

Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3)

From CRC Press

Donwload Read Online

Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press

A volume in the **Remote Sensing Handbook** series, **Remotely Sensed Data Characterization, Classification, and Accuracies** documents the scientific and methodological advances that have taken place during the last 50 years. The other two volumes in the series are *Land Resources Monitoring, Modeling, and Mapping with Remote Sensing*, and *Remote Sensing of Water Resources, Disasters, and Urban Studies.*

This volume demonstrates the experience, utility, methods, and models used in studying a wide array of **remotely sensed data characterization, classification, and accuracies for terrestrial applications**. Leading experts on global geographic coverage, study areas, and array of satellite and sensors contribute to this unique handbook. This theoretical as well as highly practical book represents a thorough history of advancement in the field over last 50 years, bringing us to where we are now, and highlighting future possibilities.

Highlights include:

Remote-sensing law or space law, and a host of other topics Considered ***magnum opus*** on the subject**,** the three-volume ***Remote Sensing Handbook*** **is edited by Dr. Prasad S. Thenkabail** of the United States Geological Survey and a renowned international expert in remote sensing and GIScience, with contributions from the very best leading global experts, the handbook gives you a knowledge base on the evolution of remote sensing science, current state-of-the-art technology, and a future vision for the field.

Download Remotely Sensed Data Characterization, Classificat ...pdf

Read Online Remotely Sensed Data Characterization, Classific ...pdf

Download Remotely Sensed Data Characterization, Classificat ...pdf

Read Online Remotely Sensed Data Characterization, Classific ...pdf

Download and Read Free Online Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press

Editorial ReviewReview

Here Is What Top Global Remote Sensing Experts Say about the Remote Sensing Handbook, Three-Volume Set1. Remotely Sensed Data Characterization, Classification, and Accuracies 2. Land Resources Monitoring, Modeling, and Mapping with Remote Sensing 3. Remote Sensing of Water Resources, Disasters, and Urban Studies"I have had the pleasure and honor to be involved in the field of remote sensing for nearly 50 years. To say that much has changed and been accomplished in this field over this time period is a severe understatement. It would require literally hundreds of experts on a global basis to characterize the history, scope, utility, dynamism, and future outlook for remote sensing. It is this exact feat that is accomplished through the contributions of over 300 highly respected, international researchers and practitioners in the production of ***Remote Sensing Handbook*** **(three volumes)**. This comprehensive treatise sets a new standard for spanning and integrating discussion of remote sensing principles, data, methods, development, applications, and scientific and social context. It will be an invaluable multidisciplinary reference for many years to come."

? Dr. Thomas M. Lillesand, Emeritus Professor of Remote Sensing, University of Wisconsin-Madison, USA, and chief author of the most widely read *Remote Sensing and Image Interpretation* "It is a great pleasure to be asked to endorse this comprehensive new book. It is a truly ambitious task to bring together so much information about remote sensing and the range of the material covered is impressive. It puts one in mind of the *Manual of Remote Sensing*, first edition 1975, second edition 1983. While much of the basic information in that earlier book is still valid, things have moved on and there was clearly scope for a new approach. In those early days, the systems flown in space were the early Landsat satellites and the polar orbiting and geostationary meteorological satellites. There are now multitudinous instruments and satellite systems flown in space; there have been many new algorithms developed for the processing of the remotely sensed data; and there are many new applications of remotely sensed data. It was time for a new comprehensive overview of the whole subject and Dr. Thenkabail has achieved an excellent project which I hope will be very useful to established researchers and to new postgraduate students in the field of remote sensing."

? Professor Arthur Cracknell, co-Editor–in-Chief of the *International Journal of Remote Sensing* (IJRS), and Emeritus Professor, University of Dundee, Scotland UK "At a time when satellite remote sensing technologies and methods are advancing so rapidly, it is good to see an up-to-date handbook covering a broad range of remote sensing topics from different international authors, with different perspectives. The handbook will be useful for students as well as practitioners using remote sensing data. I congratulate the editor for compiling this three-volume handbook, which was clearly a major undertaking."

? Dr. Christopher Justice, Professor and Departmental Chairperson, Department of Geographical Sciences, University of Maryland College Park, USA; Program Scientist, NASA Land-coverLand-use Change Program; 2014 individual Pecora Award winner"Written by leading and well accomplished remote sensing scientists of the world and competently edited by Prasad S. Thenkabail, this edition of the ***Remote Sensing Handbook*** (Vol. I, II, and III) is a compendium of information for many research areas of our Planet that have contributed to our substantial progress since the 1970s. The remote sensing community is now using multiple sources of satellite and in situ data to advance our studies… The chapters in the ***Remote Sensing Handbook*** provide many other specific studies on land, water, and other applications using Earth observation data of the last five decades…. Remote sensing is now important to a large number of scientific disciplines beyond our community and I recommend the ***Remote Sensing Handbook*** to not only remote sensers but to the entire scientific community."

? Taken from the foreword by Dr. Compton J. Tucker**,** Senior Earth Scientist, Earth Sciences Division, Science and Exploration Directorate, NASA Goddard Space Flight Center (GSFC)

"This three-volume ***Remote Sensing Handbook*** is a tour de force. Dr. Thenkabail has assembled a world-

class group of scientists to write on a range of topics from the fundamental science of remote sensing to practical applications for urban and disaster risk management. This will be an indispensable volume for both scientists and practitioners alike, whether you are looking to expand your knowledge to new domains, or deepen your understanding of a particular topic. There are few books on the market that combine the breadth and depth of remote sensing science across many of the most pressing environmental issues today."
? Karen C. Seto, Associate Dean of Research and Professor of Geography and Urbanization, Yale School of Forestry and Environmental Studies, Yale University, New Haven, CT, USA
"Dr. Thenkabail is a well-known expert of remote sensing and an experienced editor. This three-volume handbook is one of a kind, covering the areas ranging from remote sensors, systems, algorithms to environmental applications. Many chapters focus on emerging topics in the field, and are written by top experts in the world. This set of books will be very valuable for researchers, students, and practitioners who are interested in learning the rapidly evolving nature and the state of the art in the field of remote sensing."
?Dr. Qihao Weng, Editor-in-Chief, *ISPRS Journal of Photogrammetry & Remote Sensing*; Director, Center for Urban and Environmental Change; Professor, Department of Earth & Environmental Systems, Indiana State University, Terre Haute, IN , USA"The ***Remote Sensing Handbook*** (Three-Volume Set) belongs in every university library and on the shelf of every scientist or manager who uses remote sensing as part of his or her toolkit. The breadth, depth, and quality of this compendium is remarkable, and will serve as an effective springboard for even greater advances in the field in the decades to come."
? Dr. Randolph Wynne, Professor of Forestry. Remote Sensing, The Department of Forest Resources and Environmental Conservation, Virginia Tech, USA"The comprehensive three-volume, 82-chapter, ***Remote Sensing Handbook*** provides excellent coverage of the research and application of remote sensing to our natural and built ecosystems. It examines how remote sensing, related established technologies (e.g., GIS and GPS), and currently rapidly-developing technologies (e.g., crowd-sourcing and Google-Earth) can, and will, be used to better understand the processes that underpin our ecosystems. Dr. Prasad Thenkabail has assembled over 300 authors who summarise the wealth of information in a manner that provides the reader with request knowledge, while also providing insight and food-for-thought for future remote sensing researchers and users."
? Dr. **Tim** R. **McVicar,** Research Scientist, CSIRO Land and Water, Australia
"Remote sensing is an important source of information for monitoring changes and providing evidences for policy formulation in the field of agriculture and food security, forest monitoring, biodiversity loss, water resources management, impact of climate change, depletion of ozone layer, growing human settlements, and disaster reduction.. In coming years, the remote sensing technologies will play increasingly significant roles in monitoring sustainable development goals. ***Remote Sensing Handbook***, edited by Dr. Prasad S. Thenkabail, a leading scientist in the field, is a monumental piece of work. Three volumes cover almost every aspect of remote sensing technologies and applications, and undoubtedly [this] is the most comprehensive and up–to-date publication in this field in recent years. This is a must-have book in every library and for remote sensing practitioners."
? Dr. Ashbindu Singh, Ph.D., President of Environmental Pulse Institute and formerly Director of the Early Warning and Emerging Environmental Issues, United Nations Environment Programme "Over the past five decades, advancements in the technology, science and applications of environmental remote sensing have revolutionized humankind’s ability to observe and understand the patterns and processes that comprise our global Earth system. The three-volume ***Remote Sensing Handbook*** is a towering, landmark achievement in the timeline of scientific literature that documents this progress. It is a seminal, contemporary reference, with more than 80 chapters across the spectrum of remote sensing topics?contributed by leading experts whose careers collectively span most (if not all) of these five decades and contributed directly to the field’s rapid progress. As scientists, governments, resource managers and the general public increasingly rely on remotely sensed data and information to assess and respond to the challenges of environmental change, the ***Remote Sensing Handbook*** is a timely and welcome resource. The three volumes, individually and together, will benefit a broad audience, including remote sensing professionals, students, and others seeking

comprehensive, authoritative information on the past progress, current capabilities and methods, and future directions of this fast-paced field. The books are truly an amazing achievement. The editor has organized and motivated more than 300 researchers in coalescing and distilling 50 years of progress with unparalleled scope and depth. And it comes at just the right time, when "taking stock" is important and appropriate, as the baton is gradually being passed to younger generations of researchers. And for that I say congratulations."
? Dr. Dennis Dye, Research Geographer, U. S. Geological Survey "The ***Remote Sensing Handbook*** provides an invaluable service to anyone working on the theory and applications of remote sensing. It comprehensively covers the basics of remote sensing, methods for interpreting data, and a large range of applications from disaster management to urban planning. These volumes are a one-stop-shop for those applying remote sensing data to land and water resources."
? Dr. Ruth S. DeFries, Denning Professor of Sustainable Development and Professor and MacArthur Fellow, 2007 Department of Ecology, Evolution, and Environmental Biology, Columbia University, USA "The three volumes that make up the ***Remote Sensing Handbook*** represent a magnificent achievement in documenting the current status and future directions in remote sensing. The Handbook draws on the expertise of a diverse array of leading international authorities in remote sensing and provides a superb resource for those wishing to learn more about the subject."
? Prof. Giles Foody, Professor of Geographical Information Science, Faculty of Social Sciences, School of Geography, University of Nottingham, UK. Also, Editor-in-Chief Emeritus, *International Journal of Remote Sensing (IJRS)* "This ***Remote Sensing Handbook*** is the most comprehensive handbook in remote sensing I have ever read. It includes three volumes with eighty-six chapters contributed by more than three hundred international experts. It highlights scientific, methodological, and applicational achievements over the last five decades, and provides guidance for future developments. I believe each researcher and practitioner in remote sensing will find some chapters interesting and instructive."
? Dr. Qian Du, Professor and Bobby Shackhouls Endowed Professorship, Electrical and Computer Engineering Department, Mississippi State University, USA; Editorial Board Member of *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*" (JSTARS), a monthly publication sponsored by the IEEE Geoscience and Remote Sensing Society (GRSS)"The Three-Volume Set of ***Remote Sensing Handbook*** provides readers a thorough understanding of the basic physics and fundamental principles underlying the use of remote sensing data and techniques for a wide array of terrestrial applications. The three volumes consist of contributions from many renowned authors who are experts in their fields. This results in interesting views on the evolution of remote sensing science, state-of-the-art technology, and a future vision for the field. Any given chapter stands alone as a handy reference point from which to gain a thorough understanding of a specific topic. The editor, who is a leading authority on remote sensing science, has done a marvelous job in synthesizing the review articles into a comprehensive overview of a wide array of remote sensing science. I strongly recommend this Handbook to anybody who deals with the subject."
? Dr. Atul K. Jain, Professor, Department of Atmospheric Sciences University of Illinois at Urbana-Champaign, Illinois, USA"This is a timely publication of such an important collection of remote sensing applications in various fields. In particular, one can find excellent examples in this book where authors demonstrated how remotely sensed data can be utilized to address important issues in global change research where terrestrial vegetation dynamics, land resources, and water and carbon cycles are critical elements of the earth system. The information content is rich, technical and very appropriate for understanding important processes of global change."
?Dr. Jiaguo Qi, Director and Professor, Center for Global Change & Earth Observations, Michigan State University, USA"This three-volume book set is a landmark in remote sensing science and technology. It is very well organized with highly descriptive titles, and provides a unique resource on all aspects of remote sensing for both the expert and non-expert. The handbook is a timely snapshot of the wide range of applications in the field, including various types of sensors, data processing, and models. This book will be essential for students, teachers, and experienced users as an updated, extensive review of remote sensing

theories and applications."
? Dr. Guo Huadong, Professor and Director General of Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences; Past President of Committee on Data for Science and Technology (CODATA) International Council for Science (ICSU); and Editor-in-Chief of *International Journal of Digital Earth*
"An expanded update of the classic reference work for remote sensing. Comprehensive, with revised treatments of fundamentals, as well as introductions to a number of cutting-edge topics. A tour de force."
? Dr. Christopher Small, Lamont Doherty Earth Observatory, Columbia University, USA"This latest handbook provides an end-to-end update on remote sensing, the latest theory, newest sensors, processing and calibration details, major new datasets, new science discoveries, and finally new applications. These books are a very fast way to survey the full gamut of remote sensing today."
? Dr. Steven Running, Regents Professor/Director, Numerical Terradynamic Simulation Group (NTSG), College of Forestry & Conservation, University of Montana, Missoula, USA"…an immensely valuable resource for the entire remote sensing and GIS community ranging from the academia and researchers, including beginners as well as graduate scholars at one end to the practitioners and decision and policy makers at the other end."
? Dr. Nilanchal Patel, Professor, Department of Remote Sensing, Birla Institute of Technology Mesra, Ranchi, Jharkhand, India"This book has opened up uncommon opportunities to help farmers and farm scientists in getting accurate data on issues like disease spread, potential yield, and forest cover. I hope this timely book will be widely read and used."
? Dr. M.S.Swaminathan, M S Swaminathan Research Foundation, Recipient of the first World Food prize in 1987"…essential for researchers at all levels interested in using remote sensing to obtain information about the patterns and processes of earth’s land, water, ice, forests and settlements. The interconnected and well-arranged chapters of the handbook emphasize the biophysical and quantitative approaches of remote sensing from a local to global scale."
? P K Joshi, Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India
"The wide array of topics covered is truly amazing and all encompassing. It is a complete and comprehensive coverage of the state-of-the-art remote sensing, capturing the advances that have taken place over the past five decades and their applications. This handbook will become an indispensible resource for anyone who is working in the field of remote sensing."
? D. Nagesh Kumar, Chairman, Centre for Earth Sciences (CEaS); Professor, Dept. of Civil Engineering, Indian Institute of Science, Bangalore, India Users Review**From reader reviews:**
Bertie Lewis:This Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book will be information inside this guide incredible fresh, you will get data which is getting deeper you read a lot of information you will get. This kind of Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) without we realize teach the one who reading it become critical in imagining and analyzing. Don't be worry Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) can bring whenever you are and not make your carrier space or bookshelves' become full because you can have it inside your lovely laptop even telephone. This Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) having great arrangement in word as well as layout, so you will not feel uninterested in reading.
Tim Walton:Hey guys, do you wants to finds a new book to see? May be the book with the title Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) suitable to you? The particular book was written by popular writer in this era. The particular book untitled Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3)is the main one of several books that will everyone read now. This book was inspired a lot of people in the world. When you read this reserve you will enter the new way of measuring that you ever know

before. The author explained their thought in the simple way, so all of people can easily to comprehend the core of this publication. This book will give you a lots of information about this world now. So that you can see the represented of the world in this particular book.

Laquita Horton:Reading a publication tends to be new life style in this era globalization. With looking at you can get a lot of information that could give you benefit in your life. Together with book everyone in this world could share their idea. Textbooks can also inspire a lot of people. Many author can inspire their particular reader with their story as well as their experience. Not only the storyline that share in the ebooks. But also they write about advantage about something that you need example. How to get the good score toefl, or how to teach your young ones, there are many kinds of book that exist now. The authors in this world always try to improve their proficiency in writing, they also doing some analysis before they write to the book. One of them is this Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3).

Warner Gomez:Is it you actually who having spare time after that spend it whole day by means of watching television programs or just laying on the bed? Do you need something new? This Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) can be the respond to, oh how comes? The new book you know. You are therefore out of date, spending your spare time by reading in this new era is common not a nerd activity. So what these books have than the others?

Download and Read Online Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press #0PYK4QFVD56

Read Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press for online ebookRemotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press books to read online.Online Remotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press ebook PDF downloadRemotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press DocRemotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press MobipocketRemotely Sensed Data Characterization, Classification, and Accuracies (Remote Sensing Handbook) (Volume 3) From CRC Press EPub