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Spatial Modelling of Peak Frequencies of Brain Signals

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ABSTRACT

Spatial modelling of various phenomena has been undertaken in many diversified fields. In this project, we concentrate on the modelling of the peak frequencies of brain signals and the objective is to fit and illustrate spatial regression with Simultaneous Autoregressive *(SAR)* covariance structure. We found that the peak frequencies can be modelled appropriately as, $Y_i = \beta_{00} + \beta_{11} x_1 x_2 + \beta_{21} x_1^2 x_2 + \varepsilon_i$, with a simultaneous autoregressive correlation structure.