Preface

Environmental data provide huge amounts of information, but it is complex to process due to the size, variety, and dynamic nature of the data. In order to develop solutions to many environmental issues and make predictions to determine how resources are best allocated, environmental researchers have spent considerable time ensuring well-conducted data collection, analyzing and interpreting environmental data, and describing environmental changes with sound and validated models. Therefore, researchers in environmental science need to be familiar with various advanced techniques for exploration, identification and analysis of patterns in data.

This book covers the comprehensive range of topics in data analysis in space, time and spectral domains which are necessary knowledge for environmental research. Main topics include Models for Linear and Nonlinear Environmental Systems, Feature Extraction Models, Data Envelopment Analysis, Risk Assessments, and Life Cycle Assessments. It is a concise and accessible book suitable for anyone interested in learning and understanding advanced methods and applications in environmental data analysis.