MAXIMUM LIKELIHOOD ESTIMATION OF PARAMETERS OF THE TRUNCATED CAUCHY DISTRIBUTION

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ABSTRACT

Truncated Cauchy distribution with four unknown parameters is considered and derivation and existence of the maximum likelihood estimates is investigated here. We provide a sufficient condition for the roots for the scale parameter to be finite, and also show that the condition is necessary for sufficiently large samples. Note that all the moments of the truncated Cauchy distribution exist which makes it much more attractive as a model when compared to the regular Cauchy.