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MIS022-P03

Room:Convention Hall

Time:May 23 14:00-16:30

Paleoceanography based on Pliocene and Pleistocene diatom floras from the Canterbury Basin (IODP Ex. 317)

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Diatom analyses of the upper Pliocene and Pleistocene sediments (from ca 2,780 to 290 ka after results of onboard calcareous nannoplankton biostratigraphic research) in the Canterbury Basin continental slope (Hole U1352B of Integrated Ocean Drilling Program Expedition 317) revealed strong warm and cold fluctuations which might coincide with global benthic foraminiferal $\delta^{18}O$ records, in addition to three times trans- and degression events, although the preservation and occurrences were generally poor and rare and the diatom biostratigraphic events were unknown. Moreover, abundant occurrence of diatom resting spores from ca 1,700 to 1,000 ka may indicate that eutrophication advanced around coastal region after upwelling strengthened, and nutrients supplied unstable and sporadically from 1,250 to 1,000 ka.

Keywords: IODP Expedition 317, New Zealand, diatoms, nannofossils, paleoceanography, Canterbury Basin