

# Geographic Data Science

Local Spatial Autocorrelation

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**Local Spatial Autocorr.**

# Local Spatial Autocorr.

“Clusters”

*Pockets of spatial instability*

Portions of a map where values are correlated in a particularly strong and specific way

[High-High] + SA of *high* values (*hotspots*)

[Low-Low] + SA of *low* values (*coldspots*)

[High-Low] - SA (*spatial outliers*)

[Low-High] - SA (*spatial outliers*)

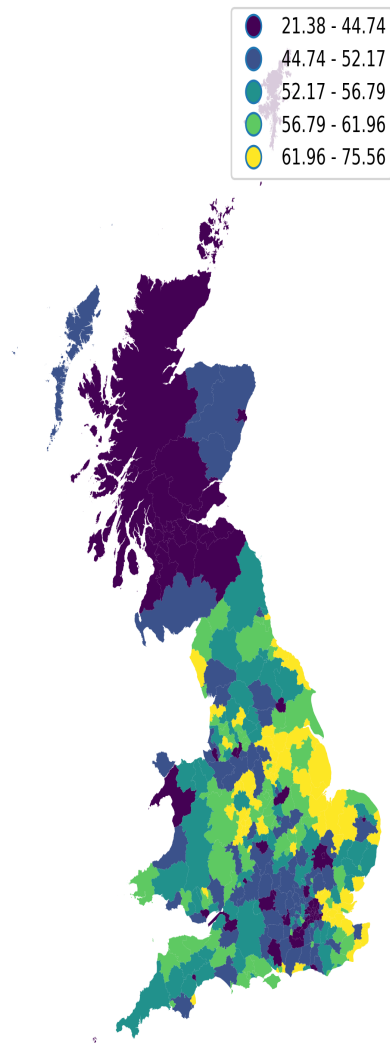
# LISAs

Local Indicators of Spatial Association

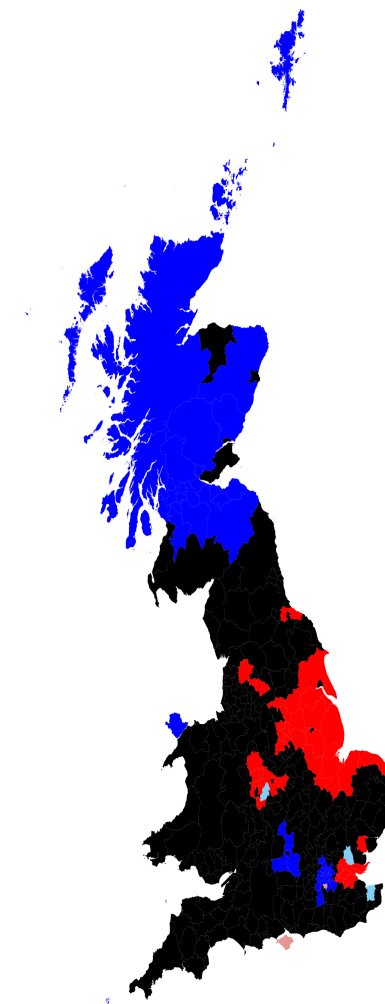
Statistical tests for spatial cluster detection →  
Statistical significance

Compares the observed map with many randomly generated ones to see how likely it is to obtain the observed associations for each location

## % to Leave



## LISA for Brexit vote





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