

Sun, Wanlong; Chen, Jiading

Some new results on the confidence limits for reliability parameters in the case of no failures.

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Summary: In reliability tests, Type I censored data are common. For products of high quality, real life length is much longer than the censoring time. A group of items of some kind of product are put into reliability experiment. In case every item is censored, there is no failure. We refer to such data as No Failures. We construct lower confidence limits for life characteristics (such as average life, reliability, reliable span). This is done under the assumption of Weibull distribution, lognormal distribution and nonparametric distribution family in the case of no failures.

MSC:

[62N05](#) Reliability and life testing

[62N01](#) Censored data models

[62F25](#) Parametric tolerance and confidence regions

Keywords:

[ordering](#); [censoring](#); [reliability](#)