Record Nr. UNINA9910817243703321 Autore Teegavarapu Ramesh S. V. <1970-> Titolo Floods in a changing climate Extreme precipitation / / Ramesh S.V. Teegavarapu, Florida Atlantic University [[electronic resource]] Cambridge:,: Cambridge University Press,, 2012 Pubbl/distr/stampa **ISBN** 1-139-85401-1 1-107-23546-4 1-139-84588-8 1-139-84493-8 1-139-08844-0 1-139-84019-3 1-139-84257-9 1-283-81254-1 1-139-84138-6 Descrizione fisica 1 online resource (xvii, 269 pages) : digital, PDF file(s) Collana International hydrology series Classificazione SCI081000 Disciplina 551.48/9011 Soggetti Precipitation (Meteorology) - Measurement Floods - Mathematical models Hydrologic models Climatic extremes Climatic changes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto ; Part I. Precipitation Processes and Measurement: ; 1. Precipitation and climate change; ; 2. Precipitation measurement; ; 3. Spatial analysis of precipitation data; ; Part II. Extreme Precipitation, Floods and Climate Change: ; 4. Extreme precipitation and floods; ; 5. Precipitation modeling and climate change; ; Part III. Precipitation Variability, Teleconnections and Trends: ; 6. Precipitation variability and teleconnections; ; 7. Global precipitation trends and variability; ; Part IV. Hydrologic Modeling and Design in a Changing Climate: ; 8. Hydrologic modeling and design; ; 9. Future perspectives; ; References; ; Index. Sommario/riassunto Measurement, analysis and modeling of extreme precipitation events

linked to floods is vital in understanding changing climate impacts and variability. This book provides methods for assessment of the trends in these events and their impacts. It also provides a basis to develop procedures and guidelines for climate-adaptive hydrologic engineering. Academic researchers in the fields of hydrology, climate change, meteorology, environmental policy and risk assessment, and professionals and policy-makers working in hazard mitigation, water resources engineering and climate adaptation will find this an invaluable resource. This volume is the first 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: Hydrological Modeling by P. P. Mujumdar and D. Nagesh Kumar, Floods in a Changing Climate: Inundation Modeling by Giuliano Di Baldassarre and Floods in a Changing Climate: Risk Management by Slodoban Simonovic.