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Goodness-of-fit test for homogeneous gamma process under a general sampling scheme

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SUMMARY

Degradation models are more and more used in reliability analysis. Among the most classical models, one can cite the Wiener process with a linear drift and the gamma process. Such models can be used to define complex maintenance policies, for instance. However, up to now, no goodness-of-fit test has been proposed formally for a general sampling scheme. The aim of this paper is to develop such a test for the homogeneous gamma process.

Keywords: Asymptotic normality, Degradation model, Reliability analysis

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