

Sedimentological features of tsunami deposit caused by the 2011 Tohoku-oki earthquake tsunami

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In some areas, the inundation distances of the 2011 Tohoku-oki earthquake tsunami was comparable to that of the 869 Jogan tsunami estimated by geological investigations of tsunami deposits. This fact revealed the potential of research of tsunami deposits to speculate the scales of future tsunamis, resulting in strong social demand to detect ancient tsunamis, especially giant tsunamis, using geological studies. Investigation of present tsunami deposits is crucial to understanding sedimentological features of tsunami deposits because the present tsunami deposits can be identified with high reliability and the investigation of the surrounding circumstances is also feasible. In this study, we collected tsunami deposits caused by the 2011 Tohoku-oki earthquake tsunami from 19 areas with different topography. The obtained cores were observed by the unaided eye and by using CT images. In this presentation, we will discuss sedimentological features of these tsunami deposits and relationship with the surrounding circumstances.

Keywords: Tsunami deposit, The 2011 Tohoku-oki earthquake, Tsunami