

Shannon Entropy for Exponentiated Exponential Distributed Data Under Progressively Type-I Interval Censoring Scheme

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ABSTRACT

The aim of this paper is to obtain the Shannon entropy, a measure of uncertainty, is considered for progressively type-I (PTI) interval censored samples. The derived expression for entropy is much complicated. So we provide a simple methodology for numerical computation utilising a Monte Carlo technique and shows that the exact entropy and approximate entropy are equivalent. Here we discussed entropy measure for exponentiated exponential distribution. Further, a comparison study of the entropy for different censoring plan is presented.

Keywords: Simulation, Shannon Entropy, Progressive type-I Interval censoring, Monte Carlo method.