البحث الثالث (مشترك)

Title: Bayesian Inference for The Left Truncated ExponentialDistribution based on Ordered Pooled Sample ofRecords

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Abstract. In this paper, the maximum likelihood and Bayesian estimations are developed based on an ordered pooled sample from two independent samples of record values from the left truncated exponential distribution. The Bayesian estimation for the unknownparameters is discussed using different loss functions. Also, the maximum likelihood and the Bayesian estimators of the correspondingreliability and p-th quantile functions are calculated. The problem of predicting the record values from a future sample from the samplepopulation is also discussed from a Bayesian viewpoint. A Monte Carlo simulation study is conducted to compare the maximumlikelihood estimator with the Bayesian

estimators. Finally, an illustrative example is presented to demonstrate the different inferencemethods discussed here.