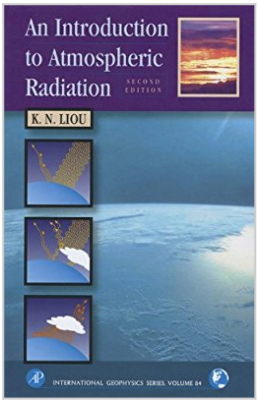

An Introduction to Atmospheric Radiation (International Geophysics)

By K. N. Liou

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou

This Second Edition of *An Introduction to Atmospheric Radiation* has been extensively revised to address the fundamental study and quantitative measurement of the interactions of solar and terrestrial radiation with molecules, aerosols, and cloud particles in planetary atmospheres. It contains 70% new material, much of it stemming from the investigation of the atmospheric greenhouse effects of external radiative perturbations in climate systems, and the development of methodologies for inferring atmospheric and surface parameters by means of remote sensing. Liou's comprehensive treatment of the fundamentals of atmospheric radiation was developed for students, academics, and researchers in atmospheric sciences, remote sensing, and climate modeling.

- Balanced treatment of fundamentals and applications
- Includes over 170 illustrations to complement the concise description of each subject
- Numerous examples and hands-on exercises at the end of each chapter

An Introduction to Atmospheric Radiation (International Geophysics)

By K. N. Liou

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou

This Second Edition of *An Introduction to Atmospheric Radiation* has been extensively revised to address the fundamental study and quantitative measurement of the interactions of solar and terrestrial radiation with molecules, aerosols, and cloud particles in planetary atmospheres. It contains 70% new material, much of it stemming from the investigation of the atmospheric greenhouse effects of external radiative perturbations in climate systems, and the development of methodologies for inferring atmospheric and surface parameters by means of remote sensing. Liou's comprehensive treatment of the fundamentals of atmospheric radiation was developed for students, academics, and researchers in atmospheric sciences, remote sensing, and climate modeling.

- Balanced treatment of fundamentals and applications
- Includes over 170 illustrations to complement the concise description of each subject
- Numerous examples and hands-on exercises at the end of each chapter

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou Bibliography

- Rank: #2821856 in eBooks
- Published on: 2002-05-09
- Released on: 2002-05-09
- Format: Kindle eBook

Editorial Review

Review

"Liou's book is broad and rigorous. It covers the topics well from fundamental principles to applications. A student who has mastered the book will be well prepared to start research in atmospheric radiation. A research worker who needs a quick review of the basic physics behind the state-of-the-art radiative codes used in climate models and remote sensing will find this an invaluable resource." **--Yuk L. Yung, Quarterly Journal of the Royal Meteorological Society**

"The many differences between [the first and second] editions illustrate areas of major progress in the field, as is evidenced in thermal infrared radiative transfer and even in the creations of completely new fields like three-dimensional radiative transfer or light scattering by nonspherical particles. Obviously, the major changes happened not in the theory...but in data quality and completely new measurements (mostly due to new satellite data) with higher accuracy and more reliability. The new edition illustrates this progress well." **--Alexander Marshak, NASA Goddard Space Flight Center, Bulletin of the American Meteorological Society**

"The First Edition of this book has become a standard (advanced) text for graduate students and researchers working in the area of atmospheric radiative transfer ...Professor Liou has a leading international standing in studies of the interaction of solar radiation with the Earth's atmosphere and his book reflects his expertise in that area." --**Joanna Haigh, Space and Atmospheric Physics, The Blackett Laboratory, Imperial College, London, UK**

From the Back Cover

This Second Edition of *An Introduction to Atmospheric Radiation* has been extensively revised to address the fundamental study and quantitative measurement of the interactions of solar and terrestrial radiation with molecules, aerosols, and cloud particles in planetary atmospheres. It contains 70% new material, much of it stemming from the investigation of the atmospheric greenhouse effects of external radiative perturbations in climate systems, and the development of methodologies for inferring atmospheric and surface parameters by means of remote sensing. Liou's comprehensive treatment of the fundamentals of atmospheric radiation was developed for students, academics, and researchers in atmospheric sciences, remote sensing, and climate modeling. Features

- Balanced treatment of fundamentals and applications
- Includes over 170 illustrations to complement the concise description of each subject
- Numerous examples and hands-on exercises at the end of each chapter

About the Author **Dr. K. N. Liou** is Professor of Atmospheric Sciences at the University of California, Los Angeles. He is a member of the National Academy of Engineering and Fellow of AAAS, AGU, AMS, and the Optical Society of America. Professor Liou received the Jule G. Charney Award from AMS in 1998 "for his pioneering work in the theory and application of radiative transfer and its interaction with clouds."

About the Author

K. N. Liou is professor and chair of the Department of Atmospheric Sciences at the University of California, Los Angeles. He was awarded the Jule G. Charney Award from the American Meteorological Society in 1998 for his "pioneering work in the theory and application of radiative transport and its interaction with clouds". Liou is author or co-author of more than 140 scientific papers and 2 previous books.

Users Review

From reader reviews:

Irving Brehm:

This An Introduction to Atmospheric Radiation (International Geophysics) book is not really ordinary book, you have it then the world is in your hands. The benefit you will get by reading this book is information inside this publication incredible fresh, you will get info which is getting deeper an individual read a lot of information you will get. That An Introduction to Atmospheric Radiation (International Geophysics) without we recognize teach the one who looking at it become critical in thinking and analyzing. Don't become worry An Introduction to Atmospheric Radiation (International Geophysics) can bring whenever you are and not make your carrier space or bookshelves' come to be full because you can have it in the lovely laptop even phone. This An Introduction to Atmospheric Radiation (International Geophysics) having good arrangement in word along with layout, so you will not sense uninterested in reading.

Jose Brummitt:

Now a day folks who Living in the era wherever everything reachable by interact with the internet and the resources in it can be true or not require people to be aware of each facts they get. How many people to be smart in obtaining any information nowadays? Of course the solution is reading a book. Looking at a book can help persons out of this uncertainty Information specifically this An Introduction to Atmospheric Radiation (International Geophysics) book as this book offers you rich data and knowledge. Of course the details in this book hundred % guarantees there is no doubt in it as you know.

Charles Buffington:

The knowledge that you get from An Introduction to Atmospheric Radiation (International Geophysics) is a more deep you excavating the information that hide inside the words the more you get interested in reading it. It does not mean that this book is hard to recognise but An Introduction to Atmospheric Radiation (International Geophysics) giving you buzz feeling of reading. The article author conveys their point in certain way that can be understood simply by anyone who read the item because the author of this guide is well-known enough. This book also makes your current vocabulary increase well. That makes it easy to understand then can go along, both in printed or e-book style are available. We suggest you for having that An Introduction to Atmospheric Radiation (International Geophysics) instantly.

Mattie Priest:

The particular book An Introduction to Atmospheric Radiation (International Geophysics) has a lot of knowledge on it. So when you make sure to read this book you can get a lot of benefit. The book was

published by the very famous author. Mcdougal makes some research prior to write this book. This particular book very easy to read you can get the point easily after reading this article book.

Read An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou for online ebook

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou books to read online.

Online An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou ebook PDF download

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou Doc

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou Mobipocket

An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou EPub

WZ4RC6U5YHM: An Introduction to Atmospheric Radiation (International Geophysics) By K. N. Liou