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Introductory Remote Sensing Principles and Concepts

Routledge Introduction to Remote Sensing: Digital Image Processing and Applications presents a unique textbook/downloadable resources package. It explains how digital images can be processed and offers practical hands-on experience of image processing. This package, which is ideal for student self-study, institutional or library purchase, shows how digital images can be processed to maximize information output and discusses a range of environmental monitoring techniques. A range of case studies are explored, drawn from a variety of disciplines and from across the world. The book also includes a practical manual of image processing instruction and detailed practical exercises to support the unique downloadable resources which accompanies the book. The downloadable resources contain fully functioning image processing software - a limited edition of DRAGON software developed specifically for readers of Introductory Remote Sensing - and over 70 satellite digital datasets for 9 scenes across America, Ireland, China, Sudan, Peru, Western Europe and the UK.

Introductory Remote Sensing Principles and Concepts

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Geographic Information

Greenwood Publishing Group Explores geographic information available through several sources including the Internet and satellite technology, covering such topics as map basics, geographic information systems, and geographical standards.

Introduction to Remote Sensing

CRC Press This comprehensive introductory text presents a timely overview of the most widely used forms of remote sensing imagery and their applications in plant sciences, hydrology, earth sciences, and land-use analysis.

Wildland Fire Management Handbook for Sub-Sahara Africa

African Minds Africa is a fire continent. Since the early evolution of humanity, fire has been harnessed as a land-use tool. Many ecosystems of Sub-Sahara Africa that have been shaped by fire over millennia provide a high carrying capacity for human populations.

Geoinformation

Remote Sensing, Photogrammetry and Geographic Information Systems, Second Edition

CRC Press Written by a renowned expert, Geoinformation: Remote Sensing, Photogrammetry and Geographic Information Systems, Second Edition gives you an overarching view of how remote sensing, photogrammetry, and geographic information systems work together in an interdisciplinary manner. The book presents the required basic background of the geoinformatics co

A Primer of GIS, Second Edition

Fundamental Geographic and Cartographic Concepts

*Guilford Publications This accessible text prepares students to understand and work with geographic information systems (GIS), offering a detailed introduction to essential theories, concepts, and skills. The book is organized in four modular parts that can be used in any sequence in entry-level and more specialized courses. Basic cartographic principles are integrated with up-to-date discussions of GIS technologies and applications. Coverage includes everything from what geographic information is to its many uses and societal implications. Practical examples and exercises invite readers to explore the choices involved in producing reliable maps and other forms of geographic information. Illustrations include 170 figures (with 15 in color). The companion website provides links to Web resources for each chapter, plus downloadable PowerPoint slides of most of the figures. New to This Edition *Chapter on online mapping and Big Data. *New and updated discussions of remote sensing, vector and raster data models, location privacy, uses of geocoding, and other timely topics. *Chapter on the many uses of GIS, such as in market analyses, emergency responding, and tracking of epidemics. *Section overviews and an end-of-book glossary. Pedagogical Features *Modules and individual chapters can be used sequentially or in any order. *End-of-chapter review questions with answers, exercises, and extended exercises for applying theories and concepts. *In-Depth" sidebars offering a closer look at key concepts and applications. *End-of-chapter links to relevant Web resources.*

Introduction to Modern Instrumentation

For Hydraulics and Environmental Sciences

Walter de Gruyter GmbH & Co KG Natural hazards and anthropic activities threaten the human environment. The gathering of field data is needed so as to quantify the impact of such activities. To gather the necessary data researchers nowadays use a great variety of new instruments based on electronics. Yet, the working principles of this new instrumentation might not be well understood by some potential users. All operators of these new tools must gain proper insight so as to be able to judge whether the instrument is selected appropriately and functions adequately. This book attempts to demonstrate some characteristics that are not easy to understand by the uninitiated in the use of electronic instruments. The material presented in this book was prepared with the purpose of reflecting the technological changes that have occurred in environmental modern instrumentation in the last few decades. The book is intended for students of hydrology, hydraulics, oceanography, meteorology and environmental sciences. Basic concepts of electronics, special physics principles and signal processing are introduced in the first chapters in order to enable the reader to follow the topics developed in the book, without any prior knowledge of these matters. The instruments are explained in detail and several examples are introduced to show their measuring limitations. Enough mathematical fundamentals are given to allow the reader to reach a good quantitative knowledge.

Key Methods in Geography

SAGE Key Methods in Geography is an introduction for undergraduates to the principal methodological issues involved in the collection, analysis and presentation of geographical information. It provides an accessible primer, which will be used by students as a reference throughout their degree, on all issues from research design to presentation. A unique feature of the book is that it provides definitions of terms from both human geography and physical geography. Organized into four parts: Getting Started in Geographical Research; Data Collection in Human Geography; Data Collection in Physical Geography; Analyzing and Representing Geographical Data. Each chapter is comprised of a short definition, a summary of the principal arguments, a substantive 5,000-word discussion, the use of real-life examples, and annotated notes for further reading. The teaching of research methods is integral in all geography courses. Key Methods in Geography identifies the key analytical and observational strategies with which all geography undergraduates should be conversant.

Handbook of Space Law

Edward Elgar Publishing The Handbook of Space Law addresses the legal and regulatory aspects of activities in outer space and major space applications from a comprehensive and structured perspective. It fundamentally addresses the dichotomy between the state-oriented character

Engineering and Science of Biomass Feedstock Production and Provision

Springer Science & Business Media The biomass based energy sector, especially the one based on lignocellulosic sources such as switchgrass *Miscanthus*, forest residues and short rotation coppice, will play an important role in our drive towards renewable energy. The biomass feedstock production (BFP) subsystem provides the necessary material inputs to the conversion processes for energy production. This subsystem includes the agronomic production of energy crops and the physical handling and delivery of biomass, as well as other enabling logistics. Achieving a sustainable BFP system is therefore paramount for the success of the emerging bioenergy sector. However, low bulk and energy densities, seasonal and weather sensitive availability, distributed supply and lack of commercial scale production experience create unique challenges. Moreover, novel region specific feedstock alternatives continue to emerge. Engineering will play a critical role in addressing these challenges and ensuring the techno-economic feasibility of this sector. It must also integrate with the biological, physical and chemical sciences and incorporate externalities, such as social/economic considerations, environmental impact and policy/regulatory issues, to achieve a truly sustainable system. Tremendous progress has been made in the past few years while new challenges have simultaneously emerged that need further investigation. It is therefore prudent at this time to review the current status and capture the future challenges through a comprehensive book. This work will serve as an authoritative treatise on the topic that can help researchers, educators and students interested in the field of biomass feedstock production, with particular interest in the engineering aspects.

Introduction to the Physics and Techniques of Remote Sensing

John Wiley & Sons The science and engineering of remote sensing--theory and applications The Second Edition of this authoritative book offers readers the essential science and engineering foundation needed to understand remote sensing and apply it in real-world situations. Thoroughly updated to reflect the tremendous technological leaps made since the publication of the first edition, this book covers the gamut of knowledge and skills needed to work in this dynamic field, including: * Physics involved in wave-matter interaction, the building blocks for interpreting data * Techniques used to collect data * Remote sensing applications The authors have carefully structured and organized the book to introduce readers to the basics, and then move on to more advanced applications. Following an introduction, Chapter 2 sets forth the basic properties of electromagnetic waves and their interactions with matter. Chapters 3 through 7 cover the use of remote sensing in solid surface studies, including oceans. Each chapter covers one major part of the electromagnetic spectrum (e.g., visible/near infrared, thermal infrared, passive microwave, and active microwave). Chapters 8 through 12 then cover remote sensing in the study of atmospheres and ionospheres. Each chapter first presents the basic interaction mechanism, followed by techniques to acquire, measure, and study the information, or waves, emanating from the medium under investigation. In most cases, a specific advanced sensor is used for illustration. The book is generously illustrated with fifty percent new figures. Numerous illustrations are reproduced in a separate section of color plates. Examples of data acquired from spaceborne sensors are included throughout. Finally, a set of exercises, along with a solutions manual, is provided. This book is based on an upper-level undergraduate and first-year graduate course taught by the authors at the California Institute of Technology. Because of the multidisciplinary nature of the field and its applications, it is appropriate for students in electrical engineering, applied physics, geology, planetary science, astronomy, and aeronautics. It is also recommended for any engineer or scientist interested in working in this exciting field.

Satellite Image Analysis: Clustering and Classification

Springer Thanks to recent advances in sensors, communication and satellite technology, data storage, processing and networking capabilities, satellite image acquisition and mining are now on the rise. In turn, satellite images play a vital role in providing essential geographical information. Highly accurate automatic classification and decision support systems can facilitate the efforts of data analysts, reduce human error, and allow the rapid and rigorous analysis of land use and land cover information. Integrating Machine Learning (ML) technology with the human visual psychometric can help meet geologists' demands for more efficient and higher-quality classification in real time. This book introduces readers to key concepts, methods and models for satellite image analysis; highlights state-of-the-art classification and clustering techniques; discusses recent developments and remaining challenges; and addresses various applications, making it a valuable asset for engineers, data analysts and researchers in the fields of geographic information systems and remote sensing engineering.

Routledge Handbook of Space Law

Routledge This handbook is a reference work providing a comprehensive, objective and comparative overview of Space Law. The global space economy reached \$330 billion in 2015, with a growth rate of 9 per cent vis-à-vis the previous year. Consequently, Space Law is changing and expanding expeditiously, especially at the national level. More laws and regulations are being adopted by space-faring nations, while more countries are adapting their Space Laws and regulations related to activities in outer space. More regulatory bodies are being created, while more regulatory diversity (from public law to private law) is being instituted as increasing and innovative activities are undertaken by private entities which employ new technologies and business initiatives. At the international level, Space Law (both hard law and soft law) is expanding in certain areas, especially in satellite broadcasting and telecommunications. The Routledge Handbook of Space Law summarises the existing state of knowledge on a comprehensive range of topics and aspires to set the future international research agenda by indicating gaps and inconsistencies in the existing law and highlighting emerging legal issues. Unlike other books on the subject, it addresses major international and national legal aspects of particular space activities and issues, rather than providing commentary on or explanations about a particular Space Law treaty or national regulation. Drawing together contributions from leading academic scholars and practicing lawyers from around the world, the volume is divided into five key parts: • Part I: General Principles of International Space Law • Part II: International Law of Space Applications • Part III: National Regulation of Space Activities • Part IV: National Regulation of Navigational Satellite Systems • Part V: Commercial Aspects of Space Law This handbook is both practical and theoretical in scope, and may serve as a reference tool to academics, professionals and policy-makers with an interest in Space Law.

Telegeoinformatics

Location-Based Computing and Services

CRC Press Telegeoinformatics is a new discipline resulting from the integration of mobile computing with wired and wireless communications, geoinformatics (including GIS and GPS), and remote sensing techniques and technologies. Users of telegeoinformatics from every field will need a comprehensive reference to solve multiple types of problems involving locat

An Introduction to Ocean Remote Sensing

Cambridge University Press Covering significant new advances in satellite oceanography, this new edition introduces remote sensing for graduate and advanced undergraduate students.

Land-use Change in the Northwestern Uplands of Vietnam

Empirical Evidence from Spatial Econometric Models and Geo-referenced Analyses and Policy Implications for Sustainable Rural Development

Cuvillier Verlag

Physical Principles of Remote Sensing

Cambridge University Press A quantitative yet accessible introduction to remote sensing techniques, this new edition covers a broad spectrum of Earth science applications.

Hyperspectral Remote Sensing

Principles and Applications

CRC Press Land management issues, such as mapping tree species, recognizing invasive plants, and identifying key geologic features, require an understanding of complex technical issues before the best decisions can be made. Hyperspectral remote sensing is one the technologies that can help with reliable detection and identification. Presenting the fundamentals of remote sensing at an introductory level, *Hyperspectral Remote Sensing: Principles and Applications* explores all major aspects of hyperspectral image acquisition, exploitation, interpretation, and applications. The book begins with several chapters on the basic concepts and underlying principles of remote sensing images. It introduces spectral radiometry concepts, such as radiance, irradiance, flux, and blackbody radiation; covers imaging spectrometers, examining spectral range, full width half maximum (FWHM), resolution, sampling, signal-to-noise ratio (SNR), and multispectral and hyperspectral sensor systems; and addresses atmospheric interactions. The book then discusses information extraction, with chapters covering the underlying physics principles that lead to the creation of an image and the interpretation of the image's information. The final chapters describe case studies that illustrate the use of hyperspectral remote sensing in agriculture, environmental monitoring, forestry, and geology. After reading this book, you will have a better understanding of how to evaluate different approaches to hyperspectral analyses and to determine which approaches will work for your applications.

A Dictionary of Human Geography

Oxford University Press A Dictionary of Human Geography is a brand new addition to Oxford's Paperback Reference Series, offering over 2,000 clear and concise entries on human geography terms. From basic terms and concepts to biographical entries, acronyms, organisations, and major periods and schools in the history of human geography, it provides up-to-date, accurate, and accessible information. It also includes entry-level web links that are listed and regularly updated on a dedicated companion website. This dictionary is a reliable reference for students of human geography and ancillary subjects, for researchers and professionals in the field, and for interested generalists.

Principles of Remote Sensing

An Introductory Textbook

Encyclopedia of Optical and Photonic Engineering (Print) - Five Volume Set

CRC Press The first edition of the Encyclopedia of Optical and Photonic Engineering provided a valuable reference concerning devices or systems that generate, transmit, measure, or detect light, and to a lesser degree, the basic interaction of light and matter. This Second Edition not only reflects the changes in optical and photonic engineering that have occurred since the first edition was published, but also: Boasts a wealth of new material, expanding the encyclopedia's length by 25 percent Contains extensive updates, with significant revisions made throughout the text Features contributions from engineers and scientists leading the fields of optics and photonics today With the addition of a second editor, the Encyclopedia of Optical and Photonic Engineering, Second Edition offers a balanced and up-to-date look at the fundamentals of a diverse portfolio of technologies and discoveries in areas ranging from x-ray optics to photon entanglement and beyond. This edition's release corresponds nicely with the United Nations General Assembly's declaration of 2015 as the International Year of Light, working in tandem to raise awareness about light's important role in the modern world. Also Available Online This Taylor & Francis encyclopedia is also available through online subscription, offering a variety of extra benefits for researchers, students, and librarians, including: Citation tracking and alerts Active reference linking Saved searches and marked lists HTML and PDF format options Contact Taylor and Francis for more information or to inquire about subscription options and print/online combination packages. US: (Tel) 1.888.318.2367; (E-mail) e-reference@taylorandfrancis.com International: (Tel) +44 (0) 20 7017 6062; (E-mail) online.sales@tandf.co.uk

An Introduction to Laser Spectroscopy

Second Edition

Springer Science & Business Media In the new edition the editors have preserved the basic concept and structure, with the involvement of some new authors - all recognized experts in laser spectroscopy. Each chapter addresses a different technique, providing a review and analysis of the current status, and reporting some of the latest achievements. With the key formulas and methods detailed in many sections, this text represents a practicable handbook of its subject. It will be a valuable tool both for specialists to keep abreast of developments and for newcomers to the field needing an accessible introduction to specific methods of laser spectroscopy - and also as a resource for primary references.

Handbook of Surveillance Technologies

CRC Press From officially sanctioned, high-tech operations to budget spy cameras and cell phone video, this updated and expanded edition of a bestselling handbook reflects the rapid and significant growth of the surveillance industry. The Handbook of Surveillance Technologies, Third Edition is the only comprehensive work to chronicle the background and current

Classification Methods for Remotely Sensed Data

CRC Press Remote sensing is an integral part of geography, GIS and cartography, used by academics in the field and professionals in all sorts of occupations. The 1990s saw the development of a range of new methods of classifying remote sensing images and data, both optical imaging and microwave imaging. This comprehensive survey of the various techniques pul

GEOGRAPHY - Volume II

EOLSS Publications Geography is a component of Encyclopedia of Earth and Atmospheric Sciences in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Geographical perceptions can be traced from very ancient cultures, although geography as a science started its development during the eighteen century, it was firmly established after the Darwinian revolution and many of its fundamentals appeared during the nineteenth century. The history of geography is closely connected with the history of human society Geography embraces both the physical and human worlds, and aims to bridge natural and human sciences. For a geographer, although the environment and its conservation is a crucial item, it is also fundamentally concerned with the living standards of humankind. Although its wide embrace may be seen as a weakness, diversification is also strength and an attraction. Approaches are multidisciplinary, exploring the complex linkages between the cultural and the natural. These favor cross-cultural communication and mutual understanding at a global scale. There is a geographical basis to most of the outstanding political problems, and geographical reasons to explain them. The subject matter of the geography theme is presented basically on how the subject matter is taught presently at the universities, and following the many paths its practitioners are following in doing research. It introduces modern subject matters and goes much further than a simple description of places and travels. The theme has been divided into four main topics: Foundations, Physical Geography, Human Geography, and Technical matters. The scope of the foundation topic is to present an overview of the basis of the geographical field, its scope, history, methods, and its importance in education. The chapters included are Main Stages of the Development, Theory and Methods, and Geographical Education. The Physical Geography topic includes the historical background of the geographical study of the Earth natural environment, and the main fields cultivated by geographers. It consists of eight chapters on basic research fields, which are Geomorphology, Climatology, Hydrology, Biogeography, Soil Geography, Coastal Systems, Ocean Geography, Mountain Geocology, and two chapters on environmental issues: Natural Hazards and Land Degradation and Desertification. In the Human Geography topic six chapters discuss the more current fields, that is: Population, Cultural and Social, Agricultural and Rural, Industries and Transport, Economic Activities and Urban Geography. Three chapters present subjects developed more recently: Medical, Political and Tourism geographies. Finally, the Regional approach is presented as the most traditional and integrative field. These volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Remote Sensing Imagery for Natural Resources Monitoring

A Guide for First-time Users

Columbia University Press The Cambrian radiation was the explosive evolution of marine life that started 550,000,000 years ago. It ranks as one of the most important episodes in Earth history. This key event in the history of life on our planet changed the marine biosphere and its sedimentary environment forever, requiring a complex interplay of wide-ranging biologic and nonbiologic processes. The Ecology of the Cambrian Radiation offers a comprehensive and surprising picture of the Earth at that ancient time. The book contains contributions from thirty-three authors hailing from ten countries and will be of interest to paleontologists, geologists, biologists, and other researchers interested in the global Earth-life system.

Computer Processing of Remotely-Sensed Images

An Introduction

John Wiley & Sons Remotely-sensed images of the Earth's surface provide a valuable source of information about the geographical distribution and properties of natural and cultural features. This fully revised and updated edition of a highly regarded textbook deals with the mechanics of processing remotely-sensed images. Presented in an accessible manner, the book covers a wide range of image processing and pattern recognition techniques. Features include: New topics on LiDAR data processing, SAR interferometry, the analysis of imaging spectrometer image sets and the use of the wavelet transform. An accompanying CD-ROM with: updated MIPS software, including modules for standard procedures such as image display, filtering, image transforms, graph plotting, import of data from a range of sensors. A set of exercises, including data sets, illustrating the application of discussed methods using the MIPS software. An extensive list of WWW resources including colour illustrations for easy download. For further information, including exercises and latest software information visit the Author's Website at: <http://homepage.ntlworld.com/paul.mather/ComputerProcessing3/>

Understanding Surveillance Technologies

Spy Devices, Privacy, History & Applications, Second Edition

CRC Press Understanding Surveillance Technologies demystifies spy devices and describes how technology is used to observe and record intimate details of people's lives often without their knowledge or consent. From historical origins to current applications, it explains how satellites, pinhole cameras, cell phone and credit card logs, DNA kits, tiny m

An Introduction to Atmospheric Radiation

Elsevier This Second Edition of An Introduction to Atmospheric Radiation has been extensively revised to address the fundamental study and quantitative measurement of the interactions of solar and terrestrial radiation with molecules, aerosols, and cloud particles in planetary atmospheres. It contains 70% new material, much of it stemming from the investigation of the atmospheric greenhouse effects of external radiative perturbations in climate systems, and the development of methodologies for inferring atmospheric and surface parameters by means of remote sensing. Liou's comprehensive treatment of the fundamentals of atmospheric radiation was developed for students, academics, and researchers in atmospheric sciences, remote sensing, and climate modeling. Balanced treatment of fundamentals and applications Includes over 170 illustrations to complement the concise description of each subject Numerous examples and hands-on exercises at the end of each chapter

An Introduction to Atmospheric Radiation

Academic Press An Introduction to Atmospheric Radiation

Introduction to Remote Sensing of the Environment

Kendall Hunt Publishing Company

Introduction to Remote Sensing, Fifth Edition

*Guilford Press 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.*

Hyperspectral Imaging Remote Sensing

Physics, Sensors, and Algorithms

Cambridge University Press Understand the seminal principles, current techniques, and tools of imaging spectroscopy with this self-contained introductory guide.

Hyperspectral Remote Sensing

Principles and Applications

CRC Press Land management issues, such as mapping tree species, recognizing invasive plants, and identifying key geologic features, require an understanding of complex technical issues before the best decisions can be made. Hyperspectral remote sensing is one the technologies that can help with reliable detection and identification. Presenting the fundamentals of remote sensing at an introductory level, Hyperspectral Remote Sensing: Principles and Applications explores all major aspects of hyperspectral image acquisition, exploitation, interpretation, and applications. The book begins with several chapters on the basic concepts and underlying principles of remote sensing images. It introduces spectral radiometry concepts, such as radiance, irradiance, flux, and blackbody radiation; covers imaging spectrometers, examining spectral range, full width half maximum (FWHM), resolution, sampling, signal-to-noise ratio (SNR), and multispectral and hyperspectral sensor systems; and addresses atmospheric interactions. The book then discusses information extraction, with chapters covering the underlying physics principles that lead to the creation of an image and the interpretation of the image's information. The final chapters describe case studies that illustrate the use of hyperspectral remote sensing in agriculture, environmental monitoring, forestry, and geology. After reading this book, you will have a better understanding of how to evaluate different approaches to hyperspectral analyses and to determine which approaches will work for your applications.

Encyclopedia of Optical Engineering: Pho-Z, pages 2049-3050

CRC Press Compiled by 330 of the most widely respected names in the electro-optical sciences, the Encyclopedia is destined to serve as the premiere guide in the field with nearly 2000 figures, 560 photographs, 260 tables, and 3800 equations. From astronomy to x-ray optics, this reference contains more than 230 vivid entries examining the most intriguing technological advances and perspectives from distinguished professionals around the globe. The contributors have selected topics of utmost importance in areas including digital image enhancement, biological modeling, biomedical spectroscopy, and ocean optics, providing thorough coverage of recent applications in this continually expanding field.

Introduction to Remote Sensing, Second Edition

CRC Press Addressing the need for updated information in remote sensing, Introduction to Remote Sensing, Second Edition provides a full and authoritative introduction for scientists who need to know the scope, potential, and limitations in the field. The authors discuss the physical principles of common remote sensing systems and examine the processing, interpretation, and applications of data. This new edition features updated and expanded material, including greater coverage of applications from across earth, environmental, atmospheric, and oceanographic sciences. Illustrated with remotely sensed color images from satellites and aircraft, it also outlines data acquisition and analysis. New to this edition: · Details of satellite systems launched since the first edition · Sections on airborne lidar for land surveys and airborne gamma ray spectroscopy · A section on interferometric synthetic aperture radar · Expanded discussions of filtering of images · Updates to a number of recent applications, particularly some that make use of global datasets Suitable for students and professionals with some background in the physical sciences, this book comprehensively surveys the basic principles behind remote sensing physics, techniques, and technology.

A Primer of GIS, First Edition

Fundamental Geographic and Cartographic Concepts

Guilford Press This textbook examines the choices considered when creating geographic representations and cartographic representations, transforming spherical coordinates to planar coordinates, and modeling geographic data. Harvey (geography, University of Minnesota) introduces the three generic options for recording the locations and characteristics of things and events, the principles of remote sensing, map design elements, and geostatistical methods. Fifteen color plates are provided in the middle of the book, while black and white images are scattered throughout.

Advanced Introduction to Space Law

Edward Elgar Publishing Frans von der Dunk, a leading authority on space law, presents a nuanced introduction to the topic, explaining the legal rules, rights and obligations applicable to activities in outer space and activities that precede operations in space. He analyzes the interaction of these elements as well as how international organizations relate to the core tenets of space legislation.

Geospatial Modeling for Environmental Management

Case Studies from South Asia

CRC Press This is a comprehensive resource that integrates the application of innovative remote sensing techniques and geospatial tools in modeling Earth systems for environmental management beyond customary digitization and mapping practices. It identifies the most suitable approaches for a specific environmental problem, emphasizes the importance of physically based modeling, their uncertainty analysis, advantages, and disadvantages. The case studies on the Himalayas with a complex topography call for innovation in geospatial techniques to find solutions for various environmental problems. Features: Presents innovative geospatial methods in environmental modeling of Earth systems. Includes case studies from South Asia and discusses different processes and outcomes using spatially explicit models. Explains contemporary environmental problems through the analysis of various information layers. Provides good practices for developing countries to help manage environmental issues using low-cost geospatial approaches. Integrates geospatial modeling with policy and analysis its direct implication in decision making. Using a systems' approach analysis, Geospatial Modeling for Environmental Management: Case Studies from South Asia shall serve environmental managers, students, researchers, and policymakers.