Record Nr. UNINA9910557104803321

Autore Shao Songdong

Titolo Advances in Modelling and Prediction on the Impact of Human Activities

and Extreme Events on Environments

Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing

Institute, 2020

Descrizione fisica 1 electronic resource (414 p.)

Soggetti Research & information: general

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Sommario/riassunto

Rapid urbanization and industrialization have progressively caused severe impacts on the mountainous, river, coastal environments, and have increased the risks for people living in these areas. Human activities have changed the ecosystems, and, hence, it is important to determine ways to predict these consequences to enable the preservation and restoration of these key areas. Furthermore, extreme events attributed to climate change are becoming more frequent, aggravating the entire scenario and introducing ulterior uncertainties for the accurate and efficient management of these areas to protect the environment, as well as the health and safety of people. Climate change is altering the rain and extreme heat, as well as inducing other weather mutations. All these lead to more frequent natural disasters such as flood events, erosions, and contamination and spreading of pollutants. Therefore, efforts need to be devoted to investigating the underlying causes, and to identifying feasible mitigation and adaptation strategies to reduce the negative impacts on both the environment and citizens. In support of this aim, the selected papers in this book covered a wide range of issues that are mainly relevant to the following: i) the numerical and experimental characterization of complex flow conditions under specific circumstances induced by the natural hazards; ii) the effect of climate change on the hydrological processes in the mountainous, river and coastal environments, iii) the protection

of ecosystems and the restoration of areas damaged by the effects of the climate change and human activities.