



STUDY ON THE PRIORITY OF MEASURING AGAINST SCENARIO EARTHQUAKES BASED ON SEISMIC RISK ESTIMATION

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ABSTRACT: Local governments must prepare the regional mitigation plans on the basis of seismic hazard and risk estimation. The seismic risk estimation of 36 patterns of assumable scenario earthquakes with a variety of source parameters was done for Kitami City, Hokkaido Prefecture that is our research target. Taking account of each priority in the bureaus related to disaster prevention measures of the government, we proposed a new approach for choosing the more prior earthquakes among the assumable scenario earthquakes. By applying the Analytic Hierarchy Process (abbreviated to AHP) to the damage data, which we simulated under the 36 patterns of scenario earthquakes, multiplying by the weighted coefficients on the priority of each bureau; we selected the most important earthquakes of Kitami hazardous areas.

Key Words: Seismic Risk Estimation, Near Field Earthquake, Fault Parameter, Consensus Model, AHP