

Characteristics of physical properties of the cores from Oyashio region and its relation to paleoceanography

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Physical properties of some cores collected from Oyashio region showed the similar stratigraphic change. Water content was low in the LGM sediments according to coarse material supply due to the lowest sea stand. Highest value of the water content during deglaciation resulted to higher productivity of diatoms in surface water. Well laminated sediments occurred in this period in the IMAGES Off Shimokita core. Water content was decreased by decreasing of diatom occurrence after mid Holocene. Occurrence of foraminiferal tests in the cores also showed the similar pattern. During the late Holocene, both planktonic and benthic foraminifera showed the small occurrence. Foraminifer increased rapidly at a lithologic (color) boundary. Preservation potential for foraminiferal test might change at this horizon. In the LGM sediments, foraminifers occurred commonly, although of slight decreasing of planktonic foraminifer occurrence. In Oyashio region off Hokkaido-Shimokita, at least a few events on change of bottom water properties might be estimated. Comparison of the events in each core would be very important to reconstruct paleoenvironmental change in the Oyashio region.