



Probabilistic Seismic Risk Model for Western Balkans

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A probabilistic seismic risk model for insurance and reinsurance purposes is presented for an area of Western Balkans, covering former Yugoslavia and Albania. This territory experienced many severe earthquakes during past centuries producing significant damage to many population centres in the region. The highest hazard is related to external Dinarides, namely to the collision zone of the Adriatic plate.

The model is based on a unified catalogue for the region and a seismic source model consisting of more than 30 zones covering all the three main structural units - Southern Alps, Dinarides and the south-western margin of the Pannonian Basin. A probabilistic methodology using Monte Carlo simulation was applied to generate the hazard component of the model. Unique set of damage functions based on both loss experience and engineering assessments is used to convert the modelled ground motion severity into the monetary loss.