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DEVELOPMENT OF EARTHQUAKE DAMAGE ESTIMATION SYSTEM CONSIDERING BUILDING TYPE USING SEISMIC INTENSITY MEASURE CORRELATED WITH STRUCTURAL DAMAGE

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ABSTRACT: We developed earthquake damage estimation system considering building type using seismic intensity measure which had correlation with structural damage in order to estimate building and human damage more accurately. We estimated earthquake damage of past large earthquakes in Japan by the developed system. Comparing the results of earthquake damage estimation and actual damage data, we confirmed that proposed system is effective to estimate earthquake damage. We also confirmed that proposal system can estimate earthquake damage more accurately than earthquake damage estimation system using JMA Seismic Intensity.

Key Words: Earthquake Damage Estimation, Population of Buildings, Human Damage, Building Cluster, Building Damage