Performance Of Local Indices Of Spatial Heterogeneity, To Screen Clusters Of Risk Factors Or Disease.

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The paper presents the relative performance and characteristics of different local indicators of spatial homogeneity or heterogeneity (spatial association indices G and G* Getis, Local Indicator of Spatial Autocorrelation (LISA), Local Joint Count Statistics)), applied to quantitative or qualitative data in animal health.

Sensitivity of test to identify particular spatial structures of events is well described in the literature, and is hereafter applied to health data. Concentration and autocorrelation indices can help to better interpret the type of dynamic of the events under investigation. The paper presents an application to a dataset on Contagious Bovine Pleuropneumonia (CBPP) data in a territory in the Ethiopian highlands.

In conclusion their joint use is promoted in order to investigate clusters and clumping of risk factors or diseases when no global spatial autocorrelation is found in a dataset