## **Supplementary Materials: Thermo-Elasticity of Materials from Quasi-Harmonic Calculations**

Maurizio Destefanis,<sup>1</sup> Corentin Ravoux,<sup>1,2</sup> Alessandro Cossard<sup>1</sup> and Alessandro Erba<sup>1</sup>\*



**Figure S1.** Single-crystal elastic stiffness constants of forsterite as a function of temperature. Circles are experimental adiabatic data. Dashed lines are isothermal quasi-harmonic computed values while continuous lines are adiabatic quasi-harmonic computed values.



**Figure S2.** Single-crystal elastic stiffness constants of forsterite as a function of temperature. Circles are experimental adiabatic data. Continuous lines are adiabatic quasi-harmonic computed values.



**Figure S3.** Adiabatic single-crystal elastic stiffness constants of forsterite as a function of temperature. Circles are experimental data while lines correspond to values computed with the quasi-static approximation.