

Particle transport process based on the analysis of natural and anthropogenic radionuclides on the continental margin

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Settling particles were collected from three locations in the East China Sea continental margin by using sediment traps and then analyzed for Pb-210 and Pu-239+240. There was a clear tendency for total mass fluxes to increase with depth at all three stations, and there was an especially large increase near-bottom. The highest Pb-210 and Pu-239+240 fluxes were observed near-bottom at every station. The large fluxes of Pb-210 and Pu-239+240 in the near-bottom traps seem attributable to lateral transport of particles that slide down on the continental slope nepheloid layer, since this transport process is considered to be significant for Pb-210 and Pu-239+240 transport on the continental slope in the East China Sea.