

A Conceptual Framework for Spatial and Temporal Visualisations of Historical and Recent Earthquake Data

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In depth knowledge of historical earthquakes has become more important in recent years. Complete and accurate information is necessary in order to carry out coherent seismic hazard assessments of specific areas. In particular, since the introduction of Eurocode-8, the building code for the construction of earthquake-resistant buildings in Europe, the importance of new assessments of historical earthquakes according to the state of the art has increased, as the assessment period for the determination of seismic hazard was extended from 100 to more than 450 years. Recently the new earthquake catalogue for Lower Austria for the years 1000-2009 AD was published and the strongest earthquakes in Tyrol were investigated.

To make these data even more useful it is planned to realise a comprehensive pilot study for a spatial and temporal visualisation of these earthquake data. It will on the one hand contribute to the understanding of a natural phenomenon/catastrophe in the general public and on the other hand it will be at the same time a tool for architects, civil engineers, geologists, seismologists, communities, governments, civil protection, etc. The conceptual framework targeting different dissemination strategies will be carried out in this pilot study.