Oral | Symbol M (Multidisciplinary and Interdisciplinary) | M-IS Intersection

## [M-IS23\_2PM1]tsunami deposit

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Fri. May 2, 2014 2:15 PM - 4:00 PM 415 (4F)

After the 2011 off the Pacific coast of Tohoku Earthquake and tsunami, the tsunami deposit is reconsidered as very important and useful tool for future tsunami risk assessment. However, identification criteria of the tsunami deposit are not yet established. Moreover, it is still uncertain how to use the tsunami deposit in the risk assessment. In this session, we discuss the deposits that were formed by the tsunamis generated by earthquake and other mechanisms. The talks on the risk assessment using the tsunami deposits are also welcome.

## 3:45 PM - 4:00 PM

## [MIS23-P11\_PG]Tsunami deposits in eastern coast area of Ishigaki Island, Japan.

## 3-min talk in an oral session

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We found two tsunami deposits in eastern coast area of Ishigaki Island, Japan. The tsunami deposits contain many pebble-sized bioclasts such as coral fragments and mollusks, and clay rip-up clasts comprising material from the underlying soil. These deposits have erosive basement and fine upward. These layers thin abruptly at the landward margins, and fine inland. The altitude of the landward end of the lower and upper tsunami deposits attain up to 6 and 8 m, respectively. We referred to as deposits T-II and T-I in order of ascending stratigraphic position. Radiocarbon ages of excellent preserved and articulated marine bivalves mean that T-I and T-II were caused by the AD 1771 Meiwa tsunami and by tsunami at 740-500 cal. yrs BP (AD 1210-1450), respectively. It is noteworthy that abundant fragments of coral and molluscs remains are found from the debris flow deposit below T-II. Radiocarbon ages suggest these fragments were transported up to 8 m elevation by tsunami between 2490-2240 and 930-620 cal. yrs BP.