

## High pressure experiments in the system MORB-CaCO<sub>3</sub>: a possibility of producing carbonatitic magma in subduction zone.

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To understand a role of calcite in subduction processes, a series of high pressure experiments is carried out in the system MORB-CaCO<sub>3</sub>. Clinopyroxene, garnet, coesite and carbonatitic melt are present in the run with 90 wt% MORB-10 wt% CaCO<sub>3</sub> at 5.0 GPa, 1000C. Si and Al components increase with increasing temperature. The present experimental results suggest partial melting of carbonated oceanic crust may produce carbonatitic melt.