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Titolo	Exploratory and multivariate data analysis // Michel Jambu
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Collana	Statistical modeling and decision science
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Note generali	Translation of: Exploration informatique et statistique des donnees.
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Nota di contenuto	<p>Front Cover; Exploratory and Multivariate Data Analysis; Copyright Page; Dedication; Table of Contents; Preface; Chapter 1. General Presentation; 1. Introduction; 2. Examples of Applications; 3. Steps in Data Exploration: Management, Analysis, Synthesis; 4. Computer Aspects; Chapter 2. Statistical Data Exploration; 1. Statistics; 2. Fields of Statistical Data Exploration; 3. Statistics and Experiments; 4. Data Analysis, Inductive and Deductive Statistics; 5. Variables, Statistical Sets, and Data Sets; Chapter 3. 1-D Statistical Data Analysis; 1. Introduction</p> <p>2. 1-D Analysis of a Quantitative Variable3. 1-D Analysis of a Categorical Variable; 4. 1-D Analysis of a Categorical Variable with Multiple Forms; 5. 1-D Analysis of Time Series or Chronological Variables; 6. Statistical Maps or Cartograms; Chapter 4. 2-D Statistical Data Analysis; 1. Introduction; 2. 2-D Analysis of Two Categorical Variables; 3. 2-D Analysis of Two Quantitative Variables; 4. 2-D Analysis of a Quantitative Variable and a Categorical Variable; 5. 2-D Analysis of a Quantitative Variable and a Categorical Variable with Multiple Forms; 6. Conclusion</p> <p>Chapter 5. -D Statistical Data Analysis1. Introduction; 2. Joint 3-D Statistical Data Analysis; 3. Joint -D Statistical Data Analysis; 4. Cartograms and -D Analysis; Chapter 6. Factor Analysis of Individuals-Variables Data Sets; 1. Introduction; 2. From Linear Adjustment to Factor Analysis; 3. From the Origin of Factor Analysis to Modern Factor Analysis Techniques; 4. Mathematical Description of Modern Factor Analysis; 5. Factor Analysis Formulas; Chapter 7.</p>

Principal Components Analysis; 1. Basic Data Sets; 2. Different Patterns of Principal Components Analysis  
3. Standardized Principal Components Analysis 4. Interpretation of Principal Components Analysis; 5. Classifying Supplementary Points into Graphics; 6. Rules for Selecting Significant Axes and Elements; 7. Standardized Principal Components Analysis Formulas; 8. Applications and Case Studies; Chapter 8. 2-D Correspondence Analysis; 1. Introduction; 2. Basic Correspondence Data Sets; 3. Mathematical Description of Correspondence Analysis; 4. Geometric Representation of the Sets I and J; 5. Interpretation of the 2-D Correspondence Analysis; 6. Factor Graphics  
7. Classifying Supplementary Points into Graphics 8. Rules for Selecting Significant Axes and Elements; 9. 2-D Correspondence Analysis Formulas; 10. Patterns of Clouds of Points; 11. Patterns of Acceptable Data Sets; 12. Case Studies; Chapter 9. -D Correspondence Analysis; 1. Introduction; 2. Basic Data Sets; 3. Equivalence between Analyses of bJJ and kIJ; 4. Interpretation of -D Correspondence Analysis; 5. Factor Graphics; 6. Classifying Supplementary Points into Graphics; 7. Rules for Selecting Significant Axes and Points of (I), N(J), and N(Q); 8. -D Correspondence Analysis Formulas  
9. Patterns of Acceptable Data Sets

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### Sommario/riassunto

With a useful index of notations at the beginning, this book explains and illustrates the theory and application of data analysis methods from univariate to multidimensional and how to learn and use them efficiently. This book is well illustrated and is a useful and well-documented review of the most important data analysis techniques. Key Features\* Describes, in detail, exploratory data analysis techniques from the univariate to the multivariate ones\* Features a complete description of correspondence analysis and factor analysis techniques as multidimensional statistical data a

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