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Nota di contenuto	Part 1. Fundamentals of Geostatistics and Geospatial Technologies -- Chapter 1. Principles of geostatistics -- Chapter 2. Spatial variability and semivariogram theory -- Chapter 3. Kriging and its type (Ordinary krigging, co-kriging and regression kriging) -- Chapter 4. Lognormal kriging, probability kriging and Indicator kriging -- Part 2. Groundwater Availability: Exploration, depletion, Recharge and Storage -- Chapter 5. Field-based monitoring of groundwater -- Chapter 6. Satellite-based monitoring of groundwater depletion.
Sommario/riassunto	This book offers essential information on geospatial technologies for water resource management and highlights the latest GIS and geostatistics techniques as they relate to groundwater. Groundwater is inarguably India's single most important natural resource. It is the foundation of millions of Indian farmers' livelihood security and the primary source of drinking water for a vast majority of Indians in rural and urban areas. The prospects of continued high rates of growth in the Indian economy will, to a great extent, depend on how judiciously

we can manage groundwater in the years to come. Over the past three decades, India has emerged as by far the single largest consumer of groundwater in the world. Though groundwater has made the country self-sufficient in terms of food, we face a crisis of dwindling water tables and declining water quality. Deep drilling by tube wells, which was once part of the solution to water shortages, is now in danger of becoming partof the problem. Consequently, we urgently need to focus our efforts on the sustainable and equitable management of groundwater. Addressing that need, this book presents novel advances in and applications of RS–GIS and geostatistical techniques to the research community in a precise and straightforward manner.