

1. Record Nr.	UNINA9910254135503321
Autore	Solimini Domenico
Titolo	Understanding Earth Observation : The Electromagnetic Foundation of Remote Sensing // by Domenico Solimini
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-25633-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (728 p.)
Collana	Remote Sensing and Digital Image Processing, , 1567-3200 ; ; 23
Disciplina	550.28
Soggetti	Geophysics Remote sensing Geomorphology Geophysics/Geodesy Remote Sensing/Photogrammetry
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 at the end of each chapters and index.
Nota di contenuto	Contents Preface.-List of Figures -- List of Tables -- 1. The Electromagnetic Field.-2. Dielectric Behavior of Terrestrial Materials -- 3. Electromagnetic Sources and Radiation -- 4. Waves and Fields.- 5. Propagation -- 6. Reaction -- 7. Scattering -- 8. Thermal Emission -- 9. Radiative Transfer and Passive Sensing -- 10. Electromagnetic Spectrum and Remote Information -- 11. Antennas and Apertures in Earth Observation -- 12. Earth Surface Rendering from Images -- 13. Sensing Surface and Underneath Features -- 14. Wave Interaction with Land, Water and Air -- A. Vectors, Coordinates and operators -- Acronyms -- Symbols.
Sommario/riassunto	This volume addresses the physical foundation of remote sensing. The basic grounds are presented in close association with the kinds of environmental targets to monitor and with the observing techniques. The book aims at plugging the quite large gap between the thorough and quantitative description of electromagnetic waves interacting with the Earth's environment and the user applications of Earth observation. It is intended for scientifically literate students and professionals who plan to gain a first understanding of remote sensing data and of their

information content.

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