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Autore	Helsel Dennis R
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Nota di contenuto	STATISTICS FOR CENSORED ENVIRONMENTAL DATA USING MINITAB AND R; CONTENTS; Preface; Acknowledgments; Introduction to the First Edition: An Accident Waiting To Happen; Introduction to the Second Edition: Invasive Data; 1 Things People Do with Censored Data that Are Just Wrong; Why Not Substitute-Missing the Signals that Are Present in the Data; Why Not Substitute?-Finding Signals that Are Not There; So Why Not Substitute?; Other Common Misuses of Censored Data; 2 Three Approaches for Censored Data; Approach 1: Nonparametric Methods after Censoring at the Highest Reporting Limit Approach 2: Maximum Likelihood EstimationApproach 3: Nonparametric Survival Analysis Methods; Application of Survival Analysis Methods to Environmental Data; Parallels to Uncensored Methods; 3 Reporting Limits; Limits When the Standard Deviation is Considered Constant; Insider Censoring-Biasing Interpretations; Reporting the Machine Readings of all Measurements; Limits When the Standard Deviation Changes with Concentration; For Further Study; 4 Reporting, Storing, and Using Censored Data; Reporting and Storing

Censored Data; Using Interval-Censored Data; Exercises; 5 Plotting Censored Data
BoxplotsHistograms; Empirical Distribution Function; Survival Function Plots; Probability Plot; X-Y Scatterplots; Exercises; 6 Computing Summary Statistics and Totals; Nonparametric Methods after Censoring at the Highest Reporting Limit; Maximum Likelihood Estimation; The Nonparametric Kaplan-Meier and Turnbull Methods; ROS: A "Robust" Imputation Method; Methods in Excel; Handling Data with High Reporting Limits; A Review of Comparison Studies; Summing Data with Censored Observations; Exercises; 7 Computing Interval Estimates; Parametric Intervals; Nonparametric Intervals
Intervals for Censored Data by SubstitutionIntervals for Censored Data by Maximum Likelihood; Intervals for the Lognormal Distribution; Intervals Using "Robust" Parametric Methods; Nonparametric Intervals for Censored Data; Bootstrapped Intervals; For Further Study; Exercises; 8 What Can be Done When All Data Are Below the Reporting Limit?; Point Estimates; Probability of Exceeding the Reporting Limit; Exceedance Probability for a Standard Higher than the Reporting Limit; Hypothesis Tests Between Groups; Summary; Exercises; 9 Comparing Two Groups; Why Not Use Substitution?
Simple Nonparametric Methods After Censoring at the Highest Reporting LimitMaximum Likelihood Estimation; Nonparametric Methods; Value of the Information in Censored Observations; Interval-Censored Score Tests: Testing Data that Include (DL to RL) Values; Paired Observations; Summary of Two-Sample Tests for Censored Data; Exercises; 10 Comparing Three or More Groups; Substitution Does Not Work-Invasive Data; Nonparametric Methods after Censoring at the Highest Reporting Limit; Maximum Likelihood Estimation; Nonparametric Method-The Generalized Wilcoxon Test; Summary; Exercises; 11 Correlation
Types of Correlation Coefficients

Sommario/riassunto

Praise for the First Edition "" . . . an excellent addition to an upper-level undergraduate course on environmental statistics, and . . . a 'must-have' desk reference for environmental practitioners dealing with censored datasets."" -Vadose Zone Journal Statistical Methods for Censored Environmental Data Using Minitab® and R, Second Edition introduces and explains methods for analyzing and interpreting censored data in the environmental sciences. Adapting survival analysis techniques from other fields, the book translates well-established methods from other disciplines into new solu