

Eruptive activities of younger Fuji volcano in Japan by the Mg/Fe ratio of individual olivines surrounding Fuji five lakes

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The eruptive activities of younger Fuji volcano were reconstructed by using the MgO/Fe₂O₃ ratio of individual olivine particles in the sediments surrounding Fuji five lakes. The chemical composition of individual olivine particles was determined by SEM-EDX using the standardless correction method. The MgO/Fe₂O₃ ratios were changed sensitively in dependence on eruptive activities during the past 10 ky and decreased widely from 1 ky B.P. downward. This result suggests that the chemical composition of individual olivine particles can be used as an effective indicator to observe each eruptive influence in Fuji volcano.