Subjective fiducial inference for the Grubbs model

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Abstract: *In this work, we study a new estimation procedure for the precision parameters, the product variability and the mean of the quantity of interest for the Grubbs model considering the two-instrument case. The method is based on the subjective fiducial distribution. The behavior of the point and interval estimators is assessed numerically through Monte Carlo simulation studies. Comparisons with the generalized fiducial distribution are reported. Finally, the methodology is applied in the analysis of a data set from a methods comparison study.*

Keywords: Confidence interval; Fiducial statistic; Gibbs sampler; Methods comparison; Subjective fiducial distribution.

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