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using AI -- Exploring streamflow variation in the Subarnarekha River basin, Jharkhand, India -- Geoinformatics Based Land Degradation Susceptibility Analysis and Sustainability of Palghar Sea Coastal Areas -- Climate Change and Maritime Security in the Indo-Pacific Region: A Strategic Approach -- Climate Change and Renewable Energy -- Sustainable Development Goals and Indian Himalayan Region -- Climate Change and Energy Aspects -- Mustard Yield forecast using Radiation use efficiency method -- Public Private Partnership for Climate Change Research -- Groundwater and Sustainable Development Goals: Water Table Characteristics in Varanasi City -- Approach of Hydro geomorphological Mapping for Groundwater Resource Management in Mirzapur District, Uttar Pradesh -- Soil erosion assessment of Rohru C.D. Block of Himachal Pradesh using Geospatial Tools -- Impact of Sarangkheda Dam construction on the downstream reach of Tapi River, Nandurbar District, Maharashtra.

Sommario/riassunto

This book explores the potential of big data, artificial intelligence (AI), and data analytics to address climate change and achieve the Sustainable Development Goals (SDGs). Furthermore, the book covers a wide range of related topics, including climate change data sources, big data analytics techniques, remote sensing, renewable energy, open data, public–private partnerships, ethical and legal issues, and case studies of successful applications. The book also discusses the challenges and opportunities presented by these technologies and provides insights into future research directions. In order to address climate change and achieve the SDGs, it is crucial to understand the complex interplay between climate and environmental factors. The use of big data, AI, and data analytics can play a vital role in this effort by providing the means to collect, process, and analyze vast amounts of environmental data. This book is an essential resource for researchers, policymakers, and practitioners interested in leveraging these technologies to tackle the pressing challenge of climate change and achieve the SDGs.