spdep: an R package for analysing spatial dependence in areal data

Roger Bivand

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1 Introduction

A collection of functions to create spatial weights matrix objects from polygon contiguities, from point patterns by distance and tesselations, for summarising these objects, and for permitting their use in spatial data analysis; a collection of tests for spatial autocorrelation, including global Moran's I, Geary's C, Hubert/Mantel general cross product statistic, Empirical Bayes estimates and spatial Index, and Getis/Ord G, local Moran's I and Getis/Ord G, saddlepoint approximations for global and local Moran's I; and functions for estimating spatial simultaneous autoregressive (SAR) models.