



Impact of the AD365 Tsunami on the City of Alexandria

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The AD 365 tsunami is one of the most devastating events ever impacted the human societies in the Eastern Mediterranean (Guidoboni, et al, 1994). We analyze the propagation of the AD 365 tsunami along the Egyptian coast with a special focus on evaluating the tsunami amplification and the resulting flooding of the city of Alexandria. The GEBCO 30" bathymetric data were completed by other data from different marine charts and plans to build up a consistent topography dataset around Alexandria. The modelled tsunami is initiated by a seismic fault in the Hellenic Arc with the parameters varied around the values determined by Stiros, S.C. and A. Drakos (2006) and by B. Shaw et al. (2008). The TELEMAC software resolving the hydrodynamic equations on a fine resolution finite-element grid is used to model both the propagation of tsunami from the fault to the coast and the flooding wave. We compare the computed tsunami heights, polarity and the extension of flooding with the information deduced from historical documents and geological data.