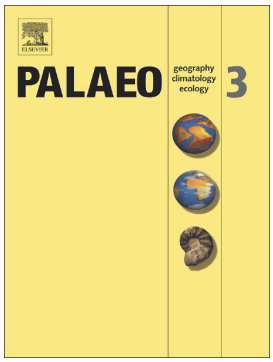

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Oceanic redox conditions through the late Pliensbachian to early Toarcian on the northwestern Panthalassa margin: Insights from pyrite and geochemical data

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Abstract

The early Toarcian oceanic anoxic event (T-OAE; ~183 Ma) was a significant palaeoenvironmental perturbation associated with marked changes in oceanic redox conditions. However, the precise redox conditions and redox history of various water masses during the T-OAE, especially those from outside the Boreal and Tethyan realms, are unclear. To address this issue, we present pyrite framboid data from an upper Pliensbachian to lower Toarcian succession deposited on the NW Panthalassic margin in a shallow-water setting (Sakuraguchi-dani section, Toyora area, SW Japan).