

## Exact goodness-of-fit tests for censored data

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**Abstract** The statistic introduced in Fortiana and Grané (J R Stat Soc B 65(1):115–126, 2003) is modified so that it can be used to test the goodness-of-fit of a censored sample, when the distribution function is fully specified. Exact and asymptotic distributions of three modified versions of this statistic are obtained and exact critical values are given for different sample sizes. Empirical power studies show the good performance of these statistics in detecting symmetrical alternatives.

**Keywords** Goodness-of-fit · Censored samples · Maximum correlation · Exact distribution ·  $L$ -statistics