

SEM032-06

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## Paleointensity and Environmental magnetism of gravity cores covering the last 100 kyr taken in the central Okhotsk Sea

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A paleomagnetic and rockmagnetic study was conducted on three gravity cores (GC1B, GC8A and GC9A) collected from the central Okhotsk Sea during the R/V Yokosuka YK0712 cruise. The three gravity cores were taken at the same positions as the piston cores studied by Inoue and Yamazaki (in press). The upper part of the piston cores suffered from perturbation. Therefore, undisturbed surface sediments were obtained by a gravity corer. Variations in relative paleointensity during the last ca 100 kyr were estimated using ARM as a normalizer. Ages of the three cores were estimated by correlating their relative paleointensity variations to those of ODP Site 983 in the North Atlantic Ocean (Channell et al., 1998). We examined temporal variations in rock magnetic parameters for magnetic grain size and magnetic mineral concentration. At the northern site (core GC9A), magnetic mineral concentration and grain size increased between 35 and 50 ka. At the southern site (core GC1B), on the other hand, magnetic mineral concentration and grain size decreased in the same time interval, and just before and after this interval, they increased. We estimate that IRD (ice rafted debris) supplies magnetic minerals, and that regional differences in sea-ice coverage caused the rock magnetic differences in the two sites.