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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Part I: Fundamental Concepts -- 1 Introduction -- 2 Persistence Models -- 3 Bootstrap Confidence Intervals -- Part II: Univariate Time Series -- 4 Regression I -- 5 Spectral Analysis -- 6. Extreme Value Time Series -- Part III: Bivariate Time Series -- 7 Correlation -- 8 Regression II -- Part IV: Outlook -- 9 Future Directions.
Sommario/riassunto	Climate is a paradigm of a complex system. Analysing climate data is an exciting challenge, which is increased by non-normal distributional shape, serial dependence, uneven spacing and timescale uncertainties. This book presents bootstrap resampling as a computing-intensive method able to meet the challenge. It shows the bootstrap to perform reliably in the most important statistical estimation techniques: regression, spectral analysis, extreme values and correlation. This book is written for climatologists and applied statisticians. It explains step by step the bootstrap algorithms (including novel adaptions) and methods for confidence interval construction. It tests the accuracy of the algorithms by means of Monte Carlo experiments. It analyses a large array of climate time series, giving a detailed account on the data and

the associated climatological questions. “….comprehensive mathematical and statistical summary of time-series analysis techniques geared towards climate applications…accessible to readers with knowledge of college-level calculus and statistics.” (Computers and Geosciences) “A key part of the book that separates it from other time series works is the explicit discussion of time uncertainty…a very useful text for those wishing to understand how to analyse climate time series.” (Journal of Time Series Analysis) “…outstanding. One of the best books on advanced practical time series analysis I have seen.” (David J. Hand, Past-President Royal Statistical Society).