Japan Geoscience Union Meeting 2010
(May 23-28 2010 at Makuhari, Chiba, Japan)

APE025-P03 Room: Convention Hall Time: May 27 17:15-18:45

Climate changes in Lake Biwa based on concentration profile of biogenic silica in bottom sediments

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Variation of biogenic silica content of cored lake sediments is regarded as reflecting the changes in the magnitude of primary production in a lake. Because, Lake Biwa, which has more than 400,000 years history, is located at the central part of Japanese island, sedimentary record of the lake can tell us climate history of the remote past. The authors calculated biogenic silica content by means of absorptiometry.Meteorological observation data and biogenic silica content showed good correlation, especially between summer temperature and biogenic silica content.Therefore, we reconstruct paleo environmentaltemperature.

Keywords: Lake Biwa, sediment, biogenic silica, paleo environment