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Tsunami risk estimation for the French coast of the Mediterranean

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The study of tsunami risk for the French coast of the Mediterranean is a difficult problem. Indeed, tsunamis are rather rare events in France and the lack of data for past tsunamis makes a direct estimation of tsunami risk difficult.

Numerical simulation of the hypothetic tsunamis in the Ligurian Sea, whose epicenters are located at the places of real earthquakes (1818, 1831, 1854 and 1887, 1703, 1905, 1954) had been done. Also Algerian tsunami of 2003 had been simulated. Then potential distant tsunamis, when seismic sources are placed near Algerian coast, had been modelled. The numerical code NAMI-DANCE had been used, a tsunami simulation and results visualization software based on TUNAMI-N2 model.

The results of this work had been compared with results of other researchers. Also the estimation of the tsunami risk from the local and distant (Algerian) tsunamis had been done and places with low and high tsunami risk had been chosen. For the estimation of the tsunami risk the method, based on the wide application of numerical simulations of real events and of possible tsunamis, had been use.