

Paleo tsunami events determination using radiogenic nuclides

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Recent advancement of mass spectrometry enables us to determine timing of past events using trace amounts of geological samples. Accelerator Mass Spectrometry (AMS) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) are amongst them and long-lived nuclides can be measured precisely. We have been conducted paleo Tsunami studies applying ¹⁴C and U-series dating employing these techniques. Together with geophysical modeling as well as paleo climate proxy data, paleo Tsunami events are clearly reconstructed from these measurements. Also newly developed AMS, single stage AMS, that is dedicated for ¹⁴C measurements can produce large number of data to constrain the timing in different manner. In this presentation, several examples of these studies will be introduced along with perspectives of age determinations of paleo Tsunami events.

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