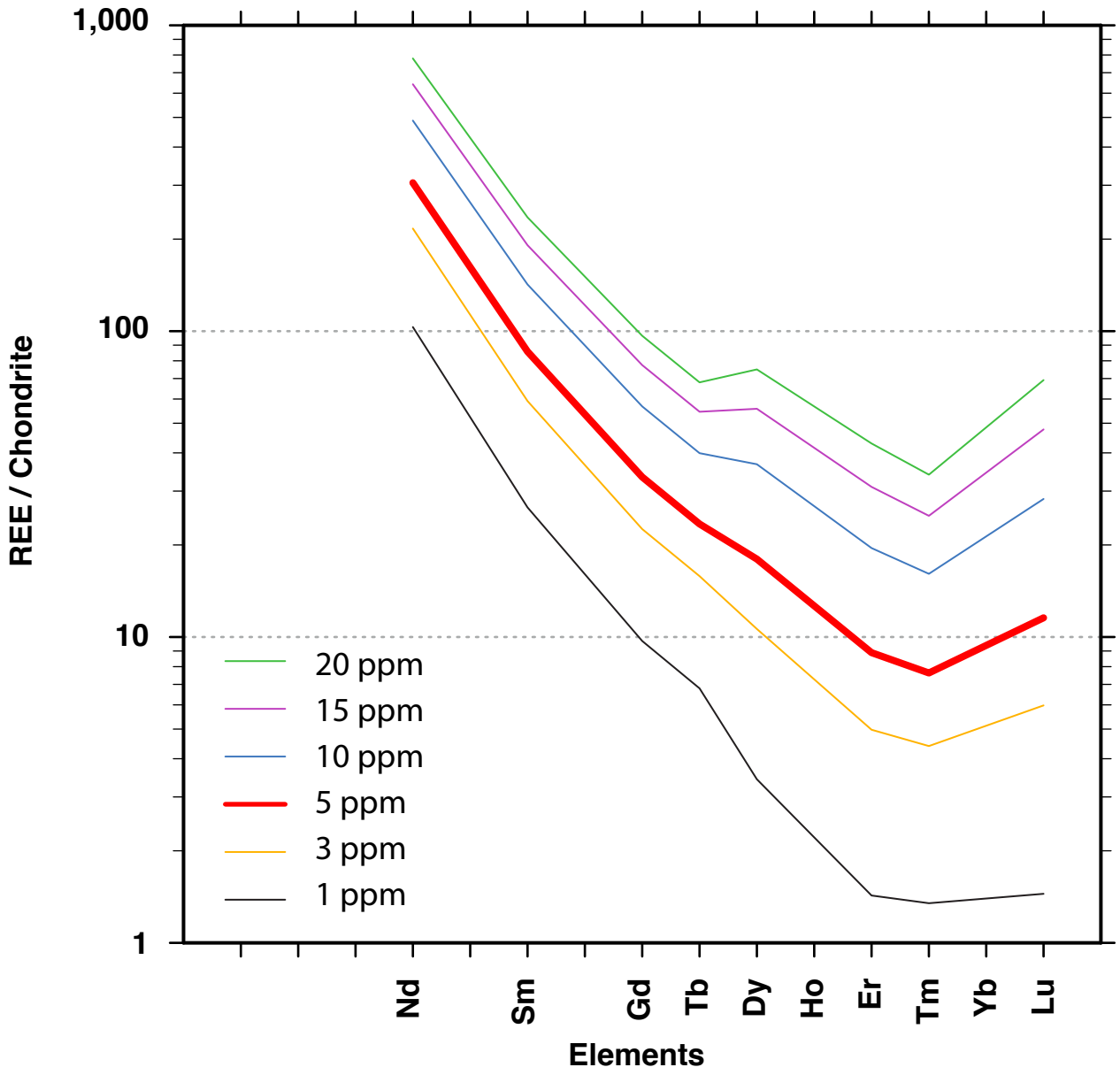
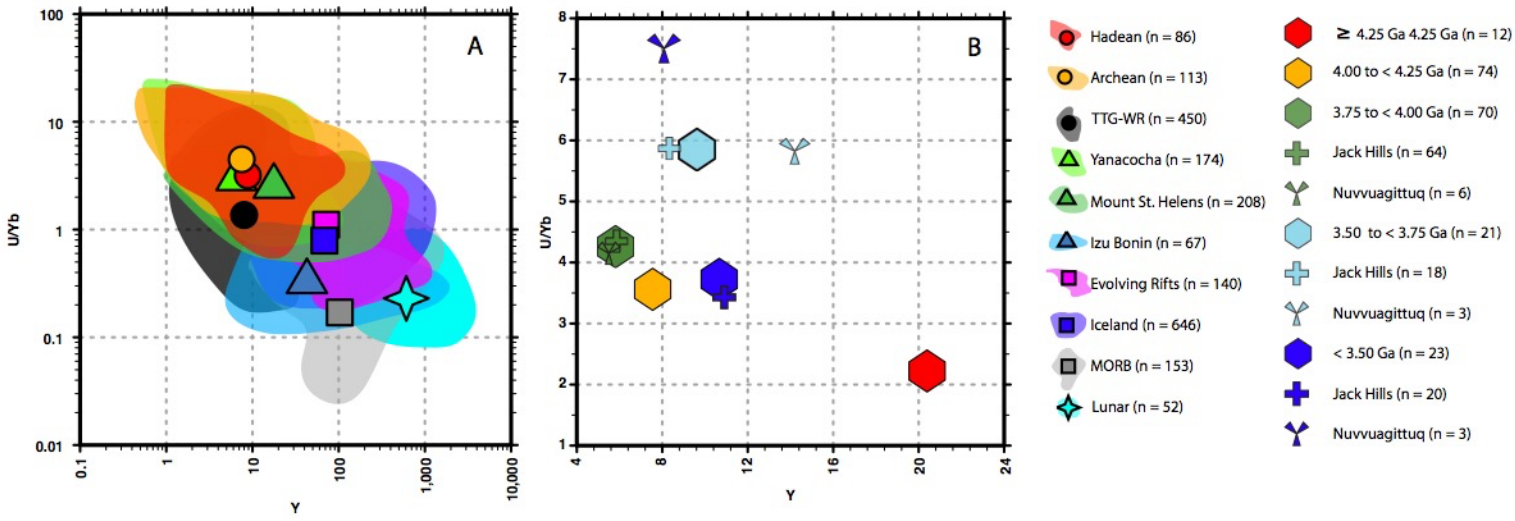
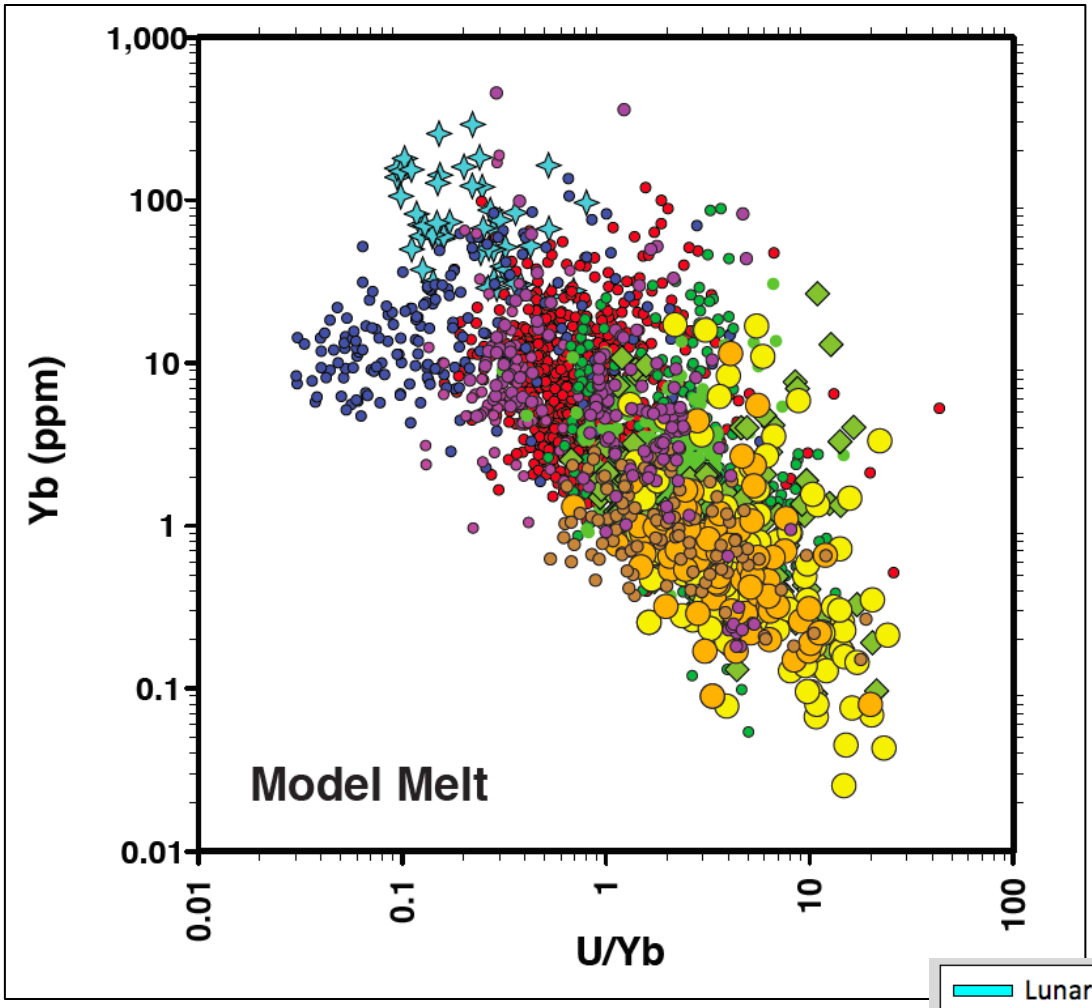


Example showing model melt sensitivity to Ti concentration in zircon. Lines represent median melt values for >4.25 Ga zircons (n = 12), calculated using Ti concentrations ranging from 1 to 20 ppm).

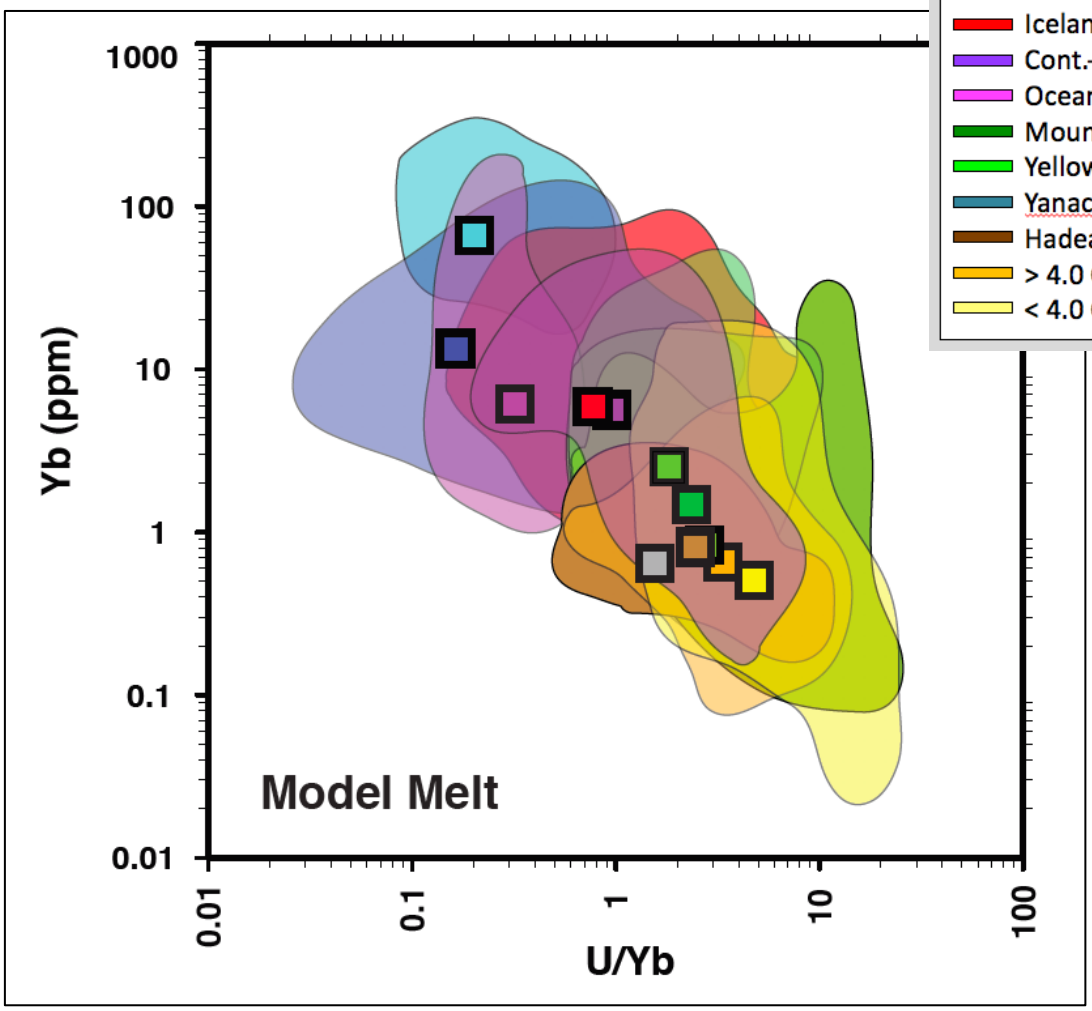


This modified version of Figure 1 (in main text) shows the Archean model melt population divided into melts calculated using Jack Hills zircons and melts calculated using Nuvvuagittuq zircons.



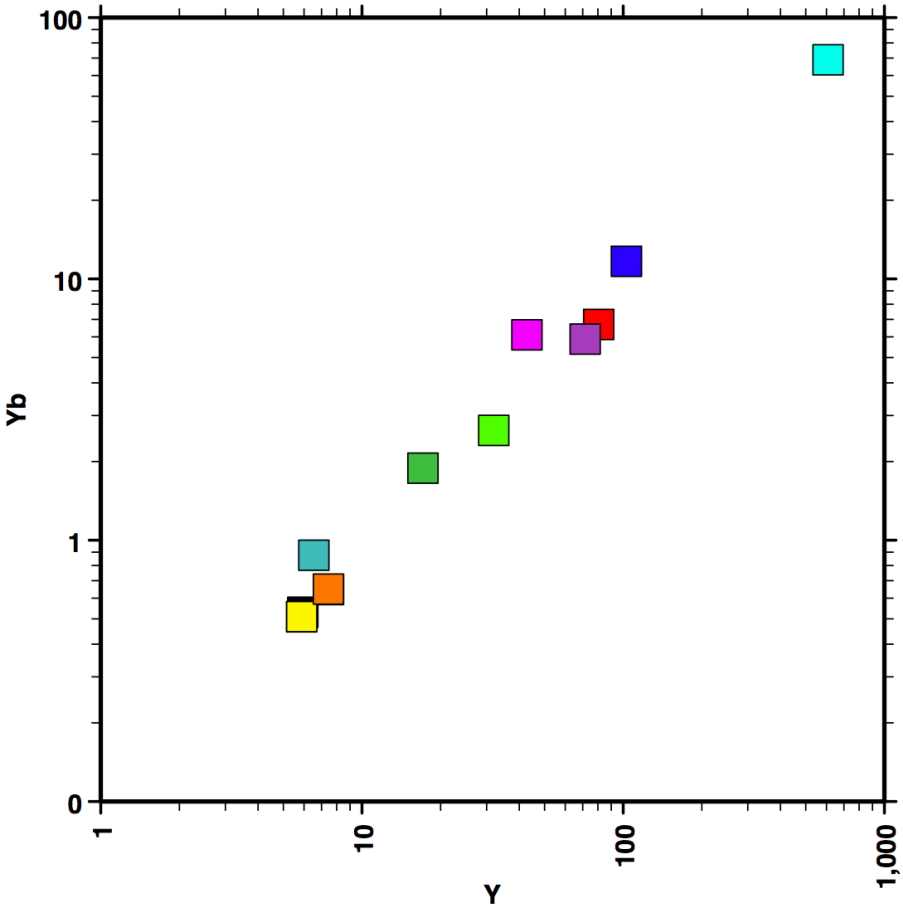
Model Melt Legend

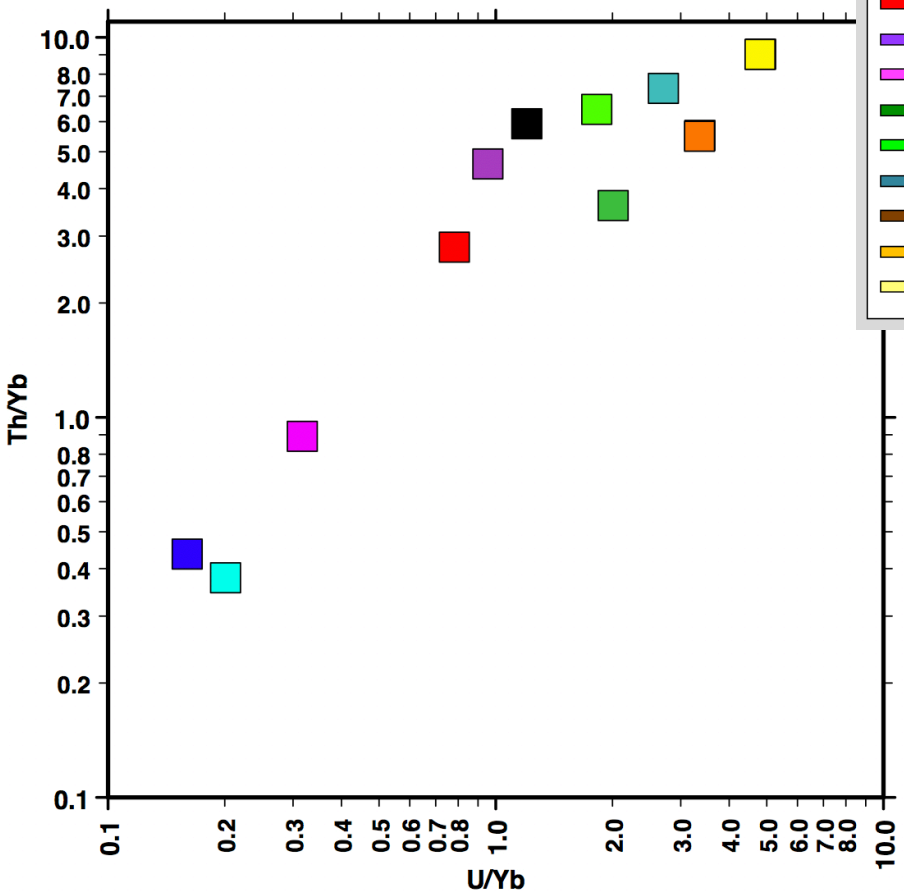
- Lunar Zircon (Crow et al., 2917)
- MORB (Grimes et al., 2007)
- Iceland (Carley et al., 2914)
- Cont.-Oceanic Rifts (Schmitt et al., 2013)
- Oceanic Arc (Barth et al., 2017)
- Mount St. Helens (Claiborne, 2011)
- Yellowstone (Stelten et al., 2013, 2015)
- Yanacocha (Dilles et al., 2015)
- Hadean Compilation (Carley et al., 2014)
- > 4.0 Ga (Bell et al., 2016)
- < 4.0 Ga (Bell et al., 2016)



Squares represent sample medians; the gray square represents the median composition of measured TTG from Moyen (2011)

This offers another perspective of the correlation between systems and composition, displayed in the main text in Figure 1.





Model Melt Legend

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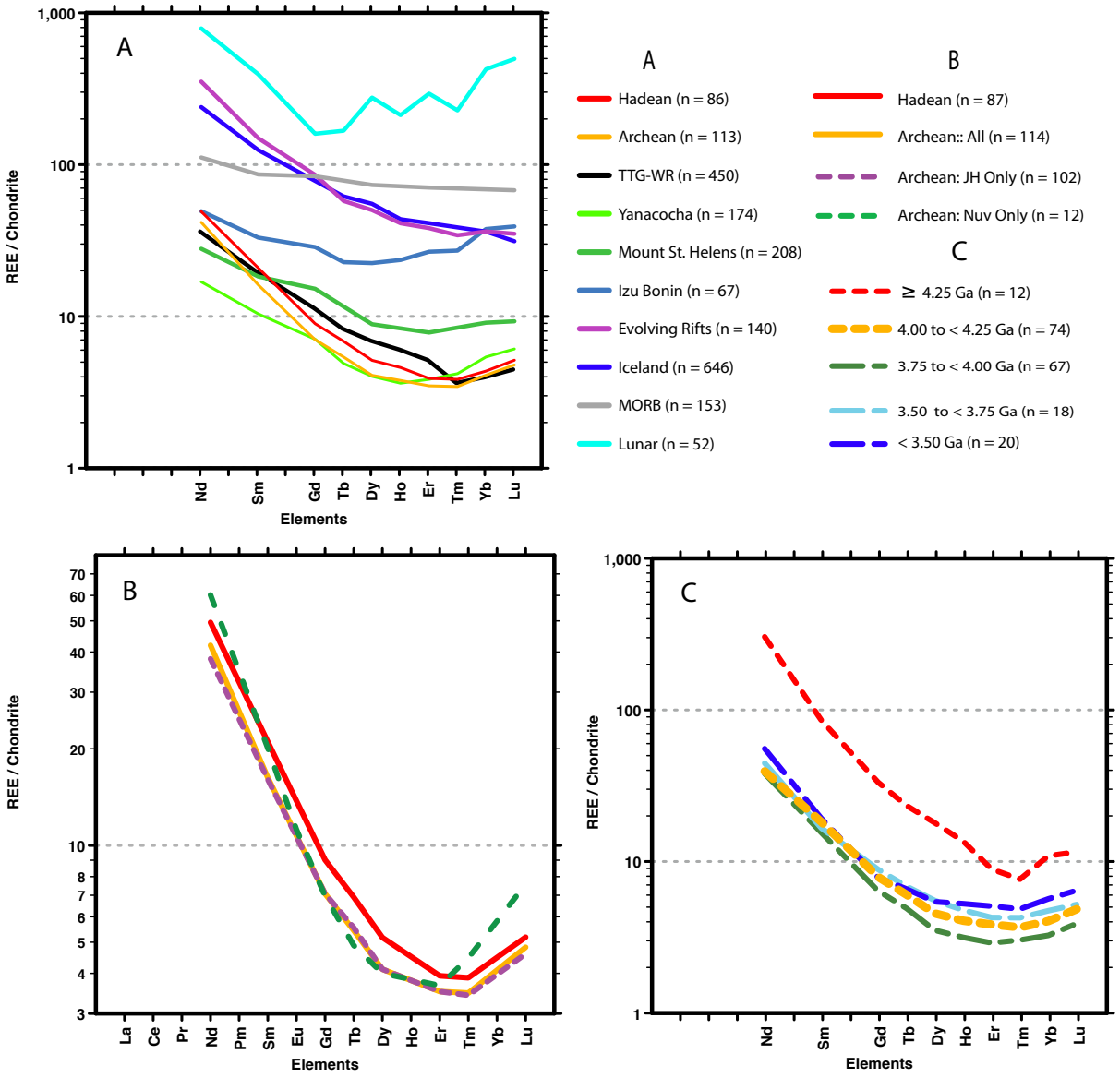
Squares represent sample medians; the black square represents the median composition of measured TTG from Moyen (2011)

These plots offer another perspective of the correlation between systems and composition, displayed in the main text in Figure 1.



This modified version of Figure 2 (in main text) shows the Archean model melt population divided into melts calculated using Jack Hills zircons and melts calculated using Nuvvuagittuq zircons.