

## **Asymptotic properties of local polynomial regression with missing data and correlated errors**

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**Abstract** The main objective of this work is the nonparametric estimation of the regression function with correlated errors when observations are missing in the response variable. Two nonparametric estimators of the regression function are proposed. The asymptotic properties of these estimators are studied; expressions for the bias and the variance are obtained and the joint asymptotic normality is established. A simulation study is also included.

**Keywords** Local polynomial regression · Missing response and correlated errors