Resolving trace element variation using batch fractionation model ; an example of the Matsuura basalts from NW Kyushu

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Incompatible element concentrations and relative abundances, which are considered as a good indicator for degree of melting and composition of the source mantle, often largely vary in a volcanic region. Batch fractionation is one of the magmatic processes to make such large spectrum of trace element composition. The comparison of model calculations of batch fractionation and composition of the Matsuura basalts in NW Kyushu shows that batch fractionation model can make large spectrum of incompatible elements in a vlocano.