1. Record Nr. UNINA9910298381603321

Titolo	Biophysical Applications of Satellite Remote Sensing / / edited by Jonathan Hanes
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-25047-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (236 p.)
Collana	Springer Remote Sensing/Photogrammetry, , 2198-0721 ; v.
Disciplina	621.3678
Soggetti	Artificial satellites Environmental sciences - Remote sensing Biophysics Remote sensing Ecology Remote Sensing/Photogrammetry Biological and Medical Physics, Biophysics Environment, general
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.
Nota di contenuto	Indices of Vegetation Activity / Alfredo Huete, Tomoaki Miura, Hiroki Yoshioka, Piyachat Ratana, Mark Broich -- Green Leaf Area and Fraction of Photosynthetically Active Radiation Absorbed by Vegetation / Sangram Ganguly, Ramakrishna R. Nemani, Frederic Baret, Jian Bi, Marie Weiss, Gong Zhang et al. -- Remote Sensing of Forest Biomass / Xiaoyang Zhang, Wenge Ni-meister -- Land Surface Phenology / Jonathan M. Hanes, Liang Liang, Jeffrey T. Morisette -- Gross Primary Production of Terrestrial Vegetation / Xiangming Xiao, Cui Jin, Jinwei Dong -- Assessing Net Ecosystem Exchange of Carbon Dioxide Between the Terrestrial Biosphere and the Atmosphere Using Fluxnet Observations and Remote Sensing / Jingfeng Xiao -- Oceanic Chlorophyll-a Content / Chuanmin Hu, Janet Campbell -- Oceanic Net Primary Production / Toby K. Westberry, Michael J. Behrenfeld -- Index.
Sommario/riassunto	A variety of biophysical applications (e.g. leaf area index and gross primary productivity) have been derived from measurements of the

Earth system obtained remotely by NASA’s MODIS sensors and other satellite platforms. In Biophysical Applications of Satellite Remote Sensing, the authors describe major applications of satellite remote sensing for studying Earth's biophysical phenomena. The focus of the book lies on the broad palette of specific applications (metrics) of biophysical activity derived using satellite remote sensing. With in-depth discussions of satellite-derived biophysical metrics that focus specifically on theory, methodology, validation, major findings, and directions of future research, this book provides an excellent resource for remote sensing specialists, ecologists, geographers, biologists, climatologists, and environmental scientists.