

Confidence Intervals for Quantiles in the Two-Parameter Exponential Distributions with Type II Censored Data

Authors : Ayman Baklizi

Abstract : Based on type II censored data, we consider interval estimation of the quantiles of the two-parameter exponential distribution and the difference between the quantiles of two independent two-parameter exponential distributions. We derive asymptotic intervals, Bayesian, as well as intervals based on the generalized pivot variable. We also include some bootstrap intervals in our comparisons. The performance of these intervals is investigated in terms of their coverage probabilities and expected lengths.

Keywords : asymptotic intervals, Bayes intervals, bootstrap, generalized pivot variables, two-parameter exponential distribution, quantiles

Conference Title : ICCSS 2015 : International Conference on Computational and Statistical Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : May 21-22, 2015