The Seismic Risk Explorer – A Scenario Tool for Assessing Seismic Risk

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The Seismic Risk Explorer, an extension for ArcGIS Desktop developed by cedim AG, is a tool for computing the seismic risk, i.e. damage on residential buildings and thereby caused monetary losses for earthquake scenarios. It is based on the research results of the CEDIM (Center for Disaster Management and Risk Reduction Technology) research center, located at the Karlsruhe Institute of Technology (KIT) and the GeoForschungsZentrum (GFZ) in Potsdam.

With this software tool seismic scenarios can be simulated for a given magnitude, depths and location. The seismic intensity, the resulting mean damage ratio for residential buildings and the seismic risk, expressed as the monetary loss caused by an earthquake can be computed downscaled to communities, postcode areas or even single buildings. Interested end-users are especially insurance companies, but also public authorities which may use the tool for risk management issues.