

Japan Geoscience Union Meeting 2011

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

©2011. Japan Geoscience Union. All Rights Reserved.



U020-P03

Room:Convention Hall

Time:May 24 10:30-13:00

Evolution of water chemistry of paleolake recorded in the mineral compositions of the lake sediment from Darhad basin

Madoka Fuchizaki^{1*}, Keisuke Fukushi², Kenji Kashiwaya², Hitomi Abe¹

¹Kanazawa University, ²Kanazawa University

Darhad basin in northern Mongolia is located in the continent where is sensitive to the climate change. Hydrologic events with climate changes occurred in this area. For example, according to data from previous study, it is suggest that Darhad basin formed ice dam lake by Pleistocene glaciers and the lake repeated drainage and impounded water.

Disturbance of equilibria between minerals and solution in Lake caused by climatic changes leads to the water-mineral reaction. In consequence, The records of biological and chemical reaction resulted from such reactions are preserved in the mineral compositions in lake sediments. Therefore, it is expected that lake sediments from Darhad basin would have record of evolution of water chemistry over the past a few million years.

We tried to reconstruct evolution of water chemistry of the paleolake by mineralogy analysis of lacustrine sediment from Darhad basin. We also tried to clarify the contributing factors which affected evolution of water chemistry.