

Paleoceanographic significance of diatomaceous ooze under the subarctic convergence in the North Atlantic (IODP Site U13)

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Stratigraphic variation in foraminiferal assemblage and oxygen isotope was examined using the late Pleistocene diatomaceous deposits collected under the subarctic convergence in the North Atlantic. Oxygen isotope from surface and subsurface dwelling planktic foraminifers (*Globigerina quinqueloba* and *Neogloboquadrina pachyderma* sinistral) revealed that mat-forming diatom, *Thalassiothrix longissima*, occurred extremely abundant under cooler surface water condition, while it occurred commonly under warmer surface water one. The evidence suggests that deposition of the diatom mats is closely related to the surface water conditions.

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