

Developments of methodology for decoding environmental variations with high time resolution using soft sediments

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Elemental profiles of sediments record the information on the environmental variations of the geologic past. In case that we restore the environments in various ages with high accuracy and high time-resolution, it is necessary for us to acquire many elemental profiles with high precision and high spatial resolution. Therefore, we were developing the methodology of decoding the environmental variations and events from sediments. In this poster presentation, we will mainly report the following two points. The first is the consolidation method of soft sediments. In case cross of mapping the cross section of soft sediments by XRF and RGB scanners, we examine that produce thin sections from soft sediments without sediment collapse and disturbance. The second is data analysis method of elemental abundance profiles of laminated sediments from Lake Suigetsu, Central Japan.

The sampling of lacustrine sediments into Lake Hovsgol, Mongolia is planed in February 2004, and we will apply the above-mentioned two methods to the sediments from Lake Hovsgol. Therefore, we will indicate about the prospects of this study, too.