



Fig. S1: BSE images of hydrated sample B_2_h at 200 MPa 1523 K and quenched normally with $16 \text{ K}\cdot\text{s}^{-1}$, showing a partially crystallized basaltic glass (a). Idiomorphic magnetite crystals (Mag) are surrounded by dendritic quench-crystals of pyroxenes (Px), embedded in the residual quenched melt (b).