

High-resolution reconstruction of palaeoenvironment across the Cenomanian-Turonian boundary

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Oceanic Anoxic Events (OAEs) characteristically occurred during the warm climate of the Mid-Cretaceous. An ultimate mechanism and its relation to the warm climate are, however, still controversial. This study aims to clarify the mechanism of OAEs through high-resolution reconstruction of palaeoenvironment across the Cenomanian-Turonian (C-T) Oceanic Anoxic Event, which is generally considered as the most widespread event of the Cretaceous OAEs. Milankovitch-scale variation of turbidite frequency occurs in the latest Cenomanian, which suddenly disappears at the C-T boundary. Redox condition and surface-productivity also show a similar fluctuation in harmony with the turbidite frequency variation. Quantification of redox condition by ICPMS is now in progress.