Electronic appendix: Data sources

Figure 2; REE data for volcano suites;

An important element of our approach is to distinguish suites from individual volcanoes. We have collated data from a number of volcanoes in several different arcs where a common differentiation process is thought to relate the rocks to each other. When volcanoes from the same arc are compared (even volcanoes separated by <100 km), they typically show quite distinct trends, and mixing data from volcanoes in an arc (or arc segment or island) will obscure any trends that may be present.

Oceanic Arcs;


**Transitional Arcs:**

**Indonesia:** Handley, H., 2006, Geochemical and Sr-Nd-Hf-O isotopic constraints on volcanic petrogenesis at the Sunda Arc, Indonesia: [PhD thesis]: University of Durham.


**Continental Arcs:**


**All other data are unpublished (Davidson and Turner).**

**Figure 4 Ce, H₂O data for glasses**


**Figure 4 Ce, H₂O data for amphibole**

Cortosego L, Gaggero L and Zanetti A, 2000, Rare earth and trace elements in igneous and high-temperature metamorphic minerals of oceanic gabbros (MARK area, Mid-Atlantic Ridge): Contributions to Mineralogy and Petrology, v. 139, p. 373-393.


