

INTERVAL CENSORING: IDENTIFIABILITY AND RELATED TOPICS

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The constant-sum property given in Oller et al. (2004) for censoring models justifies the use of a simplified likelihood to obtain the nonparametric maximum likelihood estimator (NPMLE) of the lifetime distribution. In this paper we study the importance of this constant-sum property in the identifiability of the lifetime distribution. We show that the lifetime distribution is not identifiable outside the class of constant-sum models. We also show that the lifetime probabilities assigned to the observable intervals are identifiable inside the class of constant-sum models. We illustrate all these notions with several examples and give proposals of situations where the entire lifetime distribution is identifiable.