



Geophysical Fluid Dynamics: Understanding (almost) everything with rotating shallow water models (Hardback)

By Vladimir Zeitlin

Oxford University Press, United Kingdom, 2018. Hardback. Condition: New. Language: English . Brand New Book. Geophysical fluid dynamics examines the dynamics of stratified and turbulent motion of fluids in the ocean and outer core, and of gases in the atmosphere. This book explains key notions and fundamental processes of the dynamics of large- and medium-scale atmospheric and oceanic motions from the unifying viewpoint of the rotating shallow water model. The model plays a distinguished role in geophysical fluid dynamics. It has been used for about a century for conceptual understanding of various phenomena, for elaboration of approaches and methods to be used later in more complete models, for development and testing of numerical codes, and for many other purposes. In spite of its simplicity, the model grasps essential features of the complete primitive equations models, being their vertically averaged version, and gives an intuitive representation and clear vision of principal dynamical processes. This book is a combination of a course on geophysical fluid dynamics (Part 1), with explanations and illustrations of fundamentals, and problems, as well as a more advanced treatise of a range of principal dynamical phenomena (Part 2), including recently arisen approaches and applications (Part 3). Mathematics and...



[READ ONLINE](#)
[4.87 MB]

Reviews

It becomes an amazing book which i actually have at any time study. It is actually loaded with wisdom and knowledge You wont sense monotony at at any time of your respective time (that's what catalogues are for regarding should you request me).

-- **Rosina Schowalter V**

Thorough guide for pdf fanatics. We have read through and i also am confident that i will gonna read once more once more later on. You wont sense monotony at whenever you want of your own time (that's what catalogues are for concerning in the event you request me).

-- **Davon Senger**