

Evaluation of tsunami inundation limits from distribution of tsunami event deposits along the Kuril subduction zone, Japan

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We found tsunami event deposits in the coastal marshlands along the Kuril subduction zone, Hokkaido. We evaluate the inundation limits of several earthquake tsunamis from their distribution pattern. Ten event deposits (Ts1 to Ts10) were found in Kiritappu, and we examine the correlation of event deposits that distribute the coastal area along the Kuril subduction zone. Ts3 is distributed in all investigated areas, and its estimated inundation distance is longer than that of Ts2. The estimated inundation distance of Ts4 tends to be longer than that of Ts3 in the eastern area. Different tsunami source may reflect such spatial difference of tsunami deposit distribution. Thus, the earthquake source or size can be estimated from the distribution range of event deposits.