

## Litho-, bio-, and C-Sr isotope stratigraphy of the Middle Permian carbonates in central Sichuan, South China

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We analyzed the stratigraphy of the Wordian to Capitanian (Middle-Upper Guadalupian, Permian) shallow marine carbonate (Maokou Formation) in the Ebian area of central Sichuan, South China, using samples from outcrop and drilled core. Fusulines and conodonts confirmed that the studied section ranges from lower Wordian to mid-Capitanian. Owing to depositional gap beneath the limestone conglomerate, the horizon of the end-Guadalupian extinction is missing. Nonetheless, we detected a nearly 20 m-thick interval characterized by extremely high positive values of stable carbon isotope ratio of carbonate ( $> 5$  permil) in the Capitanian. This is the first confirmation of the similar signal proposed from paleo-atoll carbonates in Japan (Kamura event). This suggests the appearance of cool climate in the later half of the Capitanian on a global scale, in good accordance with the global sea-level drop and ubiquitous hiatus on the top the Maokou Fm throughout South China (except the Penglaitan section).

Keywords: Permian, Maokou Formation, South China, Kamura event, mass extinction, Guadalupian