

An Extension of the Damage Model

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Abstract: The damage model was introduced by *Rao* [1963] and is based on the assumption that an original observation is subjected to a destructive process. *Rao*, examined in detail the case where the distribution of the original observation and the destructive process were Poisson and Binomial respectively with fixed parameters.

In this paper we extend the damage model to the case where either the parameter of the Poisson or the parameter of the Binomial is a random variable with a given distribution function (d.f.).