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Nota di contenuto	Preface -- The technical side: selecting a statistical software -- 1 Sample statistics -- 2 Sample statistics in R -- 3 Distributions, parameters and estimators -- 4 Distributions, parameters and estimators in R -- 5 Correlation and association -- 6 Correlation and association in R -- 7 Regression - Part I -- 8 Regression in R - Part I -- 9 Regression - Part II -- 10 Regression in R - Part II -- 11 The linear model: t-test and ANOVA -- 12 The linear model: t-test and ANOVA in R -- 13 Hypotheses and tests -- 14 Experimental Design -- 15 Multiple Regression -- 16 Multiple Regression in R -- 17 Outlook -- Index.
Sommario/riassunto	Environmental Data Analysis is an introductory statistics textbook for environmental science. It covers descriptive, inferential and predictive statistics, centred on the Generalized Linear Model. The key idea behind this book is to approach statistical analyses from the perspective of maximum likelihood, essentially treating most analyses as (multiple) regression problems. The reader will be introduced to statistical distributions early on, and will learn to deploy models suitable for the data at hand, which in environmental science are often not normally distributed. To make the initially steep learning curve more manageable, each statistical chapter is followed by a walk-through in a corresponding R-based how-to chapter, which reviews the theory and applies it to environmental data. In this way, a coherent and

expandable foundation in parametric statistics is laid, which can be expanded in advanced courses.The content has been “field-tested” in several years of courses on statistics for Environmental Science, Geography and Forestry taught at the University of Freiburg. .