SEQUENTIAL ESTIMATION OF A PARAMETER OF AN EXPONENTIAL DISTRIBUTION

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Abstract. We consider the problem of minimum risk point estimation for the parameter $\theta = a\mu + b\sigma$ of the exponential distribution with unknown location parameter μ and scale parameter σ when the loss function is squared error plus linear cost. In this paper, we propose a sequential estimator of θ and show that the associated risk is asymptotically one cost less than that given by Ghosh and Mukhopadhyay (1989, *South African Statist. J.*, **23**, 251–268).

Key words and phrases: Two-parameter exponential, asymptotically unbiased estimator, sequential estimator, uniform integrability, second order.