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GENERALIZED F TESTS IN MODELS WITH RANDOM PERTURBATIONS: THE GAMMA CASE

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Abstract

Generalized F tests were introduced for linear models by Michalski and Zmyślony (1996, 1999). When the observations are taken in not perfectly standardized conditions the F tests have generalized F distributions with random non-centrality parameters, see Nunes and Mexia (2006). We now study the case of nearly normal perturbations leading to Gamma distributed non-centrality parameters.

Keywords: generalized F distributions; random non-centrality parameters; Gamma distribution.

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