

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



HGM002-01

Room:301A

Time:May 25 16:30-16:45

The Holocene Environmental Change at Khuder Peat Land, Northern Mongolia

Yu Fukumoto^{1*}, Kaoru Kashima¹, A. Orkhonselenge²

¹Faculty of Sciences, Kyushu university, ²Geographical Institute, MAS, Mongolia

Holocene development of Khuder peat bog in northern Mongolia was reconstructed from fossils of diatom, pollen, and other chemical proxy records. The diatom records from two boring cores showed a general transition from riverine environments, low marsh to the present acidic peat bog. In this general trend, abrupt changes of water environments were observed. These changes could be correlated with bond events and evidence of arid environment at Little ice age was remarkable. This study demonstrated that the multi cores are necessary to fully reconstruct the paleoenvironment on terrestrial deposits as the diatom records of two cores are not necessarily synchronous. Pollen record showed some transition of vegetation such as rapid expansion of conifer forest at around 6,000 cal yr BP. Coincidence of these events with those of other areas could test the geographical extent of climate changes as the study area is located between the vegetation zones of Siberian taiga and Mongolian arid steppe.

Keywords: Holocene, Climatic Change, Mongolia, Peat Land, Diatom Analysis, Pollen Analysis