

Drastic changes of the diatom assemblages in the Lake Harutori-ko, Kushiro City on the relation with the great earthquake tsunamis

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Large earthquakes along the Kuril subduction zone have caused tsunami damage on the Pacific coast of eastern Hokkaido, including Kushiro area, northern Japan. Twenty-two postulated tsunami deposits (named hts1 to hts22) during the past 9500 years cored from Lake Harutori-ko, Kushiro City were already described by sedimentary methods and dated by AMS14C and tephrochronological methods. In this study, we carried out diatom assemblage analysis to study the paleoenvironments in detail. As a result of our study, we identified drastic changes of the diatom assemblages in this core. We infer that these assemblage changes were generated by repeated great earthquake tsunamis along the Kuril subduction zone.