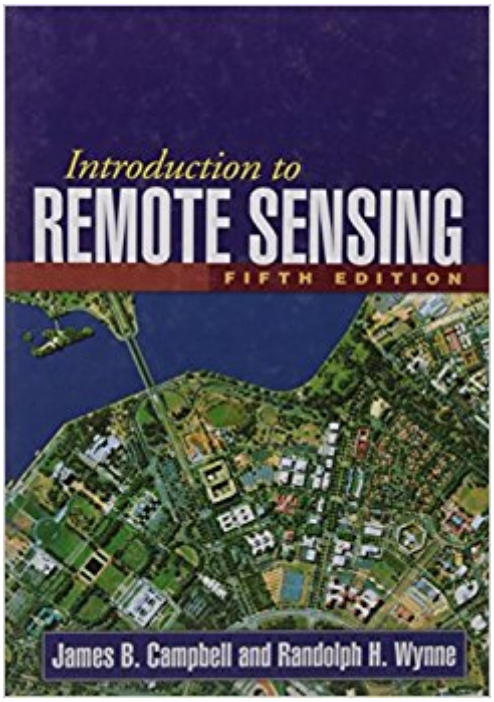
Introduction To Remote Sensing, Fifth Edition



Synopsis

A leading text for undergraduate- and graduate-level courses, this book introduces widely used forms of remote sensing imagery and their applications in plant sciences, hydrology, earth sciences, and land use analysis. The text provides comprehensive coverage of principal topics and serves as a framework for organizing the vast amount of remote sensing information available on the Web. Including case studies and review questions, the book’s four sections and 21 chapters are carefully designed as independent units that instructors can select from as needed for their courses. Illustrations include 29 color plates and over 400 black-and-white figures.New to This Edition*Reflects significant technological and methodological advances.*Chapter on aerial photography now emphasizes digital rather than analog systems.*Updated discussions of accuracy assessment, multitemporal change detection, and digital preprocessing.*Links to recommended online videos and tutorials.Â

Book Information

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Customer Reviews

"This text is irreplaceable and has stood the test of time. It is a godsend for my remote sensing classes; students are guided by the book’s logical structure, authoritative writing, liberal use of examples, and clear illustrations. The fifth edition offers an excellent opportunity to brush up on the rapidly changing face of remote sensing, as underlined by a separate chapter on change detection."--Victor Mesev, Department of Geography, Florida State UniversityÂ "Introduction to Remote Sensing deserves its excellent reputation as one of the preeminent textbooks for

undergraduate courses in remote sensing and image processing.Â It has proven very economical for my students as I can use it in complementary courses on introductory remote sensing and image processing. Like prior editions, the fifth edition provides students with critical information on how to design and conduct a remote sensing project, including acquisition of field data. Comprehensive and up to date, this is an essential text for our dynamic discipline."--Paul Treitz, Department of Geography, Queenâ ™s University, CanadaÂ "The fifth edition of this outstanding text maintains the high standards that faculty and students have enjoyed in previous editions. It provides one of the best-organized, most accessible treatments available. The inclusion of extensive references and, especially, additional learning resources easily enables instructors to explore topics in more depth as desired. I am particularly impressed with how Campbell and Wynne have admirably met the challenge of keeping the text up to date with respect to new analytical methods, always a challenge in this ever-changing field. The full section on change detection is another welcome addition."--Rick L. Lawrence, Department of Land Resources and Environmental Sciences, Montana State UniversityÂ "Introduction to Remote Sensing is the cornerstone of the reading list for my undergraduate environmental remote sensing course. The book is structured to have a clear and logical progression that guides students into the subject and builds a comprehensive knowledge base. Each chapter is highly informative, providing information that is easy to digest and fully contextualized with relevant examples and suitable illustrations. The revised questions at the end of each chapter provide an excellent opportunity for reflective learning. Overall, this book is an essential read for my students which has proven over the years to stand them in good stead."--Ross Hill, School of Applied Sciences, Bournemouth University, United Kingdom"This well-established introductory textbook covers all aspects of classical remote sensing, from basic physics and image acquisition to analytic techniques and applications in a wide range of areas. Given the continued rapid development of remote sensing--for example, the increased use of satellite imagery, digital cameras, and Lidar--the publication of the fifth edition is timely. As a teacher, I find the list of relevant Web addresses after most chapters to be especially valuable."--HÃ¥kan Olsson, Department of Forest Research Management, Swedish University of Agricultural Sciences"The text provides comprehensive coverage of principal topics and serves as a framework for organizing the vast amount of remote sensing information available on the web. Featuring case studies and review questions, the book’s 21 chapters are carefully designed as independent units that instructors can select from as needed for their courses." (Lunar and Planetary Information Bulletin 2011-12-03)"An outstanding guide to the student as well as the experienced user of remotely sensed data. The book provides a clear overview and context for further study. The transition from analog to digital is

explained extremely well without leaving out the fundamentals required to have a complete understanding. New topics including object-based image analysis are included. This book is an excellent text for an introductory remote sensing course. It is also an appropriate addition to anyone's library who is trying hard to keep up with all the changes in the remote sensing technology. This book has a valued place on my bookshelf." (Photogrammetric Engineering and Remote Sensing 2012-06-01)

James B. Campbell is Professor of Geography at Virginia Tech, where he teaches remote sensing, quantitative methods, and geomorphology. He has worked closely with students and faculty in related fields such as forestry, geology, agronomy, environmental sciences, and planning. Since 1997 he has served as Codirector of Virginia Techâ ™s Center for Environmental Applications of Remote Sensing (CEARS). The author of numerous technical articles and several books, Dr. Campbell has received the Outstanding Service Award and the Fellow Award of the American Society for Photogrammetry and Remote Sensing. He is also a recipient of the Outstanding Service Medal awarded by the Remote Sensing Specialty Group of the Association of American Geographers. Dr. Campbell has been active in the AmericaView Program, including service as a principal investigator for the VirginiaView consortium and as a member and chair of the AmericaView Board of Directors.Â Randolph H. Wynne is Professor in the Forest Resources and Environmental Conservation Department at Virginia Tech. He also serves as Remote Sensing Team Leader for the Forest Productivity Cooperative, Associate Director of the Conservation Management Institute, and Codirector of CEARS. He teaches courses in forest photogrammetry and spatial data processing and remote sensing of natural resources. Dr. Wynneâ ™s research interests are in the applications of remote sensing to forestry, natural resource management, ecology, ecosystem services, and earth system science.

This book is very informative, but it is not readable unless one has a good deal of background in remote sensing. My problem is it is written in such a difficult way that it is very hard to learn anything. It seems the authors strive to use the most difficult and shrouded language possible when describing basic concepts. I spent my semester deciphering what they meant and I was constantly looking up more accessible information online which was worded in everyday language. Not helpful for beginning students, other than the first chapter or so on history of remote sensing. If you wish to learn about the topic, I highly recommend getting another textbook so you can actually learn rather than untwist the meanings behind each unnecessarily complicated sentence. In other words, NO.

Awesome! Thanks for the speedy delvery!

Great insight into what Remote Sensing is and where it is going. This book does a great job explaining the concepts associated with remote sensing.

This book is informative and easy to read. It offers logical progressions into the subject without overwhelming even the student reader.

Has everything you need to know about remote sensing I have enjoyed using this book. Also, the book was as expected and on time.

This book covers all of the basics as well as some advanced material so I'd highly recommend it for any student serious about remote sensing. The diagrams/pics were very helpful and it was a great supplement to my lecture.

This book is one of the very good reference book int he domain (remote sensing).Good pictures, nice overview of the field of study, and it covers most of the parts from the science behind to the applications.Even though it's not the book you need for a precise and complete study of a subject in particular, it's really worth it to have it in your library.I bought it used, saving a appreciable amount of money, and still, the book is wonderful. No scratch, torn page nor highlight (which I hate so much).I strongly recommend both this book and the used section of . I've never been disappointed (read the description and aim for acceptable and up considering quality).

Good book. Came in good condition.

Edition) Introductory Digital Image Processing: A Remote Sensing Perspective (4th Edition) (Pearson Series in Geographic Information Science) Fundamentals of Satellite Remote Sensing: An Environmental Approach, Second Edition Archaeology, Volcanism, and Remote Sensing in the Arenal Region, Costa Rica Remote Sensing and Image Interpretation Hydrologic Remote Sensing: Capacity Building for Sustainability and Resilience Making Spatial Decisions Using GIS and Remote Sensing: A Workbook Bio-optical Modeling and Remote Sensing of Inland Waters Photogrammetry and Remote Sensing Remote Drone Pilot Certification Study Guide: Your Key to Earning Part 107 Remote Pilot Certification Remote Viewing: The Complete User's Manual for Coordinate Remote Viewing Sensing the Rhythm: Finding My Voice in a World Without Sound