

K-Ar ages of the high-magnesian andesites from northern Kyushu, southwest Japan

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K-Ar ages for eleven high magnesian andesites (HMA) from Nagasaki district and two HMAs from Hikosan district were obtained. They are as follows.

1. Nagasaki HMAs in Miocene Basalt — 5.83±0.31, 5.28±0.27, (4.41±0.24, 4.25±0.24), 4.49±0.25 Ma
2. Nagasaki HMAs in Togitsu and Mie volcanic rocks — (4.85±0.25, 4.71±0.24), (4.52±0.25, 4.60±0.26) Ma
3. Nagasaki HMAs in Nagasaki volcanic rocks — 4.28±0.23, 4.43±0.23, 4.43±0.24 Ma
4. Nagasaki HMAs in Pliocene Basalt — 4.41±0.25, 3.74±0.22 Ma
5. Hikosan HMAs — 3.57±0.22, (3.98±0.21, 3.97±0.21) Ma

These K-Ar ages do not contradict the stratigraphy determined by Kakubuchi et al. (1995) and Shiraki et al. (2000). Ages for HMA in Northern Kyushu vary from 3.5 to 5.8Ma. HMA in Nagasaki district are between 3.5 and 5.8 Ma in age, and HMA in Hikosan district are between 3.5 and 4.0 Ma in age. These ages suggest that the HMA igneous activities in northern Kyushu (Nagasaki and Hikosan district) are not related to the subduction of Philippine Sea Plate.