

1. Record Nr.	UNINA9910464565803321
Titolo	Seasonal to decadal predictions of arctic sea ice : challenges and strategies // Committee on the Future of Arctic Sea Ice Research in Support of Seasonal to Decadal Prediction, Polar Research Board, Division on Earth and Life Studies, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, District of Columbia : , : National Academies Press, , 2012
ISBN	0-309-26527-4
Descrizione fisica	1 online resource (92 p.)
Disciplina	551.69
Soggetti	Sea ice - Arctic regions - Forecasting Electronic books.
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.
Nota di contenuto	Introduction -- Gaps in our understanding -- Strategies for the future.
Sommario/riassunto	"Recent well documented reductions in the thickness and extent of Arctic sea ice cover, which can be linked to the warming climate, are affecting the global climate system and are also affecting the global economic system as marine access to the Arctic region and natural resource development increase. Satellite data show that during each of the past six summers, sea ice cover has shrunk to its smallest in three decades. The composition of the ice is also changing, now containing a higher fraction of thin first-year ice instead of thicker multi-year ice. Understanding and projecting future sea ice conditions is important to a growing number of stakeholders, including local populations, natural resource industries, fishing communities, commercial shippers, marine tourism operators, national security organizations, regulatory agencies, and the scientific research community. However, gaps in understanding the interactions between Arctic sea ice, oceans, and the atmosphere, along with an increasing rate of change in the nature and quantity of sea ice, is hampering accurate predictions. Although modeling has steadily improved, projections by every major modeling group failed to predict the record breaking drop in summer sea ice extent in

September 2012. Establishing sustained communication between the user, modeling, and observation communities could help reveal gaps in understanding, help balance the needs and expectations of different stakeholders, and ensure that resources are allocated to address the most pressing sea ice data needs. Seasonal-to-Decadal Predictions of Arctic Sea Ice: Challenges and Strategies explores these topics."--
Publisher's description.
