

Infos zu Misra, Vasubandhu: An introduction to large-scale tropical meteorology

Inhaltsangabe:

This upper-undergraduate/graduate-level textbook introduces students to large-scale tropical climate circulation and its variations, covering their fundamental aspects and our current understanding of how they are impacted in a warming world. From this volume, readers will gain an understanding of tropical climate variability from the meso- to planetary scale. Uniquely, equal emphasis is placed on atmospheric and oceanic processes of tropical phenomena. The book will appeal to senior undergraduate and graduate students across geoscience disciplines, including in meteorology, oceanography, geography, hydrology, and environmental science.

Inhaltsverzeichnis:

- Chapter 1. Symmetric and asymmetric tropics.
- Chapter 2. Seasonal evolution of the monsoons.
- Chapter 3. The coupled monsoons.
- Chapter 4. Intraseasonal variations of the monsoon.
- Chapter 5. The western pacific warm pool.
- Chapter 6. The monsoons-ENSO teleconnection.
- Chapter 7. ENSO.
- Chapter 8. The inter-tropical convergence zone.
- Chapter 9. Tropical atlantic variations.
- Chapter 10. Large-scale aspects of extreme weather.

Autor:

Misra, Vasubandhu:

Dr. Vasubandhu Misra got his Ph.D. in Meteorology in 1997 from the Florida State University. He has over 25 years of research experience in Climate Science that include topics like the Monsoons, El Nino and the Southern Oscillation variations, tropical Indian and Atlantic Ocean variability, and extremes like Tropical Cyclones, Heatwaves, and Droughts. The book is an outcome of teaching this course on Tropical Meteorology for over 15 years and guiding several students on related research topics.