

The strontium isotope stratigraphy in the Wordian of the mid-oceanic paleo-atoll limestone at Takachiho in Japan

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In order to clarify the extinction-related environmental changes before the G-L boundary (Permian) event, we analyzed the paleo-atoll limestone derived from ancient mid-oceanic paleo-seamount at Takachiho, Miyazaki, Japan. Using the 60 m-thick drilled core samples, we described the litho-stratigraphy first, and determined the age by the fusuline biostratigraphy. $^{87}\text{Sr}/^{86}\text{Sr}$ ratios from 15 horizons concentrate in 0.7072 to 0.70735. $^{87}\text{Sr}/^{86}\text{Sr}$ ratio reached the minimum values (0.7068-0.7069) of the Phanerozoic during the Capitanian (late Guadalupian). This study confirmed for the first time that $^{87}\text{Sr}/^{86}\text{Sr}$ ratio stayed in relatively higher value during the Wordian (Neoschwagerina Zone) at least by the beginning of the Capitanian.

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