



Suppl. Fig. 1. Profiles of X_{Mg} [$X_{Mg} = Mg/(Mg + Fe_{tot})$], X_{Cr} [$X_{Cr} = Cr/(Cr + Al)$], Ca, Na and Ti contents (a.p.f.u.) derived from analyses on cores and rims of orthopyroxenes (a) and clinopyroxenes (b) along the charges after reaction experiments at 2 GPa, 1300 and 1400°C. Colored bars at the top of the diagrams indicate the compositional variability observed in melting experiments on Px1. Distance = 0 μm marks the interface between the partially molten pyroxenite and the orthopyroxene-rich reaction layer.