1. Record Nr. UNISALENTO991000202389707536

Autore	Costa, Giovanni
Titolo	Storia e civiltà / Giovanni Costa
Pubbl/distr/stampa	Roma : Rivista Bilychnis, 1922
Descrizione fisica	100 p. ; 25 cm.
Collana	Quaderni di Bilychnis ; 8
Disciplina	909
Soggetti	Civiltà - Storia
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910437944903321

Autore	Cavallini Fabio
Titolo	Quasi-geostrophic theory of oceans and atmosphere : topics in the dynamics and thermodynamics of the fluid Earth / / Fabio Cavallini, Fulvio Crisciani
Pubbl/distr/stampa	Dordrecht ; ; New York, : Springer, c2013
ISBN	1-283-63398-1 9786613946430 94-007-4691-1
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (394 p.)
Collana	Atmospheric and oceanographic sciences library, , 1383-8601 ; ; v. 45
Altri autori (Persone)	CriscianiFulvio
Disciplina	551.4
Soggetti	Geophysics - Fluid models Fluid mechanics Oceanography Atmospheric thermodynamics
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	Basic continuum Mechanics -- Kinematics of continua -- Dynamics of fluids -- Basic geophysical fluid dynamics -- Constitutive equations -- Internal gravity waves in adiabatic and frictionless fluids -- Rotating flows -- Large-scale flows -- Quasi-geostrophic single-layer models -- Shallow-water model -- Homogeneous model -- Quasi-geostrophic two-layer model -- Basic QG equations for the two-layer model -- Energetics of the two-layer model -- Quasi-geostrophic models of continuously stratified flows -- QG continuously stratified flows in the ocean -- QG continuously stratified flows in the atmosphere.
Sommario/riassunto	Large scale flows are strong movements in the atmosphere and in the oceans, governed by the balance between Coriolis and pressure gradient forces (geostrophic equilibrium). This book describes the dynamics, mechanics and thermodynamics of these winds and currents. It is written for researchers, but also accessible for students in the field, since it also gives an overview of applied quasi-geostrophic theory suitable to advanced undergraduate and beginning graduate courses. Chapter 1 presents concepts and equations of classical inertial fluid mechanics. Chapter 2 deals with the equations of thermodynamics that close the governing equations of the fluids. Then, the motion is reformulated in a uniformly rotating reference frame. Chapter 3 deals with the shallow-water model and the homogeneous model of wind-driven circulation. The chapter also describes a classical application of the Ekman layer to the atmosphere. Chapter 4 considers the two-layer model, as an introduction to baroclinic flows, together with the concept of available potential energy. Chapter 5 takes into account continuously stratified flows in the ocean and in the atmosphere.