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BOOTSTRAP FOR THE CONDITIONAL DISTRIBUTION FUNCTION WITH TRUNCATED AND CENSORED DATA

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Abstract. We propose a resampling method for left truncated and right censored data with covariables to obtain a bootstrap version of the conditional distribution function estimator. We derive an almost sure representation for this bootstrapped estimator and, as a consequence, the consistency of the bootstrap is obtained. This bootstrap approximation represents an alternative to the normal asymptotic distribution and avoids the estimation of the complicated mean and variance parameters of the latter.

Key words and phrases: Censored data, truncated data, kernel estimator, generalized product-limit estimator, bootstrapped estimator, asymptotic representation, consistency.