

Spatial Dependence

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Definition: Spatial dependence (a.k.a. spatial correlation) is the idea that the variability of data points is to some extent dependent on the geographic distribution/location of said data points. For example, if you are studying crime in neighborhoods, it is likely that the crime rate in one neighborhood is dependent upon the crime rate (and other variables) in adjacent neighborhoods. If the data were spatially independent, then they would exhibit the same variability regardless of their location. With spatial data, this is rarely the case, so your analysis should take spatial dependence into account.

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