Record Nr. UNINA9910813809203321 Autore Sheffield Justin Titolo Drought: past problems and future scenarios // Justin Sheffield and Eric F. Wood London; ; Washington, D.C.:, : Earthscan, , 2011 Pubbl/distr/stampa **ISBN** 1-136-54040-7 1-283-71259-8 1-84977-525-7 1-136-54041-5 Descrizione fisica 1 online resource (249 p.) Altri autori (Persone) WoodEric F 363.34/929 Disciplina Soggetti **Droughts - United States** Drought relief - United States Water quality management Water-supply - Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Cover: Drought: Past Problems and Future Scenarios: Copyright: Nota di contenuto Contents; Figures, Tables, Boxes and Plates; Preface; Acknowledgements; Chapter 1. Introduction; Drought Today; Drought and Global Change; The Motivation for this Book; An Overview of the Book; Chapter 2. What is Drought?; The Hazard of Drought; Defining Drought; Chapter 3. The Science of Drought; Introduction; The Hydrological Cycle; Spatial and Temporal Patterns of Hydrology; What Causes Drought?: Summary: Chapter 4. Quantifying Drought: Introduction; Drought Data; Monitoring Drought from Space; Modelling Drought Palaeoclimate Data: Reconstructing Drought over MillenniaQuantifying Drought: Characteristics and Indices: Summary: Chapter 5. Palaeodrought: The Occurrence of Drought over Past Millennia; Introduction; Climate of the Holocene; Drought in the Holocene; The Last 2000 Years; The Last 1000 Years; Drought in Recent Centuries; Global Mechanisms and Connections; Summary; Chapter 6. Drought in the

20th Century; Introduction; Climate of the 20th Century; The Global

Extent of 20th-Century Drought; Characteristics of Global Drought; Regional Drought over the 20th Century

Global Variability in Soil Moisture and Links with Large-Scale Climate VariabilityGlobal Variability in Drought and Links with Large-Scale Climate Variability; Summary; Chapter 7. Major Drought Events of the 20th Century; Introduction; North America; South America; Europe; Africa; Asia; Oceania; The Most Severe Droughts of the 20th Century; Chapter 8. Drought in the 21st Century; Introduction; Mechanisms of Changes in Drought; Climate Models, Emission Scenarios and Future Projections; Drought Estimation; Projected Future Changes in Drought; Potential Impacts of Future Drought

Chapter 9. Summary and RecommendationsConclusions; Index; Plates

Sommario/riassunto

Drought is one of the likely consequences of climate change in many regions of the world. Together with an increased demand for water resources to supply the world's growing population, it represents a potentially disastrous threat to water supplies, agriculture and food production, leading to famine and environmental degradation. Yet predicting drought is fraught with difficulty. The aim of this book is to provide a review of the historical occurrence of global drought, particularly during the 20th century and assess the likely potential changes over the 21st century under climate change. This