1. Record Nr. UNISA996198766303316

Titolo	Ocean-Atmosphere Interactions of Gases and Particles [[electronic resource] /] / edited by Peter S. Liss, Martin T. Johnson
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-25643-0
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (315 pages) : illustrations, charts
Collana	Springer Earth System Sciences, , 2197-9596
Disciplina	551.5246
Soggetti	Physical geography Environmental chemistry Climatology Marine sciences Freshwater Earth System Sciences Environmental Chemistry Marine & Freshwater Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1: Short-lived trace gases in the surface ocean and the atmosphere -- Chapter 2: Transfer across the air-sea interface -- Chapter 3: Air-sea interactions of natural long-lived greenhouse gases (CO2, N2O, CH4) in a changing climate -- Chapter 4: Ocean-Atmosphere interactions of particles -- Chapter 5: Perspectives and Integration in SOLAS science.
Sommario/riassunto	The oceans and atmosphere interact through various processes, including the transfer of momentum, heat, gases and particles. In this book leading international experts come together to provide a state-of-the-art account of these exchanges and their role in the Earth-system, with particular focus on gases and particles. Chapters in the book cover: i) the ocean-atmosphere exchange of short-lived trace gases; ii) mechanisms and models of interfacial exchange (including transfer velocity parameterisations); iii) ocean-atmosphere exchange of the greenhouse gases carbon dioxide, methane and nitrous oxide; iv)

ocean atmosphere exchange of particles and v) current and future data collection and synthesis efforts. The scope of the book extends to the biogeochemical responses to emitted / deposited material and interactions and feedbacks in the wider Earth-system context. This work constitutes a highly detailed synthesis and reference; of interest to higher-level university students (Masters, PhD) and researchers in ocean-atmosphere interactions and related fields (Earth-system science, marine / atmospheric biogeochemistry / climate). Production of this book was supported and funded by the EU COST Action 735 and coordinated by the International SOLAS (Surface Ocean- Lower Atmosphere Study) project office.