Geophysical Research Abstracts, Vol. 9, 01241, 2007 SRef-ID: 1607-7962/gra/EGU2007-A-01241 © European Geosciences Union 2007



## **Tsunamis in the Eastern Mediterranean: coasts of Israel and neighbouring states**

## E. Pelinovsky

Institute of Applied Physics, Nizhny Novgorod, Russia

The historical information of tsunami manifestation for the Mediterranean coast of Israel is discussed and analyzed. It is emphasized that tsunamis on the Israeli coasts have been observed several times in history, and its number is about 20. It means that tsunami risk for Israel can not be ignored and should be analyzed in details. All historical tsunamis in the list occurred in the "pre-instrumental" era, and that is why the information of tsunami manifestation in Israel is rather poor: neither runup heights nor other quantitative characteristics of tsunami waves are given. It is found that Van Dorn (1987) reported the existence of the instrumental record of the 1956 tsunami in Yaffa (Israel), but this tide-gauge record was never published. It means that the tsunami risk for Israel can not be evaluated based on historical information only. The approach to evaluate the tsunami potential of the coastal locations from distant tsunamis is described. It is based on the mathematical modelling of the historical and hypothetic events in the framework of the shallow-water theory. One of examples of modelling of tsunami propagation in the Eastern Mediterranean from the Hellenic Arc to the coasts of the Eastern Mediterranean from the Hellenic Arc to the coasts