

Characteristic of palaeoenvironment based on the diatom assembles of the core drilled from Hirota bay, Iwate, Japan

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Hirota bay located in Rikuzen takada off the coast is flowed Kesen river from southeastern . The recent 2011Tohoku tsunami strongly affected the coastal area of the Pacific coast of Tohoku. We will show about characteristic of diatom assembles of the columnar core sampled from Hirota bay.

Sakamoto et al(2014) estimated that sandy sediments from 0-71cm is 2011tsunami origin sediments (Unit1) , muddy sediments from 71-143cm is normal sediments in this bay (Unit2) on the 13HV3 core .Results of diatom analysis of the 13HV3 core are that brackish~freshwater species from 0-71cm dominante but brackish-marine species from 75-143cm dominante .

On the 13HV8 core which sampled near the Kesen river , brackish~freshwater species from 0-1cm dominate but brackish-marine species from 42-160cm dominate(Sagayama et al,2014).

Normal sediments on 13HV3 shows marine environment but normal sediments on 13HV8 shows brackish environment. It suggests that the difference of distance from river front and seawater environments (seawater/freshwater ratio) on sampling points.

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