1. Record Nr. UNINA9910810370803321

Autore	Zhang Zhihua
Titolo	Environmental data analysis : methods and applications / / Zhihua Zhang
Pubbl/distr/stampa	Berlin, [Germany] ; ; Boston, [Massachusetts] : , : De Gruyter, , 2017 ©2017
ISBN	3-11-042498-3
Descrizione fisica	1 online resource (334 pages) : illustrations
Disciplina	363.700285
Soggetti	Environmental sciences - Data processing Environmental sciences - Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- 1. Time series analysis -- 2. Chaos and dynamical systems -- 3. Approximation -- 4. Interpolation -- 5. Statistical methods -- 6. Numerical methods -- 7. Optimization -- 8. Data envelopment analysis -- 9. Risk assessments -- 10. Life cycle assessments -- Index
Sommario/riassunto	Most environmental data involve a large degree of complexity and uncertainty. Environmental Data Analysis is created to provide modern quantitative tools and techniques designed specifically to meet the needs of environmental sciences and related fields. This book has an impressive coverage of the scope. Main techniques described in this book are models for linear and nonlinear environmental systems, statistical & numerical methods, data envelopment analysis, risk assessments and life cycle assessments. These state-of-the-art techniques have attracted significant attention over the past decades in environmental monitoring, modeling and decision making. Environmental Data Analysis explains carefully various data analysis procedures and techniques in a clear, concise, and straightforward language and is written in a self-contained way that is accessible to researchers and advanced students in science and engineering. This is an excellent reference for scientists and engineers who wish to analyze, interpret and model data from various sources, and is also an ideal

		graduate-level textbook for courses in environmental sciences and related fields. Contents:PrefaceTime series analysisChaos and dynamical systemsApproximationInterpolationStatistical methodsNumerical methodsOptimizationData envelopment analysisRisk assessmentsLife cycle assessmentsIndex
2.	Record Nr.	UNINA9910728935303321
	Autore	Liu Yan
	Titolo	Research Papers in Statistical Inference for Time Series and Related Models : Essays in Honor of Masanobu Taniguchi / / edited by Yan Liu, Junichi Hirukawa, Yoshihide Kakizawa
	Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
	ISBN	9789819908035 9819908035
	Edizione	[1st ed. 2023.]
	Descrizione fisica	1 online resource (591 pages)
	Altri autori (Persone)	HirukawaJunichi KakizawaYoshihide
	Disciplina	519.55
	Soggetti	Time-series analysis Mathematical statistics Nonparametric statistics Time Series Analysis Parametric Inference Non-parametric Inference Mathematical Statistics Estadística matemàtica Anàlisi de sèries temporals Llibres electrònics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Chapter 1. Frequency domain empirical likelihood method for infinite variance models -- Chapter 2. Diagnostic testing for time series -- Chapter 3. Statistical Inference for Glaucoma Detection -- Chapter 4.

On Hysteretic Vector Autoregressive Model with Applications -- Chapter 5. Probabilistic Forecasting for Daily Electricity Loads and Quantiles for Curve-to-Curve Regression -- Chapter 6. Exact topological inference on resting-state brain networks -- Chapter 7. An Introduction to Geostatistics -- Chapter 8. Relevant change points in high dimensional time series -- Chapter 9. Adaptiveness of the empirical distribution of residuals in semi-parametric conditional location scale models -- Chapter 10. Standard testing procedures for white noise and heteroskedasticity -- Chapter 11. Estimation of Trigonometric Moments for Circular Binary Series -- Chapter 12. Time series analysis with unsupervised learning -- Chapter 13. Recovering the market volatility shocks in high-dimensional time series -- Chapter14. Asymptotic properties of mildly explosive processes with locally stationary disturbance -- Chapter 15. Multi-Asset Empirical Martingale Price Estimators for Financial Derivatives -- Chapter 16. Consistent Order Selection for ARFIMA Processes -- Chapter 17. Recursive asymmetric kernel density estimation for nonnegative data -- Chapter 18. Fitting an error distribution in some heteroscedastic time series models -- Chapter 19. Symbolic Interval-Valued Data Analysis for Time Series Based on Auto-Interval-Regressive Models -- Chapter 20. ROBUST LINEAR INTERPOLATION AND EXTRAPOLATION OF STATIONARY TIME SERIES -- Chapter 21. Non Gaussian models for fMRI data -- Chapter 22. Robust inference for ordinal response models -- Chapter 23. Change point problems for diffusion processes and time series models -- Chapter 24. Empirical likelihood approach for time series -- Chapter 25. Exploring the Dependence Structure Between Oscillatory Activities in Multivariate Time Series -- Chapter 26. Projection-based nonparametric goodness-of-fit testing with functional data.

Sommario/riassunto

This book compiles theoretical developments on statistical inference for time series and related models in honor of Masanobu Taniguchi's 70th birthday. It covers models such as long-range dependence models, nonlinear conditionally heteroscedastic time series, locally stationary processes, integer-valued time series, Lévy Processes, complex-valued time series, categorical time series, exclusive topic models, and copula models. Many cutting-edge methods such as empirical likelihood methods, quantile regression, portmanteau tests, rank-based inference, change-point detection, testing for the goodness-of-fit, higher-order asymptotic expansion, minimum contrast estimation, optimal transportation, and topological methods are proposed, considered, or applied to complex data based on the statistical inference for stochastic processes. The performances of these methods are illustrated by a variety of data analyses. This collection of original papers provides the readerwith comprehensive and state-of-the-art theoretical works on time series and related models. It contains deep and profound treatments of the asymptotic theory of statistical inference. In addition, many specialized methodologies based on the asymptotic theory are presented in a simple way for a wide variety of statistical models. This Festschrift finds its core audiences in statistics, signal processing, and econometrics.