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Rb-Sr WHOLE-ROCK AGES OF METAMORPHIC ROCKS FROM EASTERN QUEEN MAUD LAND, EAST ANTARCTICA (2): TENMONDAI ROCK AND RUNDVÅGSHETTA (ABSTRACT)

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Geochronological study using the Rb-Sr whole-rock isochron method was carried out on the metamorphic rocks from two localities, Tenmondai Rock and Rundvågshetta, in eastern Queen Maud Land. Four migmatitic gneisses in the Tenmondai Rock area give an isochron of 780±70 Ma with an initial $^{87}Sr/^{86}Sr$ ratio of 0.70463±33, which is approximately concordant with those of several other areas in eastern Queen Maud Land reported in SHIBATA *et al.* (Mem. Natl Inst. Polar Res., Spec. Issue. **43**, 133, 1986). The quality of the isochron for Tenmondai Rock is not good because the data points have a small spread in $^{87}Rb/^{86}Sr$ ratio.

As for Rundvågshetta, three of five analyzed granulites give an isochron of 3020±470 Ma with an initial $^{87}Sr/^{86}Sr$ ratio of 0.70515±44. The age is the oldest so far obtained from eastern Queen Maud Land, and corresponds to those of the Archean Napier Complex of Enderby Land. This isochron is essentially controlled by a data point with an extraordinary high $^{87}Sr/^{86}Sr$ ratio (0.8416). This is quartzofeldspathic gneiss characterized by mesoperthitic texture, which is uncommon in eastern Queen Maud Land. There may be some fragments of Archean basement rocks in the vicinity of Syowa Station.

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