



ORIGINAL ARTICLE

A NEW ASYMMETRIC LOSS FUNCTION FOR ESTIMATION OF ANY PARAMETER

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Abstract: A new asymmetric loss function which is suitable for estimation of location as well as scale and other parameters has been introduced. To check the superiority of the proposed loss function over some existing and exploited loss functions such as squared error loss function (SELF), general entropy loss function (GELF), LINEX loss function and Logarithmic-SELF (LSELF), we have calculated the Bayes estimators of the parameter θ of exponential distribution under SELF, GELF, LINEX loss function, Logarithmic- SELF (LSELF) and the proposed exponential squared error loss function (ESELF) for complete sample from the exponential distribution. A data set has been considered to show its application to the real problems. The simulation study is carried out to compare the performance of Bayes estimators in terms of their posterior risks.

Key words: Exponential distribution, Bayes estimator, Loss function, Simulation study, Posterior risks.

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