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APE031-P18

Room:Convention Hall

Time:May 25 10:30-13:00

## Paleoclimate changes based on high-resolution biogenic silica record from Takashima-oki Drilling Core in Lake Biwa

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We analyzed continuous biogenic silica content (BSC) record at high-resolution over the past 47,000 years from Takashima-oki Drilling Core in Lake Biwa (e.g., Yoshikawa and Inouchi, 1991). The BSC record in wt% (weight percent) unit was analyzed by means of colorimetric molybdenum-yellow method with an average resolution 50 yr. The BSC record shows three major cold ages (Little Ice Age, 8.2ka event, Younger Dryas period), Heinrich events, and Greenland interstadial no.1-12. In addition, we reconstructed mean temperature in summer during the past 47,000 years using the transfer function (Nakanishi et al., 2010) derived from the observation that BSC is strongly correlated with mean summer temperature especially in July (Nakanishi et al., 2009). The result clarified that there was approximately 10 degC during the period, corresponding to the summer temperature difference at present over in Sapporo and in Naha.

Keywords: Lake Biwa, Biogenic silica, Temperature reconstruction