



TSUNET: a first attempt of tsunami monitoring in Italy

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After the Indian-Ocean tsunami there is a widespread recognition that tsunamis are not only a lethal patrimony of the Pacific Ocean and several activities have been set up in order to protect the coastal countries in all the world basins. The Mediterranean sea has a long history of tsunami attacks, as is shown by the European tsunami databases; and Italy, together with Greece and Turkey, is in the number of the countries that were most affected by tsunami waves. According to the most recent Italian tsunami catalogue, the region with the highest tsunami potential is the area around the Messina Straits embracing southern Calabria, and northern and eastern Sicily. In spite of the past and easily foreseeable future occurrence of tsunamis, no network is currently in place to monitor such events.

TSUNET is a project, based on national funds, that is run by the INGV, Rome, and by the University of Bologna in cooperation with the Civil Protection Department of the Sicily Region, with the main purpose to install a monitoring network for tsunamis with early detection capability. The final goal is to cover all the major tsunamigenic areas of Italy. Due to the present fund limitations, however, priority is given to the aforementioned area around the Messina Straits. It is stressed, that, since all the known tsunami sources are here in the coastal zone, tsunamis are expected to attack the nearest coastal segments with no delay, which makes early detection an absolute need and a very crucial issue for the design and the implementation of the system. Since very often tsunamis are generated near-coast not only in Italy, it is believed that the experience that will be gained in the implementation of TSUNET could be useful and exploited in other regions of the world.