

Geochemical signature of amphibolite melting from ridge subduction-related granitoids: Chile Triple Junction Area

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Ridge-subduction makes important role on formation of the Phanerozoic granitoids. Although the Taitao Peninsula granitoid is known as a ridge subduction-related granitoid, there are few studies on petrology and geochronology. We worked on the petrology and geochemistry of three plutons in the Taitao Peninsula more comprehensively. The key point of this study is that major and trace element composition of the Taitao granitoids shows low Sr/Y, $[La/Yb]_N$ and Nb/Ta. In spite of expect that they were formed in garnet-stability field, our results suggest that the parental magma of the Taitao Peninsula granitoids was generated in amphibolite phases rather than garnet-stability field. The results provide new constraints on the granitic magma genesis during the ridge-subduction.