Tsunami deposits in Arao tidal flat (Ariake Bay), generated by the 1792 Shimabara Catastrophe

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Mt. Mayuyama of the Shimabara peninsula caused landslide on May 21, 1792, and it rushed into the Ariake Bay. By the tsunami produced on that occasion, no less than 15000 persons""""" human damage has arisen. This is a Tsunami misfortune with the largest damage in Japan.. This study, sediment investigation by the Geoslicer in the Arao tidal flat on the opposite shore was conducted. Four cores were extracted in the same place. As for the maximum depth, about 3.6m core was obtained. The most was a muddy tidal flat sediment. The three-set thin layer which consists of coarse grained sediments, such as sand and a piece of a shell, into the muddy tidal flat sediment was found out. From sedimentary structures, paleo- current which flowed toward land from the offing was found out in this sand layer. In a muddy tidal flat, it is hard to consider that coarse grained sediments flows in by the flow which goes to land from the offing by usual. Therefore, it is thought that this layer is an event deposits like tsunami. As a result of presuming a deposition age by C14 and Pb/Cs, it became clear that a possibility of being the tsunami sediment of Shimabara Catastrophe in 1792 is high. It is very high density of bioturbation in tidal flat, it is hard to extract an event deposits out of a tidal flat. It was actually one that the tsunami deposits was seen among four cores. This is first time Shimabara Catastrophe tsunami deposits was discovered in tidal flat. The obtained tsunami deposits was found out with the depth of about 1.3m from the surface. By having obtained the Shimabara Catastrophe tsunami deposits this time was able to show the example of a collapse of a volcanic edifice type tsunami deposits.