

pIRIR dating of marine terraces along the Sea of Okhotsk coast area, northern Hokkaido, Japan

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In Hokkaido Island, northern Japan, it has been difficult to construct a detailed chronology of marine terraces, due to the lack of the marker tephra layers and to the deformation of original landforms by strong past periglaciations. The lack of age constraint has prevented studies of precise geomorphic development and palaeoenvironmental reconstruction in this area.

This study applies an elevated temperature post-IR IRSL (pIRIR; Buylaert et al., 2009) SAR protocol using polymineral fine grains to marine terraces along the Sea of Okhotsk coast area in northern Hokkaido (Fig 1).

In Hamatonbetsu town, northern Hokkaido, the pIRIR ages from the higher marine terraces are ca.340 -370 ka, which yielded ages corresponding to MIS 9, respectively.

Keywords: pIRIR dating, marine terraces, the Middle Pleistocene, northern Hokkaido