

# **A SIMULATED ILLUSTRATION OF A DISSIMILARITY INDEX IN SPATIAL AREA DATA USING BAYESIAN INFERENCE**

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## **ABSTRACT**

A commonly studied characteristic of area data is the assessment of similarity (or absence thereof) among neighboring areal units. However, most methodologies do not measure uncertainties which are likely outcomes of sampling variation and do not consider spatial autocorrelation. This paper explores the ability of Bayesian models with local and global smoothing to address the said situations. It attempts to apply these models to the voting participation statistics in the Philippine Presidential Elections of 2016.