Record Nr. UNINA9911004769303321 Autore Ochi Michael K Titolo Hurricane-generated seas / / Michael K. Ochi Pubbl/distr/stampa Amsterdam, : Elsevier, 2003 **ISBN** 1-281-07239-7 9786611072391 0-08-053424-4 Descrizione fisica 1 online resource (155 p.) Collana Elsevier ocean engineering book series ; ; v. 8 Disciplina 551.46/3 22 551.463 Soggetti Hurricanes Ocean waves Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Front Cover; Hurricane-Generated Seas; Copyright Page; Series Preface; Nota di contenuto Preface and Acknowledgements; List of Tables; Contents; Chapter 1. Hurricane wind and sea state in the ocean; 1.1 Hurricane wind over the ocean; 1.2 Sea state generated by hurricane winds; Chapter 2. Wave spectra of hurricane-generated seas in deep water; 2.1 Features of wave spectra; 2.2 Presentation of wave spectra by mathematical formulation; 2.3 Wave spectra for design consideration of marine systems; 2.4 Directional characteristics of hurricane-generated seas Chapter 3. Transformation of wave spectra with the advance of a hurricane from deep to finite water depth3.1 Wave spectra in finite water depth on the continental shelf; 3.2 Wave breaking and energy loss; 3.3 Nearshore wave spectra; Chapter 4. Sea severity and wave characteristics; 4.1 Waves in deep water; 4.2 Waves in finite water depth; Chapter 5. Hurricane landing and nearshore sea severity; 5.1 Estimation of nearshore sea severity: 5.2 Hurricane landing sea severity indicator; 5.3 Onshore sea severity; Appendix: Review of non-Gaussian random waves A.1 Probability distribution of wave profileA.2 Probability distribution of

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Hurricanes are one of the most adverse aspects of the ocean

Sommario/riassunto

environment, with the potential to cause a disastrous event for marine systems in the ocean. This is an invaluable reference for all involved in the field of naval, ocean and coastal engineering. The work clarifies hurricane generated sea conditions necessary for the design and operation of marine systems in a seaway, and provides information for the protection of near shore / onshore structures and the environment at the time of hurricane landing.Reveals Information vital for avoidance of disastrous events experienced by sh