



## Development of Classification and Story Building Data for Accurate Earthquake Damage Estimation

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**ABSTRACT:** We investigated the method of developing classification and story building data from census population database in order to estimate earthquake damage more accurately especially in the urban area presuming that there are correlation between numbers of non-wooden or high-rise buildings and the population. We formulated equations of estimating numbers of wooden houses, low-to-mid-rise(1-9 story) and high-rise(over 10 story) non-wooden buildings in the 1km mesh from night and daytime population database based on the building data we investigated and collected in the selected 20 meshes in Kanto area. We could accurately estimate the numbers of three classified buildings by the formulated equations, but in some special cases, such as the apartment block mesh, the estimated values are quite different from actual values.

*Key Words: Earthquake Damage estimation, Building Cluster, Wooden house, Non-wooden building, population database*