

## Crystallization differentiation in shallow basaltic intrusions

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Doleritic bodies are exposed in the Capes of Sukoton and Gorota, Rebun Island, Hokkaido. The body in the Cape of Sukoton is composed of olivine-pyroxene dolerite, two-pyroxene dolerite and clinopyroxene porphyrite masses. Investigation of whole-rock and mineral chemistries, and initial Sr and Nd isotopic ratios of three masses indicates that they were formed by fractional crystallization of plagioclase and clinopyroxene from the common parental basaltic magma at the time of its intrusion. On the other hand, the body in the Cape of Gorota is composed of single mass consisting of several rock types. These rock types were formed by fractional crystallization of plagioclase and clinopyroxene from a parental basaltic magma at the time of its intrusion, alike the Cape of Sukoton bodies.