



Tsunami forecast for Bulgarian coasts of the Black Sea

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Tsunami hazard in the Black Sea is considered low to moderate but not negligible. At present, New European Tsunami Catalogue counts 29 historical tsunami events in the Black Sea, 22 of which are considered as reliable. Four of them affected Bulgarian coast including a strong earthquakes event 544/545 of offshore Varna.

Here we discuss a forecast of possible tsunami wave heights at Bulgarian coasts of the Black Sea. In order to do that, prognostic numerical simulations of 55 tsunami events in the Baltic Sea has been performed. All tsunami sources are uniformly distributed in the Black Sea basin. The results of prognostic numerical simulations are compared with the results of numerical modelling of two instrumentally measured historical events (1939 and 1966) and with the data of instrumental measurements. On this basis a preliminary forecast of tsunami wave heights along the Bulgarian coast of the Black Sea is given.