

16.06.2014, 13:30

Modern tsunami deposits - from the equator to the North Pole

Witold Szczuciński^{1,2}

¹⁾ Institute of Geology, Adam Mickiewicz University in Poznan, Poland

²⁾ Institute of Seismology and Volcanology, Hokkaido University, Japan

Identification of **tsunami deposits** is the key to improve tsunami hazard assessment. However, recent studies of modern tsunami deposits using a large set of characteristics ("proxies") have revealed that the deposit's identification is far from being an easy task. This talk reviews some outcomes from studies of **modern and paleotsunami deposits in Thailand, Japan, Poland, Scotland and Greenland**, and provides modern-case based **limitations of tsunami deposits identification**. The latter include aspects of sediment sources, depositional environments and post-depositional changes in variable climatic and topographic conditions. It is shown that even large tsunamis may leave onshore deposits without marine indicators due to sediment source being on land or due to post-depositional changes. The depositional processes in many cases may be the same as during storms or floods. Finally the sedimentary record of tsunamis in various settings may be very variable, in particular in marine environment. The major problems, as well as open research questions are underlined.

