

1. Record Nr.	UNINA9910143460803321
Autore	Holton James R
Titolo	Encyclopedia of atmospheric sciences // editor-in-chief, James R. Holton ; editors, Judith A. Curry, John A. Pyle
Pubbl/distr/stampa	Burlington, : Elsevier Science, 2002 Amsterdam, Netherlands : , : Academic Press, , 2003
ISBN	1-78402-400-7 1-78034-502-X 0-08-052357-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (6 volumes (xlii, 2780 pages)) : illustrations (some color)
Collana	Gale eBooks
Disciplina	551.503
Soggetti	Atmosphere Meteorology Atmospheric physics
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 and index.
Nota di contenuto	Cover image; Title page; Table of Contents; Editor-in-Chief; Editors; Editorial Advisory Board; Foreword; Preface; Permission Acknowledgments; Article Titles; A; Chapter 1: ACOUSTIC WAVES; Introduction; The Acoustic Wave Equation; Sound Pressure Levels and Decibels; The Speed of Sound in the Atmosphere; Absorption of Sound in the Atmosphere; Refraction of Sound in the Atmosphere; Diffraction of Acoustic Waves in the Atmosphere; Acoustic Remote Sensing of the Atmosphere; See also; Chapter 2: AEROSOLS Climatology of Tropospheric Aerosols; Introduction Spatial and Temporal Distribution of Particle PropertiesLower Troposphere; Particle Mass; Particle Number; Upper Troposphere (>5 km); See also; Chapter 3: AEROSOLS Observations and Measurements; Introduction; Sampling; Sample Collection and Analysis: Filters and Impactors; Real-Time, In-Situ Analysis of Aerosol Chemical Properties; Measurement of Physical Properties; Summary; See also; Chapter 4: AEROSOLS Physics and Chemistry of Aerosols; Introduction; Nomenclature; Distribution and Physical Properties; Chemical

Composition; State of Mixture; See also

Chapter 5: AEROSOLS | Role in Cloud Physics Introduction; Atmospheric Particulate Matter; Water Content of Aerosols; Aerosol Interactions with Liquid-Phase Clouds; Aerosol Interactions with Cold Clouds; Effects of Anthropogenic Activities; see also; Chapter 6: AEROSOLS | Role in Radiative Transfer; Introduction; Scattering and Absorption of Light; Effects of Surface Reflection; Interactions with Thermal Radiation; See also; Chapter 7: AGRICULTURAL METEOROLOGY AND CLIMATOLOGY; Introduction; Fundamental Principles; Instrumentation, Measurements, and Networks; Modeling and Theory

Parameterizations of Transfer Velocity Air-Sea Fluxes of Carbon Dioxide; Air-Sea Fluxes of Other Gases; see also; Chapter 10: AIR-SEA INTERACTION | Momentum, Heat, and Vapor Fluxes; Introduction; Definition of the Fluxes; Measuring the Fluxes; Sources of Flux Data; The Regional and Seasonal Variation of the Momentum Flux; The Regional and Seasonal Variation of the Heat Fluxes; Discussion: Accuracy of Flux Estimates and Future Trends; See also; Chapter 11: AIR-SEA INTERACTION | Sea Surface Temperature; Introduction; History of SST Measurements and Applications; Satellite SST; SST Climatology Skin SST

Sommario/riassunto

This authoritative resource covers all aspects of atmospheric sciences- including both theory and applications. Nearly 350 articles and over 1,900 figures and photographs are presented, many in full-color. The Encyclopedia is an ideal resource for academia, government, and industry in the fields of atmospheric, ocean, and environmental sciences. It is written at a level that allows undergraduate students to understand the material, while providing active researchers with the latest information in the field. The Encyclopedia of Atmospheric Sciences has been developed alongside the award-winning
