USE OF INFORMATION SPATIAL IN THE ANALYSIS OF VARIANCE

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- *ABSTRACT: One of the essential principles of the experimentation is the randomization which contributes towards the presuppositions which the errors should be both equally and identically distributed, are met. Nevertheless, experiments are found of which errors present a definite spatial dependence structure. A way to bypass that trouble is to utilize a spatial approach in which it is possible to estimate and model the spatial correlation among the errors. So, the objective of this work was to report how to carry out the variance analysis with spatially correlated errors in which the error covariance matrix, modeled through a geostatistical approach, was utilized as a weighting factor of the sums of squares of the variance analysis. The results obtained showed that spatial error correlation modeling proved more efficient, since it produced greater values to the F statistic, if compared with the values obtained by the model which supposed spatial error independence..*
- *KEYWORDS: Covariance; analysis experiments; semivariogram; dependent errors..*

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