

1. Record Nr.	UNISA996213956103316
Titolo	Arctic sea ice decline [[electronic resource]] : observations, projections, mechanisms, and implications // Eric T. DeWeaver, Cecilia M. Bitz, L.-Bruno Tremblay, editors
Pubbl/distr/stampa	Washington, DC, : American Geophysical Union, c2008
ISBN	1-118-66647-X 1-118-67158-9 1-118-67262-3
Descrizione fisica	1 online resource (279 p.)
Collana	Geophysical monograph, , 0065-8448 ; ; 180
Altri autori (Persone)	BitzCecilia M DeWeaverEric T. <1964-> TremblayL.-Bruno
Disciplina	551.34/3091632
Soggetti	Climatic changes - Environmental aspects - Arctic regions Environmental impact analysis - Arctic regions Sea ice - Arctic regions Arctic regions Climate
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.
Nota di contenuto	Title Page; Contents; Preface; Arctic Sea Ice Decline: Introduction; Section I: Arctic Sea Ice in the Instrumented and Paleo-Proxy Records; Recent Trends in Arctic Sea Ice and the Evolving Role of Atmospheric Circulation Forcing, 1979-2007; Reconstructing Sea Ice Conditions in the Arctic and Sub-Arctic Prior to Human Observations; Section II: Factors in Sea Ice Sensitivity; Arctic Cloud Properties and Radiative Forcing From Observations and Their Role in Sea Ice Decline Predicted by the NCAR CCSM3 Model During the 21st Century; Some Aspects of Uncertainty in Predicting Sea Ice Thinning Sensitivity of Arctic Sea Ice Thickness to Intermodel Variations in the Surface Energy BudgetThe Atmospheric Response to Realistic Reduced Summer Arctic Sea Ice Anomalies; Section III: Rapid Loss Versus Abrupt Transition; Sea Ice-Albedo Feedback and Nonlinear Arctic Climate Change; The Role of Natural Versus Forced Change in Future Rapid Summer Arctic Ice Loss; Multiple Equilibria and Abrupt Transitions in

Arctic Summer Sea Ice Extent; What Is the Trajectory of Arctic Sea Ice?;
Analysis of Arctic Sea Ice Anomalies in a Coupled Model Control
Simulation

Section IV: The Threat to Polar Bears From Sea Ice Decline
A Bayesian Network Modeling Approach to Forecasting the 21st Century Worldwide
Status of Polar Bears; Index

Sommario/riassunto

Published by the American Geophysical Union as part of the
Geophysical Monograph Series, Volume 180. This volume addresses the
rapid decline of Arctic sea ice, placing recent sea ice decline in the
context of past observations, climate model simulations and
projections, and simple models of the climate sensitivity of sea ice.
Highlights of the work presented here include
An appraisal of the role played by wind forcing in driving the decline;
A reconstruction of Arctic sea ice conditions prior to human observations, based on proxy data
from sediments;
A modelin
