

Tephrochronology of the late Quaternary Japan Sea sediments

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Tephra layers intercalated in two IMAGES cores from Japan Sea were examined. In a 56m long core MD01-2407 from the Oki Ridge, 44 tephra layers were observed and analyzed. Most of tephras were the Japanese island origin, but some were Ulleung island origin. Almost of the examined tephras in a 33m long core MD01-2408 off Akita were the Japanese island origin, but a few Baegdusan and Ulleung island origin tephras were observed. Re-examination of the reported tephras in the late Quaternary Japan Sea sediments suggests that many thin tephras from Ulleung island and its surroundings widely recognize in the southern-eastern-central Japan Sea and while tephras from Baegdusan in the northern Japan Sea. Coupled with the stratigraphic relations with the other tephras, dark layer occurrence, and microfossil biohorizons, these thin tephras from Ulleung island and Baegdusan will be very useful tool to construct age model in the Quaternary Japan Sea sediments.