



Supplementary Figure S1 Rb/Sr and Sr/Y filtering criteria for intermediate to felsic magmatic rocks of South China. (A-C) Rb/Sr versus Sr/Y diagrams for Jurassic to Cretaceous intermediate to felsic magmatic rocks of South China. (D) Rb/Sr versus Sr/Y diagrams for magmatic rocks with 55-70 wt% SiO₂ and 1-6 wt% MgO. Published data for Cretaceous magmatic rocks formed by sufficient crystal-melt separation³² are indicated to exclude highly fractionated and accumulated samples. After filtering, the data with $0.05 \leq Rb/Sr \leq 0.32$ and $10 \leq Sr/Y \leq 40$ were used to calculate the crustal thickness.