

Gene will be responsible for organizing sessions for next year's program. Suggested session topics include Cartographic Education, Map Use, Historical Cartography, Electronic Publishing, Map Design, Design of Presentations, Critiquing Map Design, and Analytical Cartography. Workshops will also be offered. I would encourage NACIS members to participate by contacting Gene. The deadline for paper submission is sometime in September.

The specialty group will continue to award master's research grants and to sponsor the Student Paper Competition. If you know of students who are conducting thesis research related to cartography they should be encouraged to contact the specialty group. The idea of establishing a service bureau for next year's meeting to assist paper presenters with their graphics was also discussed. The Central Office of the AAG has also asked the specialty group to develop guidelines for graphics used in presentations. This is an ongoing problem which NACIS members should also be aware of when presentations are created for our own annual meeting. One final item of discussion was the feasibility of creating a home page on the world wide web which could be used to distribute minutes, newsletters, a membership directory, and other items of interest.

In conclusion, cartography was well represented at this year's national meeting of the AAG. The Cartography Specialty Group is one of the largest in the Association and is very active in organizing sessions and promoting cartography. I would urge you to participate when possible and to consider making a presentation at next year's meeting in Charlotte to be held April 9-13, 1996. For information contact the AAG, 1710 16th Street NW, Washington, D.C. 20009-3198 or GAIA@AAG.ORG. □

reviews

BOOK REVIEW

Thematic Mapping from Satellite Imagery: A Guidebook.

Edited by Jean Denègre. Published on behalf of the International Cartographic Association (ICA) by Elsevier Science, Oxford: Pergamon, 1994. 269 + xxvi pp. English and French text, 24 images in color, 4 in black and white, preface by D.R.F. Taylor, acknowledgments. Size: 29.2 cm X 20.3 cm (11.5" X 8"). Contributors include: Andrzej Ciolkosz, Andrzej B. Kesik, Donald Laurier, Sten Folving, Jean Denègre, Janos Lerner. \$105.00 hardcover. (ISBN 0-08-042351-5)

*Reviewed by Michael P. Peterson
Department of Geography/Geology
University of Nebraska at Omaha*

The stated purpose of this book is to present methods for producing maps from satellite images. It is intended for "inexperienced satellite imagery users desiring practical guidance on methods employed and their expected results." Of the five chapters, four examine two general technical problems: 1) how to interpret the collected data, and 2) how to integrate the information acquired from conventional cartography. The remaining chapter, by far the longest, describes the methods and includes examples for the production of maps from satellite imagery. This chapter includes most of the black and white and all of the color images.

The first chapter describes the characteristics of different remote sensing satellites, especially for cartographic applications. It examines the spectral, spatial, and temporal resolutions of twenty

different satellite systems, including those for weather, oceanography, geology, and environmental applications. The chapter takes a historical approach, beginning with a description of meteorological satellites, then discussing the land observation satellite systems of the 1970s and 1980s, and finally providing an overview of other systems from Russia (COSMOS), India (IRS-IA), Japan (MOS-1), Germany (MOMS), and the U.S. Space Shuttle radar imagery.

The second chapter concerns the process of extracting information from satellite imagery. The fourteen page chapter examines both the methods of visual image interpretation and computer-assisted image analysis. The first part of the chapter looks at the elements of the interpretation process, including tone, color, and texture. The second part of the chapter looks at image preprocessing (radiometric and geometric corrections), image enhancement (contrast and spatial enhancement), and image classification (minimum distance to means, parallelepiped, and maximum likelihood). The last part of the chapter examines accuracy in image classification.

The third chapter looks at the methods for combining satellite imagery with maps. Topics include image/map registration, mosaicing, radiometric processing, and GIS techniques. A major part of the chapter concerns the color transformations that are needed to create an image that looks as "natural" as possible for use of a satellite image as a map background.

Chapter four (nine pages) concerns the design and "semiology" of image map representations. A majority of the chapter looks at typography or lettering. Other parts of the chapter cover the relevant cartographic techniques for selection of information, cartographic representation, and design.

The last chapter, Chapter 5, describes a number of different applications for satellite image mapping. At 110 pages, this chapter represents the core of the book. It is divided into twenty sections, each about six pages in length, and presented in both English and French. Each section describes a specific application, including the mapping of land use/land cover, urban areas, soil, agriculture, coastal zone areas, ice and snow fields, vegetation, flood-zone areas, and the representation of three-dimensional landscapes. The international aspect of the book is apparent in this chapter. A total of sixteen different countries are represented. The specific applications make use of a number of different sensor platforms. Of the applications, four involve the use of SPOT imagery, three use LANDSAT Thematic Mapper (TM) imagery, four combine SPOT and TM imagery, three use AVHRR (Advanced Very High Resolution Radiometer) imagery, and one uses imagery from the LANDSAT multispectral scanner (MSS).

After Chapter 5, Chapters 1 through 4 are presented in French. Considerable effort has been taken to translate the text, including the text within the illustrations. However, the first two chapters still contain English text within the individual figures. Chapters 3 and 4 have French text throughout.

In one respect, the book is short. Of the total 269+ pages in the book, only about ninety pages are text in one language. But, the pages are somewhat bigger so that there is still a considerable amount of text. The best aspect of the book is the discussion of the different applications in Chapter 5. In general, the applications make use of existing technology rather than demonstrating new innovations. The discussion of each application (presented in French and English) is brief and is presented in a manner similar to a "poster session" at a conference. The color

images vary from high-resolution photographs to ink-jet printed image classifications with a limited number of colors. Almost all of the images are the result of some type of image classification procedure. Although some have been annotated with text, few contain a reference map or other ancillary data to help locate the image. One wishes the images could have been printed at a larger size since much of the detail in the images is lost.

The information in Chapter 1 through 3 represents a summary of the major remote sensing topics as one would find in any of the current textbooks on the subject. Chapter 4 attempts to integrate some cartographic theory to satellite image mapping. The information here is derived from books on cartography, including Bertin's book on the "Semiology of Graphics." In total, these chapters provide some necessary background to the discussion of the applications in Chapter 5. However, few of the image maps in Chapter 5 make use of the cartographic techniques that are discussed in Chapter 4.

The most significant contribution of the book is that it provides some general guidelines for how information from maps and images can be combined and how images can be annotated with information from maps. The initial chapters provide necessary information concerning the general transformations and other aspects involved in the computer processing of the satellite imagery. It presents some interesting approaches for the application of remote sensing techniques for examining a variety of environmental problems.

Thematic Mapping from Satellite Imagery: A Guidebook is an organized and accessible discussion of current methods and applications in remote sensing. The editor has succeeded in creating a well-organized, dual-

language book that summarizes the major remote sensing techniques, shows what is currently possible with the technology, and describes a set of applications from a number of different countries. The two languages have been incorporated in an effective manner. Separating the languages in the first four chapters and combining them in Chapter 5 was a good approach. The figures are legible and the numerous color images have been professionally printed. The applications from different countries indicate the degree to which the technology is being applied around the world. The book does not quite achieve its stated objective of being a pedagogical device, however, because the major topics have been treated in a cursory manner. Overall, the book seems to be intended for people who have considerable prior experience in remote sensing. □

BOOK REVIEW

American Places Dictionary: A Guide to 45,000 Populated Places, Natural Features, and other Places in the United States.

Frank R. Abate (ed.) Detroit : Omnigraphics, Inc., 1994. 4 v. Cloth, price \$350.00/set (\$100.00/vol). (ISBN 1-55888-147-4)

*Reviewed by Christopher Baruth
AGS Collection
University of Wisconsin-Milwaukee*

The American Places Dictionary is a hefty four volume work which contains select information on 45,000 populated places in the United States. The work is arranged geographically: each volume contains the states in a region of the country (Northeast; South; Midwest; West) which are, in turn, arranged by county. For each state there is an introductory section containing summary