

Influx of the Oyashio Current into the Holocene Japan Sea

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The Japan Sea is a semi-closed marginal sea, and its oceanographic conditions have been influenced by the influx of ocean water and the volume of continental run-off. Sea-level rise following the onset of the post-glacial global warming changed oceanographic circulation patterns. Planktonic organisms are expected to have responded to changing seawater conditions and the organic products preserved in sediment columns have the potential to record paleoceanographic fluctuations.

We studied paleontologically and geochemically the sediment cores recovered from the west of the Tsugaru Strait. The coiling directions and the C-O isotopic ratios of *Neogloboquadrina pachyderma* infer that cool and slightly salted water has flowed into the Japan Sea through the Tsugaru Strait during Holocene time.