

Chemical composition of the core sediment from Lake Suigetsu and reconstruction of environmental changes during the Last Glacial.

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We determined the inorganic chemical composition, total organic carbon, extracted biogenic silica and extracted Fe-Mn oxide contents in the varve sediment of Lake Suigetsu core sample during the Last Glacial. Two factors are extracted from R-mode factor analysis from the bulk chemical composition: (1)biogenic productivity and (2)redox condition. According to the C-14 chronology, there is a good correlation between biogenic productivities (including biogenic silica content) and climatic change. At the end of the Younger Dryas (ca. 11.6kyr BP), both the decrease of biogenic productivities and significantly oxic condition of the lake floor are detected.