

## ***Interactive comment on “Internal structure of event layers preserved on the Andaman Sea continental shelf, Thailand: tsunami vs. storm and flash flood deposits” by D. Sakuna-Schwartz et al.***

**H. Sterr (Editor)**

sterr@geographie.uni-kiel.de

Received and published: 8 February 2015

in the seismically active marine Environments worldwide tsunamis must have occurred repeatedly in recent geologic time. If we find clues to safely identify Tsunami deposits and to differentiate them from deposits of other extreme Events such as storm surges and Flash floods, we have a tool for detecting (paleo-)Tsunami records in given coastal regions, thus getting clues about possible Tsunami risks in the future. The field study of Sakuna-Schwartz et al. provides such a tool. The paper reveals a Sound methodology for the Analysis of Tsunami deposits: by coring the Sediment layers in the nearshore seafloor environment off the coast of Southern Thailand, analyzing the Sediment Matrix

C3339

within the cores and by dating the distinguished layers with  $^{210}\text{Pb}$  it appears feasible to detect Facies created by extreme Events; and this method also allows to compare the sedimentary signatures of tsunamis versus storm or flashflood events at the same oshore location. In particular rip-up clasts (both mud and sand clasts) proved as reliable indicator for diffentiating Tsunami backwash deposits. Thus, the results provided by this paper suggest further application of the method tested here in the tracking of (paleo-)Tsunamis in other coastal regions.

---

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 7225, 2014.

C3340