



Supplemental Figure 1.

Modal garnet (in percent) plotted against total FeO from analyses of the mafic xenoliths shown in Figure 3 of the main text. The very weak correlation of iron content with garnet suggests that variation in bulk chemistry of the protoliths of these rocks has a minimal impact on the amount of garnet in the rocks today. This tends to support a significant or even dominant role for hydration in controlling the amount of garnet (and, to a large extent, increased densities and seismic wavespeeds) in the lower crust along this transect.