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Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (238 pages)
Disciplina	910.285
Soggetti	Geographic information systems Regression analysis Environmental geography Operations research Geographical Information System Linear Models and Regression Integrated Geography Operations Research and Decision Theory
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction to Geographic Data and R -- Descriptive Analysis of Geographic Data -- Correlation Analysis -- Linear Regression Analysis -- Geographically Weighted Regression Analysis -- Time Series Analysis -- Cluster Analysis -- Principal Component Analysis (PCA) -- Markov Chain Analysis -- Geographic Network Analysis -- Spatial Interpolation.
Sommario/riassunto	This book is structured to encompass both the foundational and specialized aspects of quantitative analysis in geography. The basic content covers descriptive statistical analysis and correlation analysis of geographical data, while the professional content delves into more advanced topics like linear regression analysis, geographically weighted regression analysis, time series analysis, cluster analysis, principal component analysis, Markov chain analysis, and geographical network analysis. The methodologies span from widely utilized techniques to more recent developments, and the data primarily originates from

reputable sources in China. The example code provided in the book can be executed using R packages available on the CRAN website. This book is an invaluable resource for undergraduate and graduate students, as well as researchers interested in learning and applying R for processing, visualizing, and analyzing geographic data. It serves as an introductory course in quantitative methods in geography for students in geography departments. Additionally, it is an ideal supplementary text for applied methods courses across various disciplines that involve geographic data, such as human and physical geography, geographic information science, ecology, public health, crime, and economics. .