Carbohydrates data analysis

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Abstract

The distribution of the dissolved and particulate carbohydrates in the River Krka estuary was investigated for the first time. Investigation was performed at three stations, characterized by different environmental conditions, during a four years period. The initial idea was to explore potential differences among the stations and/or depths. Experimental design was performed by taking samples at the different set of depths at each station. For that reason, depth was treated as a covariate in linear regression model and a random coefficients model was applied. This type of model is also known as a hierarchical or multilevel model. Model fit using unstructured and nested covariance matrix structure options for depth and station, treated as random effects, was investigated.