MR1898723 (2003c:62175) 62N02 (62N01)

Kosorok, Michael R. (1-WI-SBS)

On global consistency of a bivariate survival estimator under univariate censoring. (English summary)

Statist. Probab. Lett. **56** (2002), *no. 4,* 439–446.

One of the challenges of survival function estimation in the presence of right censoring is to know at which time point the distribution estimator becomes unreliable. Fortunately the Kaplan-Meier estimator for univariate data is known to be uniformly consistent over the entire support of the censored data distribution. This question of consistency remains unanswered for multivariate survival distribution estimators. This note considers this issue for bivariate survival data under univariate censoring. Simple extensions of the nonparametric bivariate survival estimator of Lin and Ying are proposed which permit consistent estimation over the entire support of the censored data distribution. These extensions utilize a simple class of stopping times. Large sample uniform consistency of the proposals is also established.

Reviewed by *P. Rochus* (Liège)