

Diatom analysis of IODP Exp.341 Site U1418 in the Gulf of Alaska

KONNO, Susumu^{1*}; SUGA, Sei-ichiro¹; OKAZAKI, Yusuke¹; ASAHI, Hirofumi²; FUKUMURA, Akemi³; MATSUZAKI, Kenji M.⁴; SUTO, Itsuki⁵

¹Graduate School of Sciences, Kyushu University, ²Korea Polar Research Institute, ³Hokkaido university, ⁴Geological Survey of Japan, AIST, ⁵Graduate School of Environmental Studies, Nagoya University

In early summer 2013 (May, 29th-July, 29th), the Integrated Ocean Drilling Program (IODP), Expedition 341, has drilled five sites along the transect from the distal end of the ice edge in southern Alaska until the proximal continental shelf, and the Gulf of Alaska (GOA) (Expedition 341 Scientists 2014; Suto et al., 2014). The geomorphology of the GOA shelf sea floor has been strongly influenced by active tectonics and glacial strata formation overprinted by glacial erosion (Carlson et al., 1982; Elmore et al., 2013). The GOA is rich in terrigenous sediments and nutrients supplied by fresh water originated by ice cover melting. Until now, studies on sediment samples in the GOA coastal areas, indicate that sedimentation rate was very fast for the last glacial period (Jaeger et al., 2008; Davies et al., 2011).

The core collected from site U1418 revealed that only 1 Ma is reached at the depth of 900 m CCSF-B after the microfossils and paleo magnetism preliminary results (Expedition 341 Scientists 2014). In this study, we propose to report the offshore data obtained during the expedition, supplemented by the data obtained onshore.

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