

## Consideration for marine alluvium in Bisan-Seto, Seto Inland Sea. –by re-examination of seismic profiles–

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Re-examination of stratigraphy of so called alluvium all over Japan has been in progress. Investigations at alluvial plains are mainly based on analysis of drilled samples. On the other hand, so called marine alluvium has not yet been re-examined up to the present. Marine alluvial stratigraphy around Bisan-Seto at the central part of Seto Inland Sea is focused this time. As a result of re-examinations based on seismic profiles acquired by Bubble Pulser (Boomer) system, a new acoustic reflector is identified in marine stratum of upper portion of alluvium. This reflector divides upper sandy layer that forms sand bank in present marine sedimentary condition and lower muddy layer, and it reflects environmental change caused by the formation of strait between eastern Bisan-Seto and western Bisan-Seto (or the formation of straits lying between islands). This is the largest environmental change of Bisan-Seto caused by sea level rise after the end of last glacial period. Bay muds are distributed beneath the reflector, and sandy sediments which deposit under the influence of tidal current are distributed above the reflector.

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