



A revision of the 1783 Calabrian (southern Italy) tsunamis

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Southern Italy is one of the most tsunamigenic areas in the Mediterranean basin, having experienced during centuries a large number of tsunamis, some of which very destructive. In particular, the Calabrian and Sicily coasts facing the Messina Straits are the most exposed to tsunami attack, being affected by the strongest Italian tsunamis. In 1783 Calabria (southern Italy) was shaken by the most violent and persistent seismic crisis occurred in the last two thousands years. Five very strong earthquakes, followed by tsunamis, occurred in a short interval of time (February-March), causing destruction and a lot of victims in a vast region embracing the whole southern Calabria and the Messina area, Sicily. In this study we examined the five events by taking into account all available historical sources. In particular, the aim is to reconstruct what happened during the February 5th and 6th tsunamis, that were the most destructive. The February 5th event was at first underestimated and considered as a minor event, causing no serious damage. On the contrary, the analysis of the sources revealed that in some localities the tsunami effects were quite strong. The February 6th tsunami, the strongest one, was probably due to a huge earthquake-induced rockfall: a portion of the Monte Paci (south-western side of the Scilla beach) collapsed into the sea generating big waves. Many villages were severely affected by the tsunami and more than 1500 people died at Scilla. For this event a tentative reconstruction of the inundated area and the runup values distribution is presented.