

## Sedimentary record of historic earthquake in Lake Inawashiro, Japan

Katsuhiko Nameki<sup>1\*</sup>, Yoshio Inouchi<sup>2</sup>, Yoshitaka Nagahashi<sup>3</sup>, Kotaro Hirose<sup>3</sup>

<sup>1</sup>Graduate School of Human Sciences, Waseda University, <sup>2</sup>Faculty of Human Sciences, Waseda University, <sup>3</sup>Faculty of Symbiotic Systems Science, Fukushima University

Lake-bottom drilling at the central part of Lake Inawashiro was carried out by the member of Fukushima University in the fall of 2012 and about 30m long sediment was recovered. We analyzed uppermost 1.3m sediment and some event layers were correlated to historic earthquake events.

The sediment was composed chiefly of dotted greenish grey silty clay intercalated by thinly banded dark layers. Brownish grey silty layer is intercalated at depth of 35 to 40cm. Soft X-ray photo shows several dark layers which imply less transparency of soft X-ray. Sediment samples were taken at each 5mm depth and analyzed water content and grain size were measured at 1cm interval. The result shows existence of several event layers which show lower water content and coarser grain size. At depth of 35 to 40cm volcanic mudflow sediment of 1888 Bandai eruption was recognized. Mass sedimentation rate was measured based on the age of volcanic mudflow and sedimentation age of event layers were estimated. The result shows existence of event layers of 2011 large earthquake and 1943 Tajima earthquake.

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