

البحث الثامن (مشترك)

Title: Bayesian prediction of order statistics with fixed and random sample sizes based on k-record values from Pareto distribution

Author: A. R. Shafay, N. Balakrishnan and Jafar Ahmadi

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Abstract. In this paper, the two-parameter Pareto distribution is considered and the problem of prediction of order statistics from a future sample and that of its geometric mean are discussed. The Bayesian approach is applied to construct predictors based on observed k-record values for the cases when the future sample size is fixed and when it is random. Several Bayesian prediction intervals are derived. Finally, the results of a simulation study and a numerical example are presented for illustrating all the inferential procedures developed here.

