

Point Estimation for the Type II Generalized Logistic Distribution Based on Progressively Censored Data

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Abstract : Skewed distributions are important models that are frequently used in applications. Generalized distributions form a class of skewed distributions and gain widespread use in applications because of their flexibility in data analysis. More specifically, the Generalized Logistic Distribution with its different types has received considerable attention recently. In this study, based on progressively type-II censored data, we will consider point estimation in type II Generalized Logistic Distribution (Type II GLD). We will develop several estimators for its unknown parameters, including maximum likelihood estimators (MLE), Bayes estimators and linear estimators (BLUE). The estimators will be compared using simulation based on the criteria of bias and Mean square error (MSE). An illustrative example of a real data set will be given.

Keywords : point estimation, type II generalized logistic distribution, progressive censoring, maximum likelihood estimation

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