

Correlations of tsunami deposits based on high-dense array drilling survey at Koyadori, Iwate Prefecture

ISHIMURA, Daisuke^{1*} ; ICHIHARA, Toshihiko² ; SAKATA, Tomohiro³ ; OHATA, Masahiko³ ; TAKADA, Yuya³

¹IRIDeS, Tohoku Univ., ²Fukken Co., Ltd., ³Dept. Earth Science, Tohoku Univ.

Tsunami deposits study greatly increased after The 2011 off the Pacific coast of Tohoku earthquake tsunami. However, tsunami deposits are covered and sometimes disturbed, and thus we generally conducted coring survey and correlate tsunami deposits between each core based on lithology and age. Especially, the correlation of tsunami deposits is very significant for assessment of tsunami and earthquake risk. In this study, we carried out high-density array drilling survey to confirm continuity of tsunami deposits. Additionally, we tried to compare the correlation of each tsunami deposits when we change the interval of coring sites. Consequently, we correlated each tsunami deposits confidently in 2.5 m, 5 m, and 10 m interval. In 20 m and 50 m interval, we can correlate some tsunami deposits, however accuracy of the correlation is much lower than that of 2.5 m and 5 m interval. Although this study is one case, we need to confirm the accuracy of correlation in the future.

Keywords: tsunami deposits, high-dense array drilling survey, Sanriku Coast, correlation of tsunami deposits