Environmental change of marine sediment at Onagawa bay before/after 3.11Tsunami

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In the Onagawa bay, quality of sea bottom environment in the gulf has changed by 3.11 earthquake disasters. All of Sanriku area such as Ohtsuchi, Toni, Okirai, Ohfunato, Hirota bay expressions has turned into environment of the sabulosity from nature of the mud sea-bottom environment. However, the Onagawa bay varied from sabulosity to nature of the mud environment unlike other areas. Therefore we carried out bottom of the sea environmental research around the Onagawa bay.
The sabulosity sediment zone presents an oval shape and is distributed over the north and south direction that located form between Izushima island and Futamatajima island in the Gulf of Onagawa heads of a bay. The sand zone becomes an infinitesimal grain concentrically toward the outside. The particle size becomes small from the heads of a bay to bay-back area. From the quality of bottom observation that continued after an earthquake disaster, the tendency that sandy sediment returned to toward heads of a bay was gradually recognized by bay-back area. Two directions are considered as the origin of the sand zone distributed near the heads of a bay. One is the direction which assumes Kinkasan island and southern Abukuma mountains the origin and takes the other in the northern Kitakami mountainous district origin, and a long-distance travel is estimated all. However, the possibility that the reef distributed near the heads of a bay supplies sabulosity sediment because of the erosion by the wave is estimated.

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