

Measurement Error Models

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ISI Mahalanobis International Award Session

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¹Main source: Web of Science – Clarivate Analytics.

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Contributions cover [theory](#), [methodology](#), and [applications](#).

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The Canadian Journal of Statistics
Vol. 19, No. 2, 1991, Pages 191–207
La Revue Canadienne de Statistique

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Finite-population prediction under error-in-variables superpopulation models

Heleno BOLFARINE

State University of New York at Binghamton

Key words and phrases: Prediction, finite population, superpopulation, regression, measurement errors, Bayesian.

AMS 1985 subject classifications: 62D05.



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Journal of Multivariate Analysis 96 (2005) 265–281

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Skew normal measurement error models

R.B. Arellano-Valle^a, S. Ozan^b, H. Bolfarine^{b,*}, V.H. Lachos^b

^a*Pontificia Universidad Catolica de Chile, Casilla 306, Correo 22, Santiago-Chile*

^b*Departamento de Estatística-IME, Universidade de São Paulo, Caixa Postal 66281-CEP 05315 970, São Paulo, Brazil*

Survival Analysis

Cure Rate Model with Measurement Error

MARCIA F. MIZOI, HELENO BOLFARINE,
AND ANTONIO C. PEDROSO-DE-LIMA

Department of Statistics, University of São Paulo, São Paulo, Brazil

Censoring is a common feature in survival data, usually associated with loss to follow-up. However, when the fraction of censored data is high, it may indicate that part of the experimental units are no longer at risk of presenting the event of interest. In this article we consider the approach of Chen et al. (1999) for such situation, and discuss the case where covariates may be measured with error. Simulations and an application to a real dataset are also presented.

Keywords Censored observations; Cure rate model; Functional model; Measurement error.

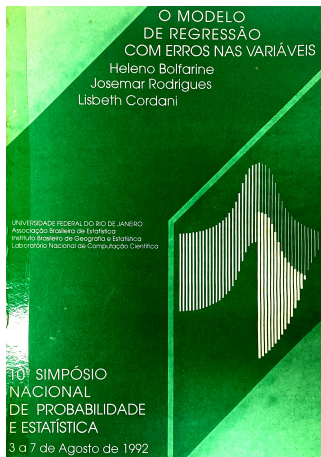
Bayesian inference in measurement error models for replicated data

Mário de Castro^{a*}, Heleno Bolfarine^b and M. Galea^c

This paper deals with Bayesian inference in measurement error models with unknown error covariances. Our formulation covers heteroscedastic and homoscedastic models for replicated data. Both equation-error and no-equation-error models are included in our proposal. Resorting to data augmentation, we present a simulation-based framework using the Gibbs sampler. Model selection is also briefly discussed. Results from a simulation study are reported. We work out an illustrative example with a real data set on measurements of mineral element contents in pottery samples. Copyright © 2012 John Wiley & Sons, Ltd.

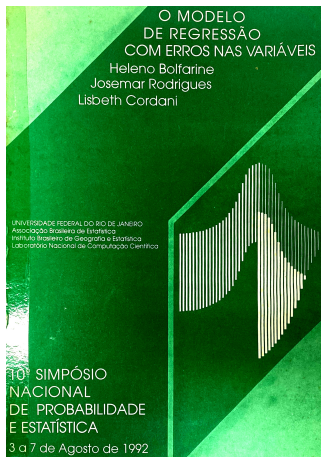
Keywords: measurement error; equation-error model; no-equation-error model; model selection; Markov chain Monte Carlo; Gibbs sampler

1992 book



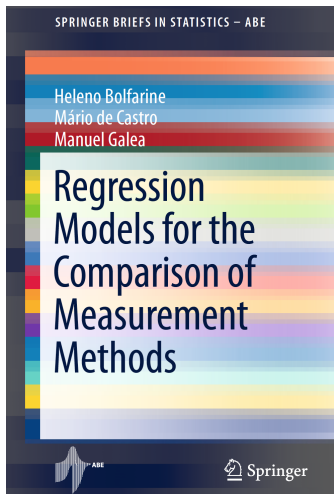
“The Errors-in-variables Regression Model” (in [Portuguese](#)).

1992 book



“The Errors-in-variables Regression Model” (in [Portuguese](#)).
Textbook of a short course at the 1992 Brazilian Symposium on Probability and Statistics.

2020 book



An updated account of the regression techniques employed in comparing analytical methods.

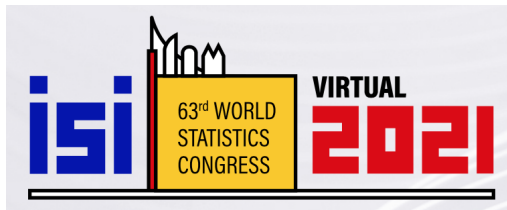
Professor Bolfarine's contributions are [impressive](#).

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Congratulations for the award!

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Thank you very much.