

## Subaqueous Tsunami Deposites from southern part of Okinawa Island of Naha city

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Since the interplate coupling is assumed to be weak along the Ryukyu Trench, the occurrence of large interplate earthquakes is assumed to be unlikely. However, locally coupled area is observed near Okinawa Island in the central Ryukyu Trench (Nakamura et al., 2010). Furthermore, the core-sampling research detected the anomalous layers which contain corals and open-sea shells in the Haneji Naikai Bay and Shoya Bay, northwestern Okinawa Island (Haraguchi et al 2012). The thicknesses of the layers are 5-10 cm. Since the coral and open-water shells live in the outside of the bay, they would have been transported by the tsunami. Distribution of tsunami sediments is important to constrain the source area of the tsunami. However, the distribution of the tsunami sediment in Okinawa Island is still unknown. Therefore, we employed coring survey to detect tsunami sediments in the southwestern Okinawa Island.

We carried out the tsunami sediment investigation in Manko of Naha city. I used Russian style Pete sampler for a sampling. Sample R1 and R2 gathered the depth of 310cm and 260cm. I divided the sample into every 5 cm. Then we measured the water content of the samples. Then the samples were sieved in a mesh-size of 63 micro. After then we calculated the mud contents. Then we measured the particle size of the samples using sieves (mesh: 2mm, 1mm, 0.5mm, 0.25mm, 0.125mm). Finally, the depth of the core was converted to age using the sedimentation ratio of 1.4 cm/yr, which was estimated from the Pb210 isotope analysis.

The core sample R1 almost consists of mud from top to bottom. From surface to the depth of 100 cm, sand content is higher. The grayish white coarse sand is included in the depth of 0-25 cm. The grayish white medium-grained sand with patch-like inclusion of fine sand is included in the 30-45 cm. The fragments of wood are concentrated in the depth of 60-100 cm, which correspond to the age of WWII and postwar population growth, reclamation. We assumed that the concentration of fragment of wood and sand would have been caused by these events. The concentration of the sand could not be found in this core. This suggests that remarkable tsunami events did not arrived in the lake-Manko area for about 300 years.

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