1. Record Nr. UNINA9910297408403321 Autore Emery William J. Titolo Introduction to satellite remote sensing: atmosphere, ocean, land and cryosphere applications / / William Emery, Adriano Camps Pubbl/distr/stampa Amsterdam:,: Elsevier,, [2017] ©2017 **ISBN** 0-12-809259-9 0-12-809254-8 Descrizione fisica 1 online resource (857 pages): illustrations Disciplina 621.3678 629.46 Soggetti Remote sensing Climatology - Remote sensing Oceanography - Remote sensing Artificial satellites Scientific satellites Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Chapter 1: The history of satellite remote sensing -- Chapter 2: Basic electromagnetic concepts and applications to optical sensors --Chapter 3: Optical imaging Systems -- Chapter 4: Microwave Radiometry -- Chapter 5: Radar -- Chapter 6: Remote sensing using global navigation satellite system signals of opportunity -- Chapter 7: Orbital mechanics, image navigation, and cartographic projections --Chapter 8: Atmosphere applications -- Chapter 9: Ocean applications -- Chapter 10: Land applications -- Chapter 11: Cryosphere applications -- Chapter 12: Remote sensing with small satellites. Introduction to Satellite Remote Sensing: Atmosphere, Ocean and Land Sommario/riassunto Applications is the first reference book to cover ocean applications. atmospheric applications, and land applications of remote sensing. Applications of remote sensing data are finding increasing application in fields as diverse as wildlife ecology and coastal recreation

management. The technology engages electromagnetic sensors to measure and monitor changes in the earth's surface and atmosphere.

The book opens with an introduction to the history of remote sensing, starting from when the phrase was first coined. It goes on to discuss the basic concepts of the various systems, including atmospheric and ocean, then closes with a detailed section on land applications. Due to the cross disciplinary nature of the authors' experience and the content covered, this is a must have reference book for all practitioners and students requiring an introduction to the field of remote sensing. Provides study questions at the end of each chapter to aid learning Covers all satellite remote sensing technologies, allowing readers to use the text as instructional material Includes the most recent technologies and their applications, allowing the reader to stay up-to-date Delves into laser sensing (LIDAR) and commercial satellites (DigitalGlobe) Presents examples of specific satellite missions, including those in which new technology has been introduced.