BAYESIAN TESTING FOR SYMMETRY IN FREUND'S MODEL UNDER TYPE I CENSORSHIP

Seungbae Choi and Jangsik Cho

Abstract

In this paper, we consider two components lifetime model which have Freund's bivariate exponential model. Here, we assume that experiments are run over a fixed time period in such a way that an individual's lifetime will be known exactly only if it is less than some predetermined value. We propose a Bayesian testing procedure for symmetry based on fractional Bayes factor (FBF). Also, we compare proposed testing procedure with classical method based on maximum likelihood estimator (MLE), and we give a numerical result to illustrate our results.