1. Record Nr. UNINA9910831060403321

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Titolo	Quantitative remote sensing of land surfaces [[electronic resource] /] / Shunlin Liang
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2004
ISBN	1-280-25291-X 9786610252916 0-470-34800-3 0-471-72371-1 0-471-72372-X
Descrizione fisica	1 online resource (562 p.)
Collana	Wiley series in remote sensing
Disciplina	550.287 550/.28/7 624.151
Soggetti	Earth sciences - Remote sensing Environmental sciences - Remote sensing Remote sensing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	QUANTITATIVE REMOTE SENSING OF LAND SURFACES; Contents; Preface; Acronyms; CHAPTER 1 Introduction; 1.1 Quantitative Models in Optical Remote Sensing; 1.2 Basic Concepts; 1.2.1 Digital Numbers; 1.2.2 Radiance; 1.2.3 Solid Angle; 1.2.4 lrradiance; 1.2.5 Bidirectional Reflectances and Albedos; 1.2.6 Extraterrestrial Solar lrradiance; 1.3 Remote Sensing Modeling System; 1.3.1 Scene Generation; 1.3.2 Scene Radiation Modeling; 1.3.3 Atmospheric Radiative Transfer Modeling; 1.3.4 Navigation Modeling; 1.3.5 Sensor Modeling; 1.3.5.1 Spectral Response; 1.3.5.2 Spatial Response 1.3.6 Mapping and Binning1.4 Summary; References; CHAPTER 2 Atmospheric Shortwave Radiative Transfer Modeling; 2.1 Radiative Transfer Equation .; 2.2 Surface Statistical BRDF Models; 2.2.1 Minnaert Function; 2.2.2 Lommel-Seeliger Function; 2.2.3 Walthall Function; 2.2.4 Staylor-Suttles Function; 2.2.5 Rahman Function; 2.2.6 Kernel Functions; 2.3 Atmospheric Optical Properties; 2.3.1 Rayleigh

Scattering; 2.3.2 Mie Scattering; 2.3.3 Aerosol Particle Size Distributions; 2.3.4 Gas Absorption; 2.3.5 Aerosol Climatology; 2.4 Solving Radiative Transfer Equations; 2.4.1 Radiation Field Decomposition
2.4.2 Numerical Solutions2.4.2.1 Method of Successive Orders of Scattering; 2.4.2.2 Method of Discrete Ordinates; 2.4.3 Approximate Solutions: Two-Stream Algorithms; 2.4.4 Representative Radiative Transfer Solvers (Software Packages); 2.5 Approximate Representation for Incorporating Surface BRDF; 2.6 Summary; References; CHAPTER 3 Canopy Reflectance Modeling; 3.1 Canopy Radiative Transfer Formulation; 3.1.1 Canopy Configuration; 3.1.2 One-Dimensional Radiative Transfer Formulation; 3.1.3 Boundary Conditions; 3.1.4 Hotspot Effects; 3.1.5 Formulations for Heterogeneous Canopies
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4.2 Multiple Scattering Solutions for Angular Reflectance from Snow and Soil

Sommario/riassunto

Processing the vast amounts of data on the Earth's land surface environment generated by NASA's and other international satellite programs is a significant challenge. Filling a gap between the theoretical, physically-based modelling and specific applications, this in-depth study presents practical quantitative algorithms for estimating various land surface variables from remotely sensed observations.A concise review of the basic principles of optical remote sensing as well as practical algorithms for estimating land surface variables quantitatively from remotely sensed observations.Emp