Detailed analysis of tsunami deposits made by large-scale laboratory experiments

*Takumi Yoshii¹, Shiro Tanaka¹, Masafumi Matsuyama¹

1. Central Research Institute of Electric Power Industry

The characteristics of tsunami deposits can reflect the hydraulic parameters of tsunami which made the tsunami deposits. However, considerable variation of tsunami deposits in the field makes it difficult to estimate the scale of tsunami from the resulting deposits. Thus, the authors have conducted the large-scale laboratory experiment on tsunami deposits and succeeded in reproducing the deposits (Yoshii et al., 2017, 2018). In these previous studies, the hydrodynamic conditions and the resulting deposits were investigated by using bulk samples.

In this presentation, we will present detailed analysis of tsunami deposits made by these flume experiments and discuss the reproducibility of the deposits in the flume. Okazaki et al.,(2017a,b) have already indicated that the se flume tsunami deposits has the complex structures and Okazaki et al.,(2018) have discussed the similarity to the tsunami deposits in the field. Based on these results, we analyzed the structure of these flume deposits by using core samples and peer samples. The result will provide useful information for future field investigation and interpretation of tsunami deposits.

(Reference)

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