

Renewal Models for Recurrent Earthquakes and Errors of Their Parameters(2)

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In order to estimate earthquake probabilities, renewal point process models in statistics are used for characteristic earthquake sequences. The estimated probability is approximated by a normal distribution with a certain variance, which is estimated from the likelihood function of the respective model. This approximation is not valid for those probabilities that are near the ends of variable range (0 or 1). Logarithmic transformation for the variable results in getting a probability distribution more appropriate than a simple normal distribution.