Record Nr. UNINA9910781987103321 Autore Barry Roger G (Roger Graham), <1935-> Titolo The global cryosphere: past, present, and future // Roger G. Barry and Thian Yew Gan [[electronic resource]] Cambridge:,: Cambridge University Press,, 2011 Pubbl/distr/stampa 1-107-21804-7 **ISBN** 1-139-12465-X 1-283-29850-3 1-139-12309-2 9786613298508 0-511-97794-8 1-139-11734-3 1-139-12800-0 1-139-11298-8 1-139-11517-0 Descrizione fisica 1 online resource (xv, 472 pages) : digital, PDF file(s) SCI030000 Classificazione Disciplina 551.31 Soggetti Cryosphere - History Glaciers - History Ice sheets - History Cold regions History Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- Part I. The terrestrial cryosphere. Snowfall and snov cover; Avalanches; Glaciers and ice caps; Ice sheets; Frozen ground and permafrost; Freshwater ice -- Part II. The marine cryosphere. Sea ice; Ice shelves and icebergs -- Part III. The cryosphere past and future. The cryosphere in the past; The future cryosphere: impacts of global warming -- Part IV. Applications. Applications of snow and ice research. Sommario/riassunto This is the first textbook to address all the components of the Earth's cryosphere - all forms of snow and ice, both terrestrial and marine. It

provides a concise but comprehensive summary of snow cover,

glaciers, ice sheets, lake and river ice, permafrost, sea ice and icebergs - their past history and projected future state. It is designed for courses at upper undergraduate and graduate level in environmental science, geography, geology, glaciology, hydrology, water resource engineering and ocean sciences. It also provides a superb up-to-date summary for researchers of the cryosphere. The book includes an extensive bibliography, numerous figures and color plates, thematic boxes on selected topics and a glossary. The book builds on courses taught by the authors for many decades at the University of Colorado and the University of Alberta. Whilst there are many existing texts on individual components of the cryosphere, no other textbook covers the whole cryosphere.