

## Adakite magma of the early Pleistocene age from the Northern Chushin Highland area.

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Lower Pleistocene volcanic rocks were widely distributed in Utsukushigahara Plateau and its adjacent area, northern part of the Chushin district, central Japan. In this area, volcanic activity took place 2.1 - 1.3Ma. These volcanic rocks are grouped into Wadabokujou, Karasawagawa, Utsukushigahara, Mitsumine and Wadatoge volcanic rocks according to their distribution and stratigraphy. The whole rock chemistry for 112 samples from these volcanic rocks was newly analyzed. The results represent that volcanic rocks have the compositional range from basaltic andesite to rhyolite. The rhyolitic rocks from Wada area differ in composition from other rocks noticeably as they have extremely low Sr, Ba contents. The basaltic andesitic to andesitic lavas from the other groups have similar petrochemistry mutually. It is considerable that the magma of these lavas had been affected by fractional crystallization of mainly plagioclase and internal magma mixing of the primitive magmas of the different melting degree. Standing on this assumption, it is supposed that the primitive magma had high Sr content.

The rocks of the basaltic andesite and andesite lavas have features of the high Sr, low Y content and high Sr/Y ratio. According to these characteristics, it can be said that the magma of the flat lavas are adakitic in composition. It is suggested that this adakite magma was generated by the partial melting of ocean crust which have subducted as the Philippine Sea Plate above the Pacific Plate.