

Benthic Foraminiferal Carbon isotopic anomaly in IMAGES Core MD01-2412

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Deep sea core MD 01-2412 was collected from N 44.5 degree, E 145 degree and water depth 1225 m, off Hokkaido in the southwestern Okhotsk Sea. We measured stable isotope compositions of benthic foraminiferal fossils through this core. Carbon isotopes of foraminifera indicate about -1 per mil (VPDB) through this core. Many stable isotopic measurements, however, indicate biased light values. The most depleted value was -9.5 per mil (VPDB). The negative spike through carbon isotopic profile corresponds to the brownish foraminiferal abundant layers in the sediment core. This study reports the detailed investigations into the test structure, chemistry, mineralogy and stable isotopic composition of brownish colored benthic foraminifera.