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Analysis of seismicity in the messina strait (southern Italy)

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The southern Tyrrhenian basin is one of the most interesting regions of the Mediterranean Sea for its geodynamical activity. The presence of a Benioff zone led many investigators to hypothesize a variety of models to explain the tectonics of the region. The short term aim of this work is a scenic creation which can show the geophysical parameters of seismic events related to the Messina strait zone. Inside the seismogenetic zone of interest it is possible to value the seismic risk according to a model of seismic zonation , suggested by Scandone et al. (1992). On the basis of this model, used for the NT4.1 catalogue of the "Istituto Nazionale di Geofisica e Vulcanologia", the Italian territory was divided into 80 zones. Its main goal is to evaluate the seismic risk. In this study the necessary information was integrated using other databases, to carry out an analysis of the fundamental seismic parameters, for example: the b-value, the seismic energy, etc. evaluating their temporal fluctuations.

This analysis has become part of an larger project. The long term aim is the analysis and future visualisation and qualification of seismic events in the Italian area.