Geophysical Research Abstracts,
Vol. 11, EGU2009-4450, 2009
EGU General Assembly 2009

Orbital and millennial timescales sedimentary records during MIS 5/6 in the Ulleung back-arc Basin, East Sea/Japan Sea

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A sedimentary record from the Ulleung Basin is well reflected in both oeanographic and climatic variations during the late Pleistocene. The Ulleung Basin is influenced by activation of the shallow Korea/Tsushima Strait with the glacio-eustatic sea level fluctuation. Repetitive isolation and ventilation events of the East Sea/Japan Sea are characterized by thicker laminated and bioturbated layers during the glacial and interglacial periods as reflecting drastic ventilation changes. The extensive pyrite filaments layer was deposited during the deglciation period. The thinner dark and light layers are controlled by millennial scale paleoclimate changes and are closely linked to the higher frequency D-O events. This paper examines the distinct sedimentary records during the MIS 5e and MIS 6 periods and documents the precise stratigraphic position of the age-unknown tephra layers for estimating the ages.