Record Nr. UNINA9910781963303321 Autore Turner J (John) **Titolo** Climate change in the polar regions / / John Turner and Gareth J. Marshall [[electronic resource]] Cambridge: ,: Cambridge University Press, , 2011 Pubbl/distr/stampa **ISBN** 1-139-13969-X 1-107-22571-X 1-280-77613-7 1-139-13889-8 9786613686527 1-139-14135-X 1-139-14467-7 1-139-14046-9 1-139-13733-6 0-511-97543-0 Descrizione fisica 1 online resource (xii, 434 pages) : digital, PDF file(s) SCI042000 Classificazione Disciplina 551.6911 Soggetti Climatic changes - Polar regions - History Meteorology - Polar regions Climatic changes - Polar regions Sea ice - Polar regions Global warming - Polar regions 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. 1. Introduction -- 2. Polar climate data and models -- 3. The high Nota di contenuto latitude climates and mechanisms of change -- 4. The last million years -- 5. The Holocene -- 6. The instrumental period -- 7. Predictions for the next 100 years -- 8. Summary and future research needs. Sommario/riassunto The polar regions have experienced some remarkable environmental changes in recent decades, such as the Antarctic ozone hole, the loss of large amounts of sea ice from the Arctic Ocean and major warming on the Antarctic Peninsula. The polar regions are also predicted to

warm more than any other region on Earth over the next century if greenhouse gas concentrations continue to rise. Yet trying to separate natural climate variability from anthropogenic factors still presents many problems. This book presents a thorough review of how the polar climates have changed over the last million years and sets recent changes within a long term perspective. The approach taken is highly cross-disciplinary and the close links between the atmosphere, ocean and ice at high latitudes are stressed. The volume will be invaluable for researchers and advanced students in polar science, climatology, global change, meteorology, oceanography and glaciology.