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Titolo	Ship and Offshore Structure Design in Climate Change Perspective [[electronic resource] /] / by Elzbieta Maria Bitner-Gregersen, Lars Ingolf Eide, Torfinn Hørte, Rolf Skjong
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Collana	SpringerBriefs in Climate Studies, , 2213-784X
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Soggetti	Statistics Climate change Quality control Reliability Industrial safety Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences Climate Change Management and Policy Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1.Abstract -- 2.Introduction -- 3.Climate Change and Variability -- 4. Changes in Wind, Waves and Sea Water Level in the 20th Century -- 5. Expected Changes in Wind, Waves and Sea Water Level in the 21st Century -- 5.1. Changes in the Average Values and Extremes -- 5.2 . Uncertainties -- 6.Potential Impact on Design of Marine Structures -- 6.1. Met-ocean Design Bases -- 6.2.Risk-based Approach -- 6.3. Illustration of Application -- 7.Conclusions and Recommendations.
Sommario/riassunto	This book summarizes results of longstanding research and scientific contributions from many projects and relevant working groups. It collects and evaluates wind and wave climate projections under changing climate having design needs and marine safety in focus. Potential impact of projected climate change in met-ocean conditions

on ships and offshore structures is discussed and illustrated by an example of the expected wave climate change on tanker design. The monograph is intended for students, researchers and industry based engineers who want a summary of the many studies that have been carried out on climate change effects on wind and waves and their importance for design and operations of ship and offshore structures. The reader needs only a moderate knowledge of marine wind and wave climate to follow the text.
