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4.2 Characterizing Properties of Record Values4.2.1 The Moment Sequence; 4.2.2 Regression of Adjacent Record Values; 4.3 Families of Distributions; 4.3.1 Families Defined by Reliability Properties; 4.3.2 Linear Regressions of Adjacent Record Values; 4.4 The Exponential Distribution; 4.4.1 The Incomplete Catalog; 4.4.2 Integrated Cauchy Functional Equation; 4.4.3 Characterizations Based on the ICFE and Other Functional Equations; 4.4.4 Lower Record Statistics; 4.5 Other Continuous Distributions; 4.6 Geometric-Tail Distributions; 4.7 Dependence Structures of Record Values and Order Statistics Exercises5. Inference; 5.1 Introduction; 5.2 Maximum Likelihood Estimation; 5.3 Best Linear Unbiased Estimation; 5.4 Best Linear Invariant Estimation; 5.5 Interval Estimation and Tests of Hypotheses; 5.6 Point Prediction; 5.6.1 Best Linear Unbiased Prediction; 5.6.2 Best Linear Invariant Prediction; 5.6.3 Asymptotic Linear Prediction; 5.7 Interval Prediction; 5.7.1 Prediction Intervals Based on BLUE's; 5.7.2 Conditional Prediction Intervals; 5.7.3 Tolerance Region Prediction; 5.7.4 Bayesian Prediction Intervals; 5.8 Illustrative Examples; 5.9 Inference with Records and Inter-Record Times
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7. Random and Point Process Record Models

Sommario/riassunto

The first and only comprehensive guide to modern record theory and its applicationsAlthough it is often thought of as a special topic in order statistics, records form a unique area, independent of the study of sample extremes. Interest in records has increased steadily over the years since Chandler formulated the theory of records in 1952. Numerous applications of them have been developed in such far-flung fields as meteorology, sports analysis, hydrology, and stock market analysis, to name just a few. And the literature on the subject currently comprises papers and journal articles n