A vegetation change reconstruction at around the L-M Pleistocene boundary from a pollen record of the CHOSHI core

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Because the Tabuchi section consisting of the middle part of the Kokumoto Formation is a Lower-Middle Pleistocene (L-M) boundary GSSP candidate, to reconstruct high-resolution pollen records at this part of the formation is quite important. However, Onishi (1969) reported pollen assemblages of the Kokumoto Formation in which that the pollen density is substantially thin and the assemblages were severely distorted as to exhibit a pelagic condition where conifer tree pollens tend to be artificially overrepresented. The objective of this study is to reconstruct a high-resolution pollen records by using the Choshi core, which represents a good pollen data as reported by Okuda et al. (2006) at upper than the L-M Pleistocene boundary. The Choshi core, drilled at Morito-Cho, Choshi City in the Chiba Prefecture, is composed of five formations, the Katori Formation and the Inubo Group consisting of the Toyosato, Kurahashi, Yokone, and Obama Formations. The formations cover Marine Isotope Stages (MISs) from 11 to 25, which across the L-M Pleistocene boundary corresponding to the middle part of the Yokone Formation (Kameo et al., 2006). The position of the L-M boundary in the Yokone Formation can be determined precisely, because stratigraphic correlation between the Yokone Formation and the Kokumoto Formation were studied well. We plan to report a high-resolution pollen record from samples of the core at depths between 150 and 170m, corresponding to MIS 20-18, and will provide a vegetation changes at around the L-M Pleistocene boundary.

References
Okuda et al., 2006. Island Arc, 15, 338-354.

Keywords: Lower-Middle Pleistocene boundary, pollen analysis