ESTIMATION OF SYSTEM RELIABILITY FROM ACCELERATED EXPERIMENTS

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ABSTRACT

Suppose that time to failure of some system with statistically dependent components is long in the normalconditions of fonctionning and the estimator of the reliability function or some another reliability characteristicis needed. In this case some experiments under the higher stress conditions can be used to obtain a sufficiently largedata. The estimation of reliability characteristics under the normal stress using accelerated experiments can be done ifthe model, describing dependence of the survival distribution on the stress, is constructed.

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