

Physical properties and microstructure observations of diatomaceous sediments-A case of off Sanriku, northeast Japan(ODP Leg 186)-

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Diatomaceous sediments were recovered from off Sanriku of northeast Japan during ODP Leg 186. The onboard results of porosity measurements show high value (50-70) down to 1000 mbsf possibly due to a rigid silica framework of diatoms. We took 14 whole round core samples between 390 and 1150 mbsf in order to measure physical properties and observe microstructure of diatomaceous sediments. We observed many pores in and around diatom fossils using SEM even in the sample from deeper than 1000 mbsf. The resistance of diatom framework is important factor on the preservation of high porosity in the deeper depth.