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Nota di contenuto	Digital Innovation in Space Science -- Legal regimes for Space data -- Regulating space data management -- High Performance Computing, AI, the Metaverse and quantum computing to transform space data management -- AI applications of Space Data -- Blockchain-enabled Satellite Onboard Computing for Smart Contract: Benefits for Multi-sided Markets and IoT Applications -- On the use of available space monitoring data for improving the risk of collision avoidance -- Optimising collection, transmission and transformation of space data to take up security challenges -- A Fragile Watermarking Approach for Earth Observation Data Integrity Protection -- Deepness: Deep Neural Remote Sensing QGIS Plugin -- Earth Observation Data Transfer at Limitations of Small Satellite Missions -- Earth Observation Data Management and Offer: the experience of the ARIC -- Using satellite data to estimate NO ₂ concentrations in mainland UK from 2005 to 2021 -- Integration of Terrestrial and Non-Terrestrial Networks:

challenges and perspectives within the RESTAR project -- Estimate the ice volume of Earth's glaciers with deep learning and remote sensing -- Can life exist without water? A data driven approach.

Sommario/riassunto

The book presents latest results pertaining to challenges faced by researchers in space data management. There are large number of highly important applications that currently rely upon data from satellites and space missions, ranging from weather prediction to monitoring of environmental pollution, climate change, marine traffic, agriculture, and urban planning, etc. The quality and quantity of space data poses new and specific challenges to the scientific community, covering the entire life cycle of space data management and with a need for an interdisciplinary approach. The chapters written by experts discusses impacts of these challenges, and report activities that can stimulate new research.