

A Hazard Assessment of Active Faults in Japan Based on Statistical Simulations - Part 2 Hazard to Human Life

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The aim of the present paper is to assess earthquake hazard to human life from major active fault systems distributed across the Japanese archipelago. The following points become clear from the present study:

- 1) The total expected superficial dimension of the "potential disaster area" is estimated at about 2,500-3,500 (km²).
- 2) The total expected population at risk in the "potential disaster area" is estimated at about 800,000-1,800,000.
- 3) The coefficient of variation of the total expected population at risk in the "potential disaster area" is comparatively high.
- 4) Prioritising trenching investigations around densely populated areas would be effective in mitigating the effect of earthquake disasters.

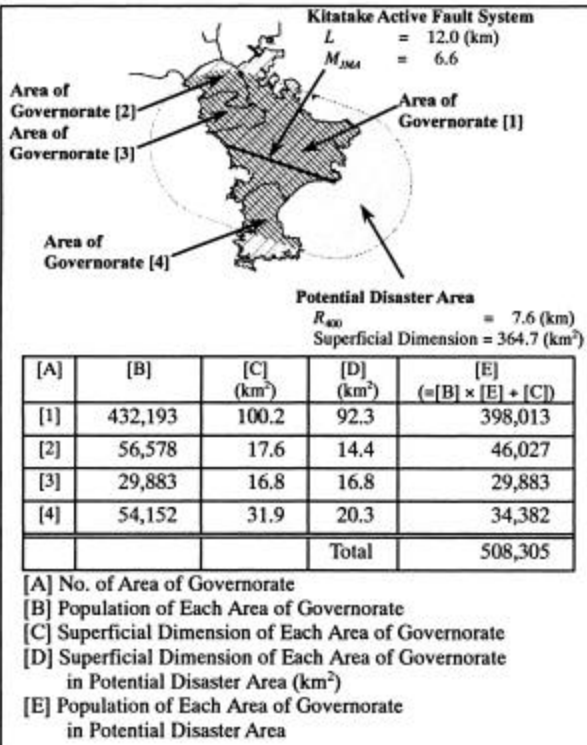


Figure 1. Estimating a Population in a Potential Disaster Area

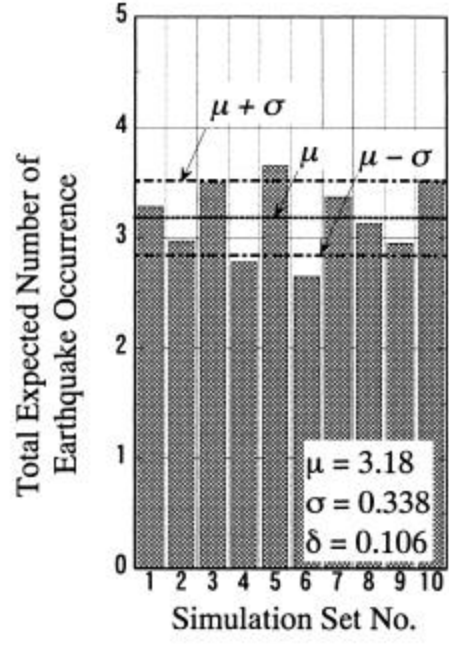


Figure 2. Total Expected Number of Earthquake Occurrences in 30 years

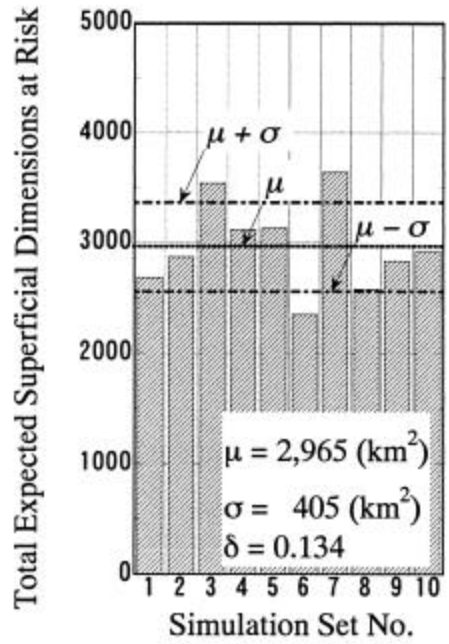


Figure 3. Total Expected Disaster Superficial Dimensions in Potential Disaster Areas

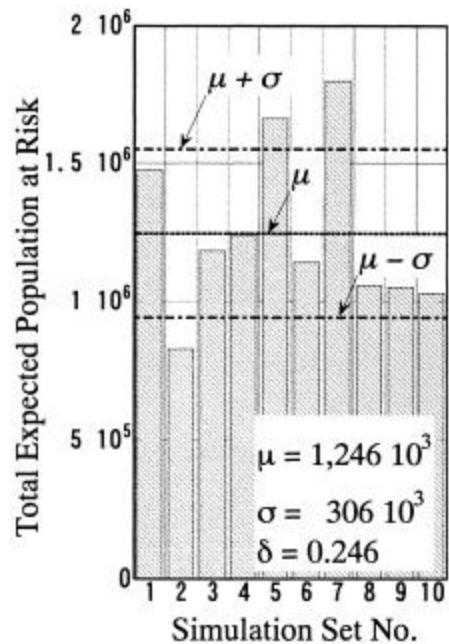


Figure 4. Total Expected Disaster Population in Potential Disaster Areas