

## **Inference on Three-parameter Gamma Distribution Based on Progressively Censored Data**

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Some work has been done in the past on the three-parameter Gamma distribution estimation based on complete and censored samples. In this article, we develop inferential methods based on progressively Type-II censored samples from a three-parameter Gamma distribution. In particular, we use EM algorithm as well as some other numerical methods to determine maximum likelihood estimates (MLEs) of parameters. The asymptotic variances and covariances of the MLEs from the EM algorithm are computed by using the missing information principle. The methodology developed is then illustrated with some numerical examples. We also consider the interval estimation based on large-sample theory and examine the actual coverage probabilities of these confidence intervals in case of small samples using a Monte Carlo simulation study.

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