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Flood inundation models enable us to make hazard predictions for floodplains, mitigating increasing flood fatalities and losses. This book provides an understanding of hydraulic modelling and floodplain dynamics, with a key focus on state-of-the-art remote sensing data, and methods to estimate and communicate uncertainty. Academic researchers in the fields of hydrology, climate change, environmental science and natural hazards, and professionals and policy-makers working in flood risk mitigation, hydraulic engineering and remote sensing will find this an invaluable resource. This volume is the third in a collection of four books on flood disaster management theory and practice within the context of anthropogenic climate change. The others are: Floods in a Changing Climate: Extreme Precipitation by Ramesh Teegavarapu, Floods in a Changing Climate: Hydrological Modeling by P. P. Mujumdar and D. Nagesh Kumar and Floods in a Changing Climate: Risk Management by Slodoban Simonovic.
