Record Nr. UNINA9910800166303321 Autore Acevedo Miguel F. Titolo Data analysis and statistics for geography, environmental science, and engineering / / by Miguel F. Acevedo Boca Raton, FL:,: CRC Press, an imprint of Taylor and Francis,, 2012 Pubbl/distr/stampa 0-429-16914-0 **ISBN** Edizione [1st edition] 1 online resource (549 p.) Descrizione fisica 519.5 Disciplina Soggetti Geography - Data processing Geography - Statistical methods Environmental sciences - Data processing Environmental sciences - Statistical methods Engineering - Data processing Engineering - Statistical methods Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Nota di contenuto Front Cover; Contents; Preface; Acknowledgments; Author; Chapter 1 -Introduction: Chapter 2 - Probability Theory: Chapter 3 - Random Variables, Distributions, Moments, and Statistics; Chapter 4 -Exploratory Analysis and Introduction to Inferential Statistics: Chapter 5 - More on Inferential Statistics: Goodness of Fit, Contingency Analysis, and Analysis of Variance; Chapter 6 - Regression; Chapter 7 -Stochastic or Random Processes and Time Series; Chapter 8 - Spatial Point Patterns; Chapter 9 - Matrices and Linear Algebra; Chapter 10 -Multivariate Models Chapter 11 - Dependent Stochastic Processes and Time SeriesChapter 12 - Geostatistics: Kriging; Chapter 13 - Spatial Auto-Correlation and Auto-Regression; Chapter 14 - Multivariate Analysis I: Reducing Dimensionality; Chapter 15 - Multivariate Analysis II: Identifying and Developing Relationships among Observations and Variables; Bibliography; Back Cover Sommario/riassunto Providing a solid foundation for twenty-first-century scientists and

engineers, Data Analysis and Statistics for Geography, Environmental Science, and Engineering guides readers in learning quantitative

methodology, including how to implement data analysis methods using open-source software. Given the importance of interdisciplinary work in sustainability, the book brings together principles of statistics and probability, multivariate analysis, and spatial analysis methods applicable across a variety of science and engineering disciplines.