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Titolo	Climate change and the oceanic carbon cycle : variables and consequences / / edited by Isabel Ferrera, PhD
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Soggetti	Seawater - Carbon dioxide content Ocean acidification Carbon cycle (Biogeochemistry) Chemical oceanography Climatic changes
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	part 1. Understanding the importance of ocean biogeochemistry -- part 2. Quantifying oceanic carbon variables -- part 3. Phytoplankton and oceanic carbon cycle -- part 4. Ocean acidification.
Sommario/riassunto	This title includes a number of Open Access chapters. This valuable compendium provides an overview of the variables and consequences of oceanic carbon cycling in the context of climate change. The chapters highlight the importance of marine plankton in carbon processing as well as the effects of rising CO ₂ and temperature in their functioning. Marine ecosystems are being increasingly threatened by growing human pressures, including climate change. Understanding the consequences that climate change may have is crucial to predict the future of our oceans. Rising temperatures and ocean acidification may profoundly alter the mode of matter and energy transformation in marine ecosystems, which could have irreversible consequences for our planet on ecological timescales. For that reason, the scientific community has engaged in the grand challenge of studying the

variables and consequences of oceanic carbon cycling in the context of climate change, which has emerged as a relevant field of science. The book is broken into four sections: Understanding the Importance of Ocean Biogeochemistry Quantifying Oceanic Carbon Variables Phytoplankton and Oceanic Carbon Cycle Ocean Acidification Edited by a researcher with many years of experience and with contributions from scientists from around the world, this volume explores the most important topics on climate change and oceanic carbon cycling.
