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Titolo	Analyzing environmental data / / Walter W. Piegorsch, A. John Bailer
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Descrizione fisica	1 online resource (xv, 496 pages) : illustrations
Altri autori (Persone)	BailerA. John
Disciplina	363.7/0072/7
Soggetti	Environmental sampling Regression analysis Correlation (Statistics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [447]-471) and indexes.
Nota di contenuto	Linear regression -- Nonlinear regression -- Generalized linear models -- Quantitative risk assessment with stimulus-response data -- Temporal data and autoregressive modeling -- Spatially correlated data -- Combining environmental information -- Fundamentals of environmental sampling -- A. Review of probability and statistical inference
Sommario/riassunto	Environmental statistics is a rapidly growing field, supported by advances in digital computing power, automated data collection systems, and interactive, linkable Internet software. Concerns over public and ecological health and the continuing need to support environmental policy-making and regulation have driven a concurrent explosion in environmental data analysis. This textbook is designed to address the need for trained professionals in this area. The book is based on a course which the authors have taught for many years, and prepares students for careers in environmental analysis centered on

statistics and allied quantitative methods of data evaluation. The text extends beyond the introductory level, allowing students and environmental science practitioners to develop the expertise to design and perform sophisticated environmental data analyses.

In particular, it: Provides a coherent introduction to intermediate and advanced methods for modeling and analyzing environmental data -

Takes a data-oriented approach to describing the various methods -

Illustrates the methods with real-world examples - Features extensive exercises, enabling use as a course text. Includes examples of SAS

computer code for implementation of the statistical methods -

Connects to a Web site featuring solutions to exercises, extra computer code, and additional material - Serves as an overview of methods for

analyzing environmental data, enabling use as a reference text for environmental science professionals. Graduate students of statistics

studying environmental data analysis will find this invaluable as will

practicing data analysts and environmental scientists including

specialists in atmospheric science, biology and biomedicine, chemistry, ecology, environmental health, geography, and geology.

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