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Tsunami Impact in Morocco due to Most Credible Tsunami Scenarios in the Gulf of Cadiz.

R OMIRA (1,2), M A BAPTISTA (1,3), J M MIRANDA (1), and E A TOTO (2)

(1) FFCUL,CGUL,IDL, LISBOA, Portugal (mabaptista@dec.isel.ipl.pt), (2) University Ibn Tofail, Morocco, (3) ISEL, IPL, Portugal

In the Gulf of Cadiz, the tsunami risk should be considered major due to the peculiar geological context close to the Nubia-Eurasia plate boundary and also to the high vulnerability of the coastlines in the region. The extensive occupation of coastal areas in the surrounding countries – Portugal, Spain and Morocco, the enormous influxes of tourists during high season and the large economic value of harbors and other coastal facilities increase considerably the vulnerability to tsunami impact.

In order to establish the Most Credible Tsunami Scenarios we used the earthquake scenarios in the Gulf of Cadiz area. Each scenario has an associated typical fault/or faults and a set of fault parameters that are used as input to compute the sea bottom deformation using Okada's equations. Tsunami propagation uses COMCOT-LX, modified version of the COMCOT Cornnell University code.

Maximum wave height (MWH) and tsunami energy direction are computed, for each tsunamigenic scenario for the north Atlantic coast of Morocco. Finally we selected the harbor of Casablanca for the production of inundation maps for Casablanca This research was funded by NEAREST and TRANSFER, 6FP-European Union.