

STATISTICAL ANALYSIS OF LONGITUDINAL COMPOSITIONAL DATA

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- *ABSTRACT: In this paper, we introduce a Bayesian analysis for compositional data considering additive log-ratio (ALR) and Box-Cox transformations applied in an experiment of repeated measures. In the case of paired data, random effects were introduced to capture the dependence between for the longitudinal data. Furthermore, we compare the obtained results under a Bayesian approach with the proposal of Hijazi and Jernigan (2009), who analyzed compositional data using ALR transformation and Dirichlet regression model under the classical approach. The proposed methodology was illustrated considering a real data set.*
- *KEYWORDS: Compositional data; Bayesian inference; Dirichlet regression model; uncorrelated errors.*

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