

## **Data imputation in switchback designs using a mixed model with correlated errors**

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### ABSTRACT

In this paper is considered the problem of predicting individual measurements. The imputation is done using the BLUP (Best Linear Unbiased Predictor) of the fixed and random effects under a mixed model and considering correlated errors in data of a switchback design. Three covariance structures were compared by the eigenvalues of the matrices of mean square errors. The results suggest that structures  $\sigma^2 I$  and AR(1) are better than CS for the errors.

Keywords: BLUP, missing data, mixed model, switchback design, correlated errors.