

Supplemental Fig. 1

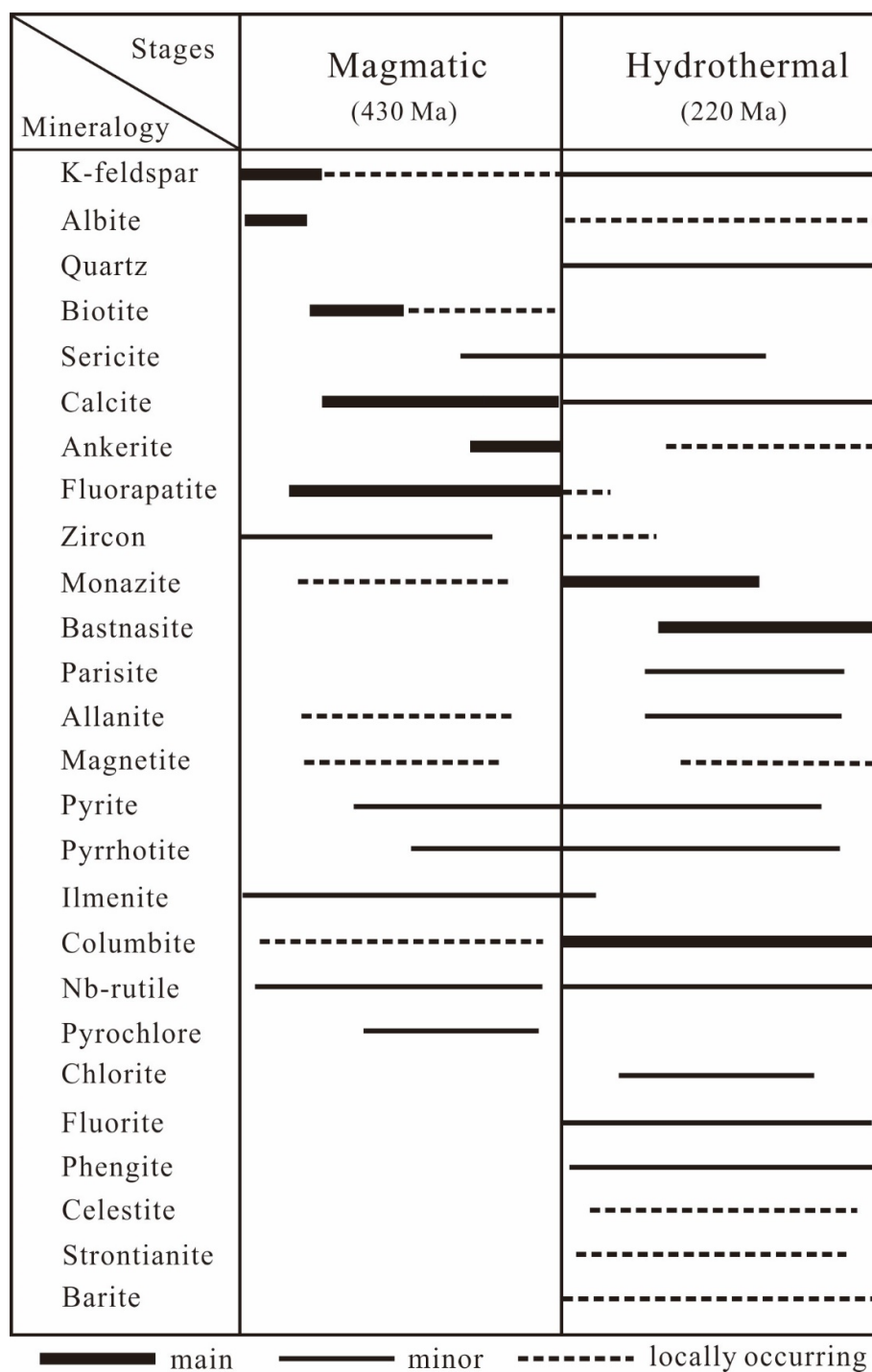


Fig. OM1 A simplified paragenetic sequence showing the formation of syenites, carbonatites and subsequent REE mineralization in the Miaoya complex. Note that the REE mineralization is mainly present in hydrothermal stage.

Supplemental Fig. 2

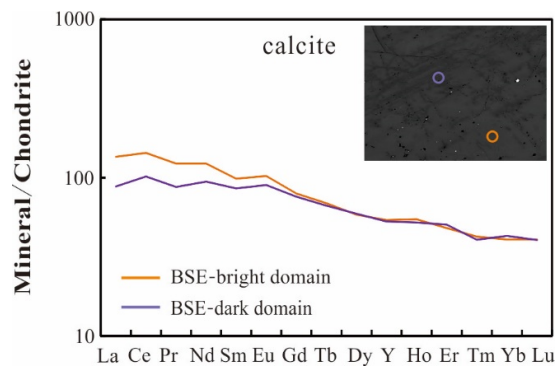


Fig. OM2 Chondrite-normalized REE patterns for different domains in a selected calcite. Not that the circles in the BSE images represent analyzing sites.