

# Geology of eastern Dronning Maud Land (Lützow-Holm Complex) and Enderby Land (Napier Complex and Rayner Complex), and geological field project objectives in JARE 65 (2023-2024)

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The team of the geological field project (AP1004) of the Japanese Antarctic Research Expedition (JARE) will investigate the basement geology of eastern Dronning Maud Land and Enderby Land in East Antarctica that includes the Lützow-Holm, the Western Rayner, the Rayner and the Napier Complexes. This part of the Antarctic continent comprises of deep crustal high-grade metamorphic and plutonic rocks that recorded the geologic history from early Archaean through Proterozoic to earliest Paleozoic over 3 billion years. For these perspectives, the area is considered by many geologists as an ideal field for investigating long Earth history and deep crustal processes. Following the temporal geologic summary by Shiraishi et al. (2008), significant scientific advance has been made especially by the JARE's geology teams. In this presentation, we will review the recent update of the basement geology of eastern Dronning Maud Land (e.g., Dunkley et al., 2020; Suzuki and Kawakami, 2019; Takamura et al., 2020; Baba et al., 2022; Mori et al., 2023; Kitano et al., 2023; Hiroi et al., 2023; Kawakami and Harley, 2023) and Enderby Land (e.g., Horie et al., 2016; Guitreau et al., 2019; Król et al., 2022; Takehara et al., 2023), and present the geological field project objectives in JARE 65 (2023-2024).

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