

Depositional rate of surface deposit during the last ca. 100 years at the Enshu Trough, central Japan

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Deep marine surface sediment core sample (KT-08-30, En-MC2) had been obtained from the Enshu Trough at 2008 autumn. Mass Accumulation Rate (MAR) of the core during the last ca. 100 years was estimated with Pb-210 dating and dry bulk density.

The En-MC2 core (ca. 1000 m water depth) has MAR of 0.2 g/cm²/y and a gap in excess Pb-210 activity around the 12 cmbsf horizon. The gap may be erosional surface because soft-X image of the core shows changes in x-ray transmission and bioturbation at the horizon. On the basis of displacement in excess Pb-210 activity, the erosion occurred around 1976 and scoured surface sediment of 2.8 g/cm² corresponding to 5 cm thick.

Although MAR of En-MC02 core is estimated as almost constant during the last 80 years, it shows upward fining trend. It is necessary to continue analysis on the relationship between deep marine sediment supply and human activity such as dam construction.

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