

New K-Ar Ages and Geologic Significance of Igneous Rocks in the South Shetland Islands, West Antarctica

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New K-Ar ages of igneous rocks in the South Shetland Islands, West Antarctica were determined. The volcanic and associated intrusive rocks from Half Moon Island and Greenwich Island are K-Ar-dated at 62.6-70.6Ma and 69.2-79.3Ma, respectively, equal to late Cretaceous. King George Island is K-Ar-dated at 28.3055.9Ma, i.e., early Tertiary for its volcanic rocks and plutonic rocks (mainly quartz-diorite). As to volcanic rocks on Deception Island in Bransfield Strait, 1.2-1.8Ma ages determined by whole-rock K-Ar dating ascribe them to Pleistocene, corresponding with complete formation of Bransfield Strait 2 Ma ago.