

K-Ar ages of volcanic rocks in southern Kyushu, Tokara Islands, and Okinawa Trough, Japan

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We obtained new K-Ar ages on the groundmass of volcanic rock samples from southern Kyushu, Tokara Islands, and Okinawa Trough which are important in the understanding of the temporal and spatial variations of Plio-Pleistocene volcanism in these areas. Three K-Ar ages obtained in southern Kyushu have the following ages: 3.32 ± 0.06 Ma for Sendai basalt, 1.1 ± 0.7 Ma for Yuwandake andesite, and 0.07 ± 0.06 Ma for Aojiki basalt. The age obtained for Aojiki basalt is correlated to the basaltic tephra erupted within 103-95 ka. The K-Ar ages of older volcanic rocks in Tokara Islands are 0.16 ± 0.02 Ma and 0.15 ± 0.04 Ma for Kuchinoerabujima, 0.29 ± 0.02 Ma for Kuchinoshima, 0.49 ± 0.02 Ma and 0.47 ± 0.03 Ma for Nakanoshima, and 0.10 ± 0.03 Ma for Akusekijima. Lava flows at Suwanosejima have much younger ages of 0.06 ± 0.02 Ma and 0.05 ± 0.01 Ma. The submarine silicic lava at Iheya ridge in the Okinawa Trough yielded an age of 0.15 ± 0.02 Ma.