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USING THE STANDARD BAYES METHOD AND MODIFIED MOMENT METHOD TO ESTIMATE THE PARAMETERS OF PARETO DISTRIBUTION WITH PRACTICAL APPLICATION

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ABSTRACT

The aim of this paper is to employ some estimation methods, namely, modified moment method and standard Bayes method to estimate the two parameters of the first kind Pareto distribution and comparing the performance of these two methods by using the Mont Carlo simulation technique. Moreover, some Applications related to Pareto distribution, in particular, human population statistics and tropical cyclones in Japan are given. The Chi Square goodness of fit test is presented for each case.

KEYWORDS: Pareto Distribution, Modified Moment Method, Standard Bayes Method, Goodness of Fit Test