

Isabelle Thomas
Pierre Frankhauser
Benoît Frenay
Michel Verleysen

Title: Clustering fractal urban patterns with curves of scaling behaviour.

Theme: D. Geographical information systems & spatial analysis

Fractal dimension can be viewed as a global morphometrical index used for characterizing urban fabrics. The use of its local components (the curve of scaling behavior) is less common. This paper further analyses the advantages of these curves, and suggests a method based on a k-medoid for clustering these curves. It is applied to 49 European urban wards selected among several cities, and shows that the information of the curves adds interesting spatial information to the knowledge of the variation of the urban texture.