

1. Record Nr.	UNINA9910350328603321
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Titolo	Scientific Satellite and Moon-Based Earth Observation for Global Change // by Huadong Guo, Wenxue Fu, Guang Liu
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-8031-7
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XLV, 618 p. 186 illus., 147 illus. in color.)
Disciplina	910.285
Soggetti	Remote sensing Geophysics Physical geography Climate change Remote Sensing/Photogrammetry Geophysics/Geodesy Earth System Sciences Climate Change
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Part 1 Earth Observation Satellites -- Development of Earth observation Satellites. -U.S. Earth Observation Satellites -- European Earth Observation Satellites -- Other Earth Observation Satellites.-Chinese Earth Observation Satellites -- Plans of Global Integrated Earth Observation -- Part 2 Scientific Satellite Series for Global Change -- Earth Observation and Scientific Satellites for Global Change -- Atmospheric Carbon Satellite -- Aerosol Satellite -- Night Light Satellite -- Forest Biomass Satellite -- Glacier Satellite -- Ocean Salinity Satellite -- Part 3 New Directions of Global Change Observation from Space -- Network of Multi-satellites for Global Change Observation -- Lunar-based Global Change Observation System -- Global Change Comparison between Planets and Earth.
Sommario/riassunto	Global change involves complex and far-reaching variations in the Earth's systems, and satellite observations have been widely used in global change studies. Over the past five decades, Earth observation has developed into a comprehensive system that can conduct dynamic

monitoring of the land, the oceans and the atmosphere at the local, regional and even global scale. At the same time, although a large number of Earth observation satellites have been launched, very few of them are used in global change studies. The lack of scientific satellite programs greatly hinders research on global change. This book proposes using a series of global change scientific satellites to establish a scientific observation grid for global environmental change monitoring from space, and offers the first comprehensive review of lunar-based Earth observation. These scientific satellites could provide not only basic datasets but also scientific support in facilitating advances in international global change research.

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