



## VALIDATION OF THE PROBABILISTIC SEISMIC HAZARD MAPS FOR JAPAN

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**ABSTRACT:** This paper discusses the validation of the probabilistic seismic hazard maps for Japan by comparing with the experienced seismic hazard maps developed from the earthquake catalog during the corresponding time period. Probabilistic and experienced seismic hazard maps for a time period of 30 years starting from 1890, 1920, 1950 and 1980 are developed. The probabilistic maps were consistent with the experienced maps in terms of the expected probabilities of exceeding various seismic intensities. Three regions due to the different characteristics of seismic hazard were also identified and mapped out. Appropriate risk management policies should be adopted according to the regional characteristics of seismic hazard.

**Key Words:** Probabilistic seismic hazard map, Experienced seismic hazard map,  
Validation, Regional characteristics of seismic hazard