

## Erosion rate of stratovolcanoes - a case study of northeast Japan

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Erosion rate of stratovolcanoes was measured for 10 volcanoes of northeast Japan.

There are weak correlation between the erosion ratio  $R$  ( $R=100*(V_o-V_e)/V_o$ ;  $V_o$ : original volume of volcano;  $V_e$ : present volume) and the age of the volcanic edifices. Erosion ratio is relatively higher for P type volcanoes ( higher pyroclastics/lava ratio) than that of L type volcanoes (lower pyroclastics/lava ratio). Other factors such as height, slope angle, and the direction of the measured sector are not likely to affect the erosion ratio. It is concluded that the long-term erosion rate ( $10^5$  to  $10^6$  years ) of P & L type volcanoes are ca. 0.1 mm /year & ca. 0.02 mm/year respectively.