

Origin of gabbroic cumulates included in Yatsugatake volcanic rocks

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Origin of the gabbroic cumulates included in the Yatsugatake volcanic rocks was considered based on their petrography, mineral chemistry, Sr-Nd isotope compositions.

Consequently, it was suggested that Yatsugatake volcanic rocks and gabbroic cumulates were produced as a result of magma mixing of three end members with different isotope compositions. One is a dacitic magma, the others are basaltic andesitic to andesitic magmas. Magma mixing might have occurred in three magma chambers with different depths.