

New age model of off Takashima drilling sediment

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Several kinds of studies have been carried out regarding Off Takashima drilling core in Lake Biwa, Japan and a lot of achievements have been reported. In recent years, we have been carrying out chemical analysis on biogenic silica content of cored sediment with high time resolution. However, there have been some age problems regarding uppermost part of the core, namely the last 45 k years. In order to solve the age model problem, we carried out piston core sampling near the Off Takashima drilling site in 2012. About 30 carbon-14 data have been obtained. In addition to well-known wide spread tephra dates, these C-14 dates are converted into new age model. Correlation between Off Takashima drilling core and newly obtained piston core sediment enabled to establish new Off Takashima age model. Last year we reported tentative correlation based on water content profile of both cores. This time, we analyzed grain size, total organic carbon content and total nitrogen content of piston core sediment and compared with those of Off Takashima drilling core. Based on total organic carbon content, correlation between two cores and age model of Off Takashima drilling core are improved greatly.

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