Past water level of Lake Ogura, Kyoto Prefecture, reconstructed from the form and deposits of a lacustrine delta

Yuka Ito\textsuperscript{1*}, Takashi Oguchi\textsuperscript{2}, Fujio Masuda\textsuperscript{3}

\textsuperscript{1}Grad, The University of Tokyo, \textsuperscript{2}CSIS, The University of Tokyo, \textsuperscript{3}Doshisha University

Lake Ogura had served as a flood retarding basin in Southern Kyoto City until 1941. Borehole data (KG-NET, 2010) revealed a coarsening-upward delta succession, indicating that the Uji River flowed directly into the lake before ca. 400 years ago. Two stages of the lake water level were inferred by detailed analysis of the form and deposits of the Uji River delta. The lake level was at T.P. 12.0?13.0 m in elevation according to the altitude of the delta topset deposits. This altitude approximately corresponds to the lake level of 400 years ago (Stage II). The lake level in the earlier period (Stage I) was T.P. 13.2?13.5 m in elevation. Along the southern edge of Lake Ogura, cliff lines corresponding to lakeside locations at Stages I and II can be recognized. The extent of the lake at the two stages was estimated using the altitudes of the cliff lines and GIS.

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