

The GEM mosaic of hazard models: a view on the national models for Japan, New Zealand and Taiwan

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The hazard component of GEM will create by the end of 2018 a mosaic of hazard models with global coverage. The hazard models included in this collection will have various origins such as national hazard models, regional models created by large pools of scientists and models produced by small groups of scientists. This variability will reflect a wide range of approaches and methods for modeling seismicity and hazard within a probabilistic framework.

Exploring the properties of an earthquake source model is a first step for a comprehensive analysis of the characteristics of PSHA input model. GEM is currently developing a set of tools for appraising earthquake source models and comparing them. These tools can be used during the model-building phase as well as a posteriori for analyzing existing models. Moreover

In this presentation we describe and discuss the main properties of three hazard earthquake source models, which will be part of the GEM mosaic:

- The 2010 National Seismic Hazard Model for New Zealand (Stirling et al., 2012);
- The Taiwan Earthquake Model (TEM) hazard model (Wang et al., 2016);
- The 2014 Japanese earthquake-hazard model (Fujiwara et al., 2009)

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