

The genesis of Lower Cretaceous volcanic rocks in North Kitakami belt, Japan.

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The geology investigation has revealed the stratigraphic units of the Lower Cretaceous volcanic rocks in the Harachiyama Formation.

Chemical compositions of the Lower Cretaceous volcanic rocks in the Harachiyama Formation are compared with those from South Kitakami belt and Rebun area in Hokkaido. The volcanic rocks of Harachiyama Formation are made up of bimodal association of SiO₂. It can be explained by the model of partial melting of lower crustal granulite. The basalts in the Kitakami belt shows higher in Sr, Zr, Nb contents compared with those of MORB and island arc basaltic rocks. There is possibility that the slab melts or OIB melt had effect on the source component of basaltic rocks.