

missing. However, reservation is well advised as to the authors' pretension that the book contains "predictions". At most, the only predictions are restricted to the future increase in marine level and its impact on European coasts. Considering its rather high price, we limit our recommendation for purchasing the book to teachers or specialists desiring to extend their overall knowledge of Europe.

LITERATURE CITED

HOUGHTON, J.T.; JENKINS, G.J., and EFHRAUMS, J.J. (eds.), 1990. *Climate Change: The IPCC Scientific Assessment*. Cambridge University Press.

Dr. Jean-Marie M. Dubois
Département de Géographie et
Télé-détection
Université de Sherbrooke
Sherbrooke, Québec, Canada

Remote Sensing for Hazard Monitoring and Disaster Assessment: Marine and Coastal Applications in the Mediterranean Region, edited by Eric C. Barrett, Krystyna A. Brown, and Anton Micallef, 1991. Gordon and Breach Science Publishers, Philadelphia, xii + 240p., 68 fig., 34 tables, 15.5 × 23.5 cm, 45 \$US. ISBN 2-88124-809-8.

"Remote Sensing for Hazard Monitoring and Disaster Assessment" is a collective work derived from presentations given at the International Training Course held in Malta, in 1989. The course was organized jointly by the Euro-Mediterranean Centre on Marine Contamination Hazards of Malta and the Remote Sensing Unit of the University of Bristol. The three co-editors belong to either of these two organizations. It is the second course to be published in this collection, the first, given in 1988, having focused on the same region but covering different aspects, *e.g.*, hydrology and water-related management.

The book is intended as an introduction to the principles and practices in the field of remote sensing and as related to environmental problems. It highlights the role of remote sensing in the evaluation and monitoring of natural hazards and natural or induced catastrophes in coastal and marine areas in the Mediterranean region. It is designed for students enrolled in graduate studies

as well as scientists and technicians working in this particular field, and I believe that the book reaches its goal quite well in this area.

The book is solidly bound with an attractive hard cover and is composed of a preface, a thematic index including a glossary of acronyms, and 11 chapters. The chapters are well balanced, with an average of 22 pages and 6 illustrations each. Although certain images often lack localized information and interpretation, the editors have found a clever way of combining low-cost color image reproduction and the functional aspect of these images in their respective texts. The 17 pages of the color insert, placed in the center of the book, are also reproduced in black and white in their rightful place in each of the chapters. In addition, each chapter is well written and respects the norms with an introduction, theme development and a conclusion, which is oddly not always the case in many of the books already reviewed. However, the book does not have an introductory chapter for defining the context, unless the preface serves this purpose; neither does it have a concluding chapter for opening other avenues of research, unless chapter 11 is intended for this purpose. Of the 17 authors, all are British except for a Maltese, a Greek, an Italian and two Spaniards. In spite of the relative ethnic diversity, only five references can be found involving publications in Spanish, German or French. I might even add that I find quite suspicious the fact that there is only one reference in French in a book dealing with an area which is to a large extent of French culture.

The first two chapters are quite general in scope in the sense that they present the subject and the tool. Chapter 1 outlines the notions of hazard and catastrophe. These are classified more or less into five groups, *i.e.*, geological, hydrological, oceanographic, meteorological and those related to vegetation. Chapter 2 presents the fundamental principles of airborne and satellite remote sensing and the types of platform, sensors and data. Chapter 3 describes the overall use and importance of remote sensing in the study of hazards and catastrophes in the Mediterranean area.

Each of the following seven chapters deals with an aspect of the subject matter: hazards related to humans (chapter 4), earthquakes and volcanism (chapter 5), soil erosion and desertification (chapter 6), vegetation and crops (chapter 7), meteorology (chapter 8), oceanography (chapter 9) and pollution (oil spills, water quality, algae blooms) (chapter 10). In chapters 4 and 5, com-

plete or partial distribution maps of these phenomena can be found, although sometimes some maps are difficult to read (example: p. 72); the reader would have expected to see other maps in the other chapters. Other problems also leave the reader perplexed. In chapter 6, a case study in Spain is presented: is the example really representative of all the reference area? In chapter 9 concerning oceanography, wave monitoring using radar is referred to without providing any example related to the overall theme; the chapter becomes quite useless in this perspective.

Chapter 11 deals with the usefulness of integrating remote sensing data within a geographic information system (GIS) to insure better data integration with multisource data. This is quite pertinent specially at the end of such a publication; however, at least one application should have been presented showing its efficiency.

In conclusion, it is an interesting book although incomplete. The price is honest and it deserves to be purchased by libraries.

Dr. Jean-Marie M. Dubois
Département de Géographie et
Télé-détection
Université de Sherbrooke
Sherbrooke, Québec, Canada

Intertidal and Littoral Ecosystems. Ecosystems of the World 24, edited by A.L. Mathieson and P.H. Nienhuis, 1991. Elsevier, Amsterdam and New York, xiv + 564p., 140 fig., 45 tables, 19.5 × 27 cm, 195\$ US. ISBN 0-444-87409-7.

This collective work was produced under the direction of two biologists of renown, A.C. Mathieson of the United States and P.H. Nienhuis of The Netherlands. The book is part of a collection devoted to world ecosystems directed by David W. Goodhall, a distinguished Australian biologist. The collection, begun in 1977, will contain at least 34 volumes at completion; so far, 28 volumes have been published. The ecosystems are divided into land ecosystems, natural and man-made, and aquatic ecosystems, marine, soft water and man-made. The present book quite obviously covers marine aquatic ecosystems.

Since this collective work does not fit the col-

loquium proceedings format, the subject matter would have been much more coherent if certain authors had not withdrawn from their assignments. Hence, most of the world coasts are not covered, such as those of Asia, the major part of Australia, the Mediterranean and Europe except for the Baltic, the Pacific coast of Central America, the Atlantic coast of South America and finally, those of the Arctic and the Antarctic. In spite of this drawback, the book generates overall interest, especially because of the presence of a few chapters presenting syntheses, and it will certainly be useful to its destined readers, i.e., graduate students, university teachers and scientists, as well as people involved in coastal planning or coastal protection policies.

Although it has a high price, the book is well edited and printed, with a solid hard cover. There are 37 authors and co-authors from 11 different countries, 18 from the United States, 4 from Australia, 3 from Germany, 3 from The Netherlands, 2 from South Africa, 2 from Great Britain and one from each of the following countries: Nigeria, Israel, Yugoslavia, Chile and Sweden. The general framework of the book begins with a preface which is more or less a list of acknowledgements and a list of authors and co-authors. At the end are found five very useful lists relating to biological types and species, cited authors, the place names mentioned and the subjects treated. The subject is divided into 18 chapters consisting of an introduction, four general interest chapters and 13 regional chapters. Unfortunately, there is no list of figures and tables.

Except for the introduction, the 17 chapters vary considerably in length, from 13 to 83 pages with an average of 27 pages. The number of figures and tables is also quite variable, from 0 to 17 with an average of 10 for some, and from 0 to 8 with an average of 2 for the others. At the end of each chapter can be found excellent references, which are really international in scope since, in addition to references in English, hundreds of references can be found in German, Spanish and French, and also a few in Italian and the Scandinavian languages.

The first three chapters cover generalities on the specific subject of the book, more specifically the intertidal zone or the tideless coastal zone up to a depth corresponding to less than 1% of natural light. These chapters present the physical and chemical characteristics of the area as well as the vertical zonation including the causes of zo-