Probability prediction of major aftershocks by using the negative binomial model

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   Probability prediction of major aftershocks was made for large inland events in Japan by using the modified Omori formula and the negative binomial model in which A-value of the Gutenberg-Richter formula is distributed following GAMMA - distribution of f degree.   The A-value under the condition of k aftershocks of Ma>Mo-d occurring follows GAMMA - distribution of f+k degree.   Then we can easily calculate the magnitude distribution of the largest aftershock in future period. Probability prediction at 24 hour later a mainshock agrees well with its largest aftershock as a whole.   A simulation for Kobe earthquake of 1995 shows that we tend to predict a little larger events than real ones.