1. Record Nr. UNINA9910299404903321 Autore Srinivasa Raju Komaragiri **Titolo** Impact of Climate Change on Water Resources: With Modeling Techniques and Case Studies / / by Komaragiri Srinivasa Raju, Dasika Nagesh Kumar Singapore:,: Springer Singapore:,: Imprint: Springer,, 2018 Pubbl/distr/stampa **ISBN** 981-10-6110-6 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XVI, 266 p. 78 illus., 59 illus. in color.) Collana Springer Climate, , 2352-0698 Disciplina 333.91 Soggetti Engineering geology Engineering—Geology Foundations Hydraulics Hydrology Climate change Geoengineering, Foundations, Hydraulics Hydrology/Water Resources Climate Change/Climate Change Impacts Climate Change Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto 1. Introduction -- 2. Climate Scenarios and Variability Indices. - 3. Statistical Techniques in Climate Modeling -- 4. Selection of Global Climate Models -- 5. Downscaling Techniques in Climate Modeling --6. Hydrological Modeling -- 7. Impacts of Climate Change.- 8. Case Studies.- Appendix -- A. Glossary -- B. Procedures of Acquiring Hydrometeorological Data.- B1. India Meteorological Department (IMD) -- B2. Water Resources Information System (WRIS).- B3. Bhuvan: Indian Geo Platform of ISRO.- B4. CLIMWAT.- B5. Coupled Model Intercomparison Project 5 (CMIP5).- B6. National Centers for Environmental Prediction (NCEP) and the National Center for Atmospheric Research (NCAR) Data.- B7. Climate Research Unit (CRU).

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- D. Representative List of Journals and books related to Climate research and allied fields -- E. Relevant Software.
- F. Acronyms.

## Sommario/riassunto

This book gives an overview of various aspects of climate change by integrating global climate models, downscaling approaches, and hydrological models. It also covers themes that help in understanding climate change in a holistic manner. The book includes worked-out examples, revision questions, exercise problems, and case studies, making it relevant for use as a textbook in graduate courses and professional development programs. The book will serve well researchers, students, as well as professionals working in the area of hydroclimatology.