

Towards a new seismic hazard map of Austria

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For hazard assessments, ground motion measurements from felt earthquakes in Austria were collected and various statistical parameters were derived. The local earthquake catalogue has been verified for the completeness and was compared with those of neighbouring countries. Source mechanisms were determined and collected and local site effects were investigated. GMPEs for intensity and ground motion were developed and selected. The results lead to a new ShakeMap algorithm which is implemented into the real-time system of the local Seismological Service of Austria.

Now we are looking for the next steps towards a new seismic hazard map of Austria. We show first results derived from our input data with the OpenQuake-engine from GEM (Global Earthquake Model). We are discussing the challenges we are facing during the development of a hazard map in a mountainous region and the definition of local fault and area sources.