

HQR011-03

Room: Exibition hall 7 subroom 3

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## Some characteristics of the Holocene barrier systems along the east coast of Hokkaido, Japan

Futoshi Nanayama<sup>1\*</sup>

<sup>1</sup>Geological Survey of Japan, AIST

There is some currently working barrier system in the east coast of Hokkaido. For examples, Akkeshi-ko lagoon is separated from Pacific Ocean by sand spits situated Akkeshi town. In this case, there is a tidal inlet between lagoon and sea, and also a typical tide flood delta with modern oyster reef in the center of this lagoon. Furen-ko lagoon is separated from Okhotsk Sea by the Shunkunitai barrier island in Nemuro and Hashirikotan sand spit. In this case, there are two tidal inlets between lagoon and sea, and also a typical tide flood delta in the southern part of this lagoon. However we did not understand development process of these barrier system formed during the Holocene transgression as well, because the postglacial sea-level research has stalled in this area since Maeda et al. (1992). We tried to summarize sea level change curve during the Holocene in this area. We got two knowledge as below. (1) There was no high sea-level episode about 5000-6000 year BP and present sea level has been stable since 5000 years BP in this area. (2) Now we observe transgression because this area has been seismic sinking since the 17th centuries till the next unusual earthquake event (Atwater et al., 2004).

## References

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Maeda, Y., Nakada, M., Matsumoto, E. and Matsuda, I., 1992, Crustal tilting derived from Holocene sea-level observations along the east coast of Hokkaido in Japan and upper mantle rheology. Geophysical Research Letters, 19, 857-860.

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