POSSIBLE SUPERIORITY OF THE CONDITIONAL MLE OVER THE UNCONDITIONAL MLE

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Abstract. The possibility that the conditional maximum likelihood estimator (CMLE) is superior to the unconditional maximum likelihood estimator (UMLE) is discussed in examples where the residual likelihood is obstructive. We observe relatively smaller risks of the CMLE for a finite sample size. The models in the study include the normal, inverse Gauss, gamma, two-parameter exponential, logit, negative binomial and two-parameter geometric ones.