

Mass Transfer Property of Subducting Oceanic Plate

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In order to elucidate the mass transfer properties of subducting oceanic plate, we measured permeability and diffusivity using core samples from Izu-Mariana subduction zones. The permeabilities of clay samples ranged from 10^{-6} to 10^{-8} cm/s, while ones of hard rocks were about 10^{-11} cm/s. This difference may result from their void structures.