Japan Geoscience Union Meeting 2012
(May 20-25 2012 at Makuhari, Chiba, Japan)

ACC31-P06 Room:Convention Hall Time:May 23 13:45-15:15

The variations in pollen abundance and composition in Holocene of an ice core of Kyrgyz Tienshan, Central Asia

TAKEUCHI, Nozomu[1*], SERA, Shuntarou[1], FUJITA, Koji[2], OKAMOTO, Sachiko[2], NAOKI, Kazuhiro[3], Vladimir Aizen[4]

[1]Chiba University, [2]Nagoya University, [3]JAXA, [4]University of Idaho

Various pollens are preserved in ice cores, in particlular, ice cores from mountain glaciers in low- or mid lattitude. Pollen grain concentration in ice cores can be used to distinguish annual and seasonal layers, and also are indicative to past vagitation around glaciers. In 2007, ice cores were successfully drilled on Grigoriev Ice Cap located in the Tien Shan Mountains, Kyrgyztan. The elevation of the drilling site was 4600 m a.s.l. and entire core length was 87 m. Radiocarbon dating revealed that the soil corrected from the bottom of the ice core was 12,500 cal year bp. Microscopy revealed that fourspecies of pollens were preserved in the ice core, and their abundance and composition varied in the last millenium.

Keywords: ice core, pollen, Plaeoenvironment, glacier, Holocene