1. Record Nr. UNINA9910816995803321 Field techniques for sea ice research / / edited by Hajo Eicken ... [et al.] Titolo Fairbanks,: University of Alaska Press, c2009 Pubbl/distr/stampa **ISBN** 1-60223-107-9 Edizione [1st ed.] Descrizione fisica 1 online resource (590 p.) Altri autori (Persone) EickenHaio Disciplina 551.34/3 Soggetti Oceanography - Fieldwork Sea ice Sea ice - Measurement Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Preface: Foreword: Chapter 1: Introduction: Chapter 2: The Sea Ice System Services Framework; Chapter 3.1: Field Techniques for Snow Observations on Sea Ice; Chapter 3.2: Ice Thickness and RoughnessMeasurements; Chapter 3.3: Ice Sampling and Basic Sea Ice Core Analysis; Chapter 3.4: Thermal, Electrical, and Hydraulic Properties of Sea Ice; Chapter 3.5: Ice Strength: In Situ Measurement; Chapter 3.6: Sea Ice Optics Measurements; Chapter 3.7: Measurements and Modeling of Ice-Ocean Interaction; Chapter 3.8: Biogeochemical Properties of Sea Ice. Chapter 3.9: Assessment of the Abundance and Diversity of Sea Ice BiotaChapter 3.10: Studying Seals in Their Sea Ice Habitat; Chapter 3.11: Community-Based Observation Programs and Indigenous and Local Sea Ice Knowledge: Chapter 3.12: Ship-Based Ice Observation Programs; Chapter 3.13: Automatic Measurement Stations; Chapter 3.14: Data Management Best Practices for Sea Ice Observations; Chapter 3.15: Principal Uses of Remote Sensing in Sea Ice Field Research; Chapter 3.16: The Use of Models in the Design and Interpretation of Field Measurements. Chapter 3.1 7: Integrated Sea Ice Observation ProgramsChapter 3.18: Personal Field Logistics; Chapter 4: Concluding Remarks: Integration of Sea Ice Field Research into Polar System Science; About the Multimedia DVD; List of Contributors and Affiliations; Index.

Sommario/riassunto

"As much as one-tenth of the world's oceans are covered with sea ice, or frozen ocean water, at some point during the annual cycle. Sea ice thus plays an important, often defining, role in the natural environment and the global climate system. This book is a global look at the changes in sea ice and the tools and techniques used to measure and record those changes. The first comprehensive research done on seaice field techniques, this volume will be indispensable for the study of northern sea ice and a must-have for scientists in the field of climate change research."--Jacket.