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SENSITIVITY OF MINIMAXITY AND ADMISSIBILITY IN THE ESTIMATION OF A POSITIVE NORMAL MEAN

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Abstract. On the problem of estimating a positive normal mean with known variance, it is well known that one minimax admissible estimator is the generalized Bayes one with respect to the non-informative prior measure, the Lebesgue measure, restricted on the positive half-line. When the true variance is misspecified, however, it is shown that this estimator does not always retain minimaxity and admissibility. In particular, it is almost surely inadmissible in the misspecification case.

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