

## Late Pleistocene to Holocene landslide dammed lakes formed around Lake Shibire, Misaka Mountains, central Japan

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At 2014 JpGU meeting, we preliminary reported the historical development of Lake Shibire based on the geological and geomorphological information (Suzuki *et al.* 2014; HDS29-P06). In particular, we showed the sedimentological and chronological features of a paleolake (paleolake A; PLA) that was connected with the present Lake Shibire and had survived during the period from 47 to 30 cal ka. At 2015 JpGU, we account for new <sup>14</sup>C dates of the lacustrine sediments of PLA, and for the newly discovered lacustrine sediments formed by another paleolake.

New <sup>14</sup>C samples were obtained from the middle and the uppermost positions of PLA sediments, whereas the bottom age of PLA sediments was already decided as 47-46 cal ka. These samples indicated 42-41 cal ka and 3.1-3.0 cal ka, respectively. We should pay careful attention to unconformity (unidentified at present) between the middle and upper parts of PLA sediments. However, it can be estimated that PLA had survived for longer than ever thought. In the late Holocene, PLA would have shrunk and had landscape of wetland or gradual channel.

Other lacustrine sediments were found from the outcrop localities about 1 km south of the present Lake Shibire. These sediments continue horizontally and can be observed at least four outcrop localities at the same altitude (700 m ALS). This altitudinal concentration of these sediments is obviously different from that of PLA sediments. Judging from these facts, we consider that these sediments were formed by another paleolake (paleolake B; PLB). Although the age and total thickness of PLB sediments are uncertain at present, the estimated area of PLB is 0.05 km<sup>2</sup>. Our geomorphic analysis suggests that PLB was caused by the secondary landslide generated from the primary landslide body that created the paleo Lake Shibire and PLA.

Furthermore, we will attempt to show the preliminary description for drilling cores being recovered (as of Feb. 2015) from a lacustrine terrace along the present Lake Shibire.

Keywords: landslide, dammed lake, lacustrine sediments, <sup>14</sup>C date, late Pleistocene