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ペルム紀中期末の生相・環境変化：中緯度での応答
Changes in biofacies and environments at the end-Gudalupian: response in mid-latitude

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The Guadalupian-Lopingian boudnary (Permian) recorded the most significant environmental change in the Paleozoic on all aspects; i.e. major global cooling, biodiversity decline, ocean chemistry, and even geomagnetism. Previous studies focused mostly on the fossiliferous limetones deposited in low-latitude domains both in peri-Pangean shelves and mid-oceanic atoll complexes. In order to check the relevant environmental changes in mid-latitude, the Iwaizaki Limestone in the South Kitakami Blet, NE Japan, was analyzed in litho-, bio-, and isotope stratigraphy. In particular, the top part of the limestone, ca. 50 m-thick interval, recorded the collapse of a patch reef complex. Except the Capitanian fusulines from the basal part of this interval, most of the interval lacks index fossil. The present Sr isotope analysis newly identified the uniquely low Sr-ratio, as low as 0.7068, throughout the interval, confirming the Capitanian age. The collapse of reef occurred during the Capitanian in accordance with the Kamura cooling event, but probably much earlier than the low-latitude domains.

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