A preliminary report for high-resolution foraminiferal oxygen and carbon stable isotope records in MIS 19 from an on land core drilled at the Choshi city, central Japan.

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The Plio-Pleistocene Inubo Group, distributed in the Choshi city, Chiba prefecture, central Japan, is though to be a suitable marine succession to investigate paleoceanographic and paleoclimatic changes around the northwestern Pacific Ocean, because a lot of wide spread key tephra beds are intercalated, and microfosills and pollens are abundant. In 1998, a continuous, well recovered on land core drilled through the Obama, Yokone, Kurahashi and Toyosato Formations in the Inubo Group was obtained (after Choshi core). Kameo et al. (2006) studied calcareous nannofosill, paleomagnetic and planktonic foraminiferal oxygen isotope stratigraphies of the Choshi core, and reported that the core corresponded to a period between MIS 11 and 24 base on a correlation with the LR04 stack curve (Lisiecki and Raymo, 2005). In this study, we show a new high-resolution stable isotope record using benthic foraminifers from a section across the Lower-Middle Pleistocene boundary of the Choshi core. This record corresponds to MIS 18-20 with a time resolution of ca. 500 years. The average oxygen isotopic value of the Choshi core is about 0.5 ‰lighter than that of LR04 during the period of MIS 19, and the difference becomes larger as the age becomes younger, indicating that the accumulation depth of the Coshi core was getting shallower due to uplifting and/or burring up the basin. Further analysis on the core will show some paleoceanographic findings at around the north western Pacific margin during the MIS 19 period.

Keywords: MIS 19, Foraminiferal stable isotope record, Choshi core

