Modelling Seismic Hazard in New Zealand using Seismic, Geological and Geodetic Data

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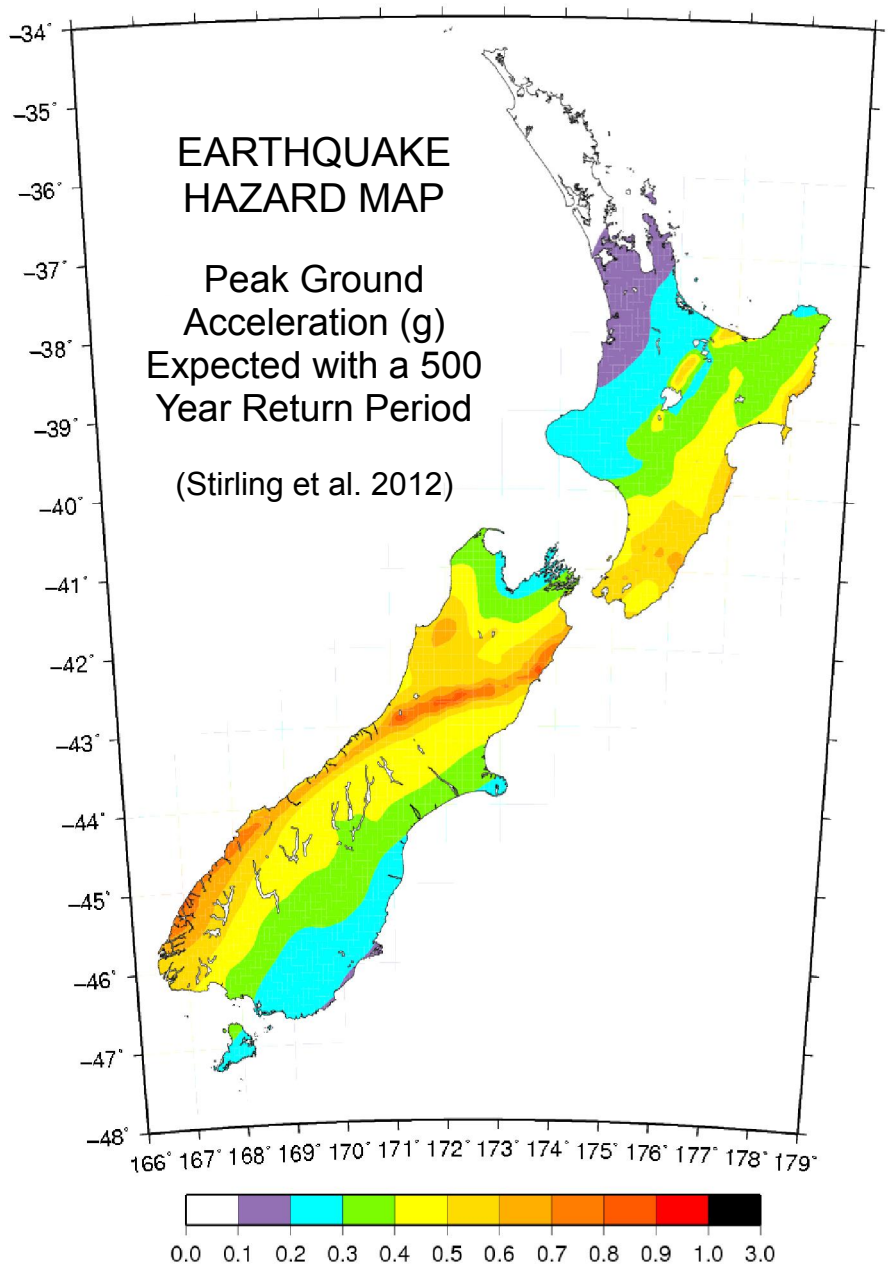

Abstract: Seismic hazard modelling uses information on the location, magnitude, frequency and predicted ground motions of past earthquakes to estimate future hazard. By far the biggest effort in developing a seismic hazard model is the construction of earthquake source models. Historical seismicity data provide constraints on the location and frequency of small to moderate earthquakes, while active fault datasets provide information on large-to-great prehistoric earthquakes. Increasingly, geodetic data is being used as a third input to seismic hazard models. Though being representative of short duration, a geodetic model is valuable for its spatial continuity in comparison to the other datasets. In my presentation I will provide an overview of seismic hazard modelling in New Zealand and elsewhere, and include examples where geodetic data have been an essential input.

School of Surveying
Te Kura Kairūri

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L1 Lecture Theatre
School of Surveying, 310 Castle Street

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