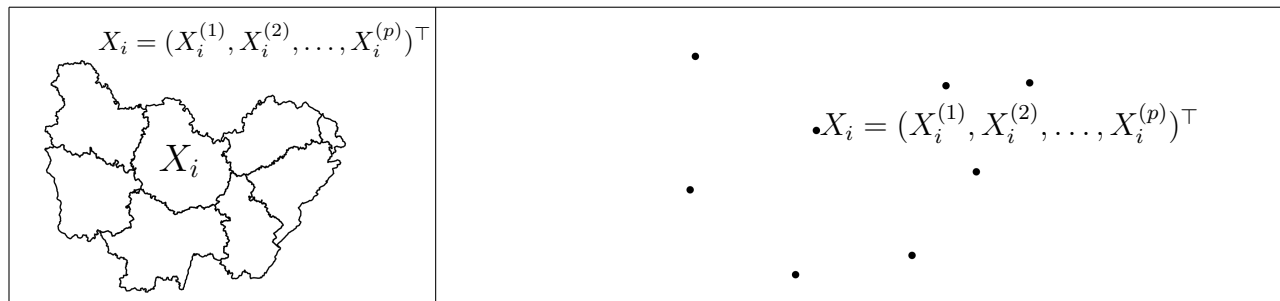


Data



Application  
example

Lattice data: <ul style="list-style-type: none"><li>• Unemployment rate and fraction of the population that has not graduated from high school</li></ul>	Geostatistical data: <ul style="list-style-type: none"><li>• Temperature and air pressure</li></ul>	Point pattern: <ul style="list-style-type: none"><li>• Circumference and height of trees</li></ul>
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Question

Is there a statistically significant cluster of high unemployment rates and high fraction of the population with a low level of education?	Is there a statistically significant cluster of high temperatures and low air pressure?	Is there a statistically significant cluster of trees with larger circumferences and heights?
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Methods

Gaussian data: <ul style="list-style-type: none"><li>• Multivariate Gaussian spatial scan statistic</li><li>• “MG” argument in the scan function of the package</li></ul> Non-Gaussian data: <ul style="list-style-type: none"><li>• Multivariate Nonparametric spatial scan statistic</li><li>• “MNP” argument in the scan function of the package</li></ul>
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Interpretation

There is a statistically significant cluster and by describing the mean or median of each variable, we can get an indication of which variables are dominant in the cluster, and which variables are higher or lower in that cluster.
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