

# Read Book Tropical Climatology An Introduction To The Climates Of The Low Latitudes 2nd Edition

## Tropical Climatology An Introduction To The Climates Of The Low Latitudes 2nd Edition | bcb7a4dcfabf213f694002842981b767

Urban Climate Challenges in the Tropics Climate Change and Adaptation Climate Change and Vulnerability and Adaptation An Introduction to Weather and Climate Climate and Health in Hot Countries and the Outlines of Tropical Climatology Synoptic and Dynamic Climatology Fundamentals of Tropical Climate Dynamics Planning to Cope with Tropical and Subtropical Climate Change Dynamics of The Tropical Atmosphere and Oceans Living in a Dynamic Tropical Forest Landscape Time Series Analysis in Meteorology and Climatology An Introduction to the Meteorology and Climate of the Tropics Increasing Climate Variability and Change Tropical Cyclones Tropical Climatology Tropical Meteorology Global Precipitations and Climate Change Introduction to Climatology for the Tropics Meteorology Today: An Introduction to Weather, Climate, and the Environment Introduction to Climatology for the Tropics Tropical Urban Heat Islands An Introduction to the Meteorology and Climate of the Tropics Tropical Climatology The Daily Telegraph Book of the Weather The Geophysiology of Amazonia Tropical Climatology Quaternary Environmental Change in the Tropics Tropical Environments Tropical Environments Sustainable Building and Built Environments to Mitigate Climate Change in the Tropics Tropical Urban Heat Islands Tropical Rain Forest Ecosystems Hurricanes and Climate Change The Outlines of Tropical Climatology Manual Of Tropical Housing & Building Climates and Societies - A Climatological Perspective Building Design, Construction and Performance in Tropical Climates Climate Change and Vulnerability Climate Dynamics of the Tropics An Introduction to Climate

### [Urban Climate Challenges in the Tropics](#)

This book reviews the latest assessments of climate variability and climate change, and their impacts on agriculture and forestry, and recommends appropriate adaptation strategies for reducing the vulnerability of agriculture and forestry to climate variability and climate change. Among other solutions, the text offers management strategies to mitigate greenhouse gas emissions from different agroecosystems, and proposes the use of seasonal climate forecasts to reduce climate risk.

### [Climate Change and Adaptation](#)

This book provides research that shows tropical cyclones are more powerful than in the past with the most dramatic increases occurring over the North Atlantic and with the strongest hurricanes. Although such increases are correlated with warming oceans and are consistent with the thermodynamic theory of hurricane intensity, there remains doubt about the interpretation, integrity, and meaning of these results. Arising from the 5th International Summit on Hurricanes and Climate Change, this book contains new research on topics related to hurricanes and climate change. Bringing together international leading academics and researchers on various sides of the debate, the book discusses new research and expresses opinions about what is happening and what might happen in the future with regard to regional and global hurricane (tropical cyclone) activity.

### [Climate Change and Vulnerability and Adaptation](#)

Tropical Climatology Second Edition Glenn R. McGregor, The University of Birmingham, UK Simon Nieuwolt (deceased) Formerly Adjunct Professor, University of Guelph, Canada Climatology, the scientific study of climate, is not only concerned with explaining why a location's or region's climate is like it is but also with describing the nature and availability of the climate resource for a wide range of human activities. This subject is of great relevance to the tropics as climate in many ways controls the lives and economic activities of the approximately 2400 million people living in tropical regions. Tropical climates also have effects that reach far beyond the limits of the regions where they actually prevail: the global general circulation is largely driven by the export of considerable amounts of heat energy from tropical to extratropical latitudes; a large part of all atmospheric water content originates from the tropics, and intermittent tropical phenomena, like El Nino Southern Oscillation (ENSO), not only influence the climates over extensive tropical areas but many parts of the extratropics. The climate sensitivity of populations and economic production in the tropics also makes these regions especially vulnerable to any negative impacts arising from human-induced climate change. Tropical Climatology aims to provide a geographical viewpoint on the physical processes in the tropical atmosphere: to offer explanations of how a location's climate is a product of these processes and to highlight the implications of tropical atmospheric behaviour and climate change for those living in the tropics. This is the second edition of the book and reflects the substantial developments in the field of tropical climatology which have taken place over the two decades since the publication of the first edition. New and

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*updated material has been included on the nature of the general tropical circulation, the monsoons, the quasi-biennial oscillation, the 40-50 day tropical circulation, the El Nino Southern Oscillation phenomenon and its climatic impacts, tropical disturbances, the characteristics of regional tropical climates and climate change in the tropics. The readership of the book remains essentially the same as that for which the first edition was intended; second to third year students in geography and the environmental sciences who have some background in climatology. The updated reference list will, however, provide an entry point for non-specialist postgraduates into the field of tropical climatology.*

## [An Introduction to Weather and Climate](#)

*In regard to global change, emphasis is generally placed on the increase in global temperature, but large changes in the distribution of precipitation are also likely to occur. Such changes have been recorded in the past by paleoclimatological studies or in the field of climatology. Different approaches to monitoring and forecasting the evolution of climate-scale precipitation are reviewed by paleoclimatologists, hydrologists, satellite meteorologists, and climate modellers.*

## [Climate and Health in Hot Countries and the Outlines of Tropical Climatology](#)

*What do we mean by the tropics? The weather and the climates it produces across the tropical zone are significantly different from those experienced by the people living in higher latitudes, so forecasters across Europe and much of North America are unfamiliar with its effects. In this book, Jim Galvin demystifies the topic in this zone that is increasingly of interest to those studying weather and climate. This book was written for weather forecasters, meteorology, environmental science and geography students as an introductory guide. It builds on the experience of the author, his professional experience in the World Area Forecast Centre at the Met Office, Exeter, using studies into the weather and climate seen within the tropical air mass conducted over many years. Its unique approach presents a practical approach to tropical weather studies, drawing on both academic and practical knowledge, covering air mass dynamics, seasonal changes, moist and dry weather, climate variability and human health in chapters and appendices that build up the overall picture, summarising our current state of knowledge. As an overview, it covers the broad range of effects connected with climate and weather in a straightforward way and is clearly illustrated throughout.*

## [Synoptic and Dynamic Climatology](#)

*"Among the places worst hit by climate change are areas of high urban growth in the warm, humid tropics of Asia and Latin America. In these places, the global trend of rapid urbanisation and conditions of local warming compound the effects of climate change. This three-part book explores the unique local climate consequences of urban growth trajectories of tropical cities and provides strategies and design approaches to enhance the quality of life of tropical urban dwellers in the face of urban warming. Part One considers the philosophical basis of the climate challenge in this context and investigates tropical urbanism from the viewpoints of urban activity patterns and the notion of 'thermal pleasure'. Part Two explores specific, practical techniques in enhancing ventilation, shading and greenery as well as the challenges in local climate assessment in the tropics. Part Three explores the barriers and future opportunities for climate-sensitive urban planning and presents specific examples of good practice, contextualized within the wider global debate on adapting to climate change. Urban Climate Challenges in the Tropics is an indispensable companion for planners, designers, architects and students of all levels."--Provided by publisher.*

## [Fundamentals of Tropical Climate Dynamics](#)

*The first edition of my book "Climate and Circulation of the Tropics" was reasonably up to date to the middle of 1985. In a second printing in 1988 it was possible to complete a few literature references and to correct some misprints. However, vigorous research has taken place over the past five years in various areas of tropical climate dynamics, especially in the atmosphere-ocean mechanisms of climate anomalies, climate prediction, ocean circulation, and paleoclimates. Promising progress has also been made in the application of general circulation modelling to tropical climate problems. In the present second edition, named "Climate Dynamics of the Tropics", I have attempted to incorporate much of the recent work to late 1990. Chapters 8 and 9 have been essentially re-written, and major additions have been made to Chapters 4 and 12 in particular. I would like to acknowledge the continued support by the U.S. National Science Foundation over the past five years. B. Parthasarathy, Poona, and H. Lessmann, San Salvador, sent me updates of data series not easily accessible. I have benefitted from discussions with numerous colleagues in the United States and overseas. In the preparation of this second edition, Marilyn Wolff patiently transferred my illegible hand-written drafts onto word processor. Dierk Polzin and Dan Skemp assisted me with the creation of the page masters and the subject index and Christopher Collimore with the author index.*

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## [Planning to Cope with Tropical and Subtropical Climate Change](#)

*This book is designed as an introductory course in Tropical Meteorology for the graduate or advanced level undergraduate student. The material within can be covered in a one-semester course program. The text starts from the global scale-view of the Tropics, addressing the zonally symmetric and asymmetric features of the tropical circulation. It then goes on to progressively smaller spatial and time scales - from the El Niño Southern Oscillation and the Asian Monsoon, down to tropical waves, hurricanes, sea breezes, and tropical squall lines. The emphasis in most chapters is on the observational aspects of the phenomenon in question, the theories regarding its nature and maintenance, and the approaches to its numerical modeling. The concept of scale interactions is also presented as a way of gaining insight into the generation and redistribution of energy for the maintenance of oscillations of a variety of spatial and temporal scales.*

## [Dynamics of The Tropical Atmosphere and Oceans](#)

*There are three interwoven strands which mark the progress of the weather/climate story throughout the past, during the present, and into the future. These are: its effect on human life - ordinary, commercial and political; our desire and ability to predict its fluctuations; and our inability to control it at the same time as inadvertently changing it.*

## [Living in a Dynamic Tropical Forest Landscape](#)

*Climate, vegetation, and human interactions in the Amazon. Introduction to vegetation and climate interactions in the humid tropics. Geophysiology: a new look at earth science. Climate, natural vegetation, and soils in Amazonia: an overview. Causes of deforestation in the Brazilian Amazon. Dam building the Tropics: some environmental and social consequences. Species diversity, phenology, plant - animal interactions, and their correlation with climate, as illustrated by the Brazil Nut family (Lecythidaceae). Climate change in the humid tropics, especially Amazonia, over the last twenty thousand years. Biogeochemical cycles in the tropics. Role of the tropics in atmospheric chemistry. Contribution of tropical ecosystems to the global budgets of trace gases, especially CH<sub>4</sub>, H<sub>2</sub>, CO, and N<sub>2</sub>O. Influence of a tropical forest on air chemistry. Biological processes and productivity of soils in the humid tropics. Effects of deforestation on soil properties and microclimate of a high rain forest in Southern Nigeria. Element cycling in the Amazon Basin: a riverine perspective. Climate, micrometeorology, and the hydrological cycle in the moist tropics. Micrometeorology of an Amazonian Rain Forest. The forest and the hydrological cycle. Modeling effects of vegetation on climate. Tropical climate and general circulation: its susceptibility to human intervention. Interactions between convective and large-scale motions over Amazonia. On the dynamic climatology of the Amazon Basin and associated rain-producing mechanisms. General circulation modeling and the tropics. Effects of change in land use on climate in the humid tropics.*

## [Time Series Analysis in Meteorology and Climatology](#)

*"This book is written for those students that have a data set in the form of a time series and are confronted with the problem of how to analyse this data"--*

## [An Introduction to the Meteorology and Climate of the Tropics](#)

*This textbook introduces fundamental dynamics of tropical atmosphere and ocean useful for advanced graduate courses in atmospheric and climate sciences. It presents an overview of simple atmospheric and oceanic models, as well as the observed phenomena associated with major climate modes in the tropics. It provides students with an up-to-date understanding of the dynamics of tropical climate and weather phenomena. A particular focus is given to scale interactions and atmosphere-ocean interactions associated with tropical mean climate (such as ITCZ asymmetry and annual cycles), synoptic-scale variability (such as synoptic wave trains, easterly waves and tropical cyclones), intraseasonal oscillations (such as Madden-Julian Oscillation and boreal summer intraseasonal oscillation), and interannual variability (such as El Niño-Southern Oscillation and Indian Ocean Dipole). Theoretical and conceptual models are presented for better understanding of physical mechanisms behind the observational phenomena. This book aims to motivate graduate students in atmospheric sciences and oceanography by providing them with the key methods and tools necessary to conduct research.*

## [Increasing Climate Variability and Change](#)

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*Conventional air conditioning is not a sustainable solution to the challenge of a hot or humid climate. The climate problem is compounded in so-called Urban Heat Islands, urban areas where the air can be 3-5°C hotter than its surrounding areas and where pollution levels are consequently raised. Including a colour section with thermal images and maps, this book explores the complex relationships between climate, buildings and plants, especially in urban heat islands. These relationships bear very critically on a range of environmental issues and point to some corresponding solutions. One chapter highlights some of the extensive research work carried out in Singapore, especially investigating the thermal benefits of greenery in buildings in the urban setting. Though several books have been written on urban heat islands, this work uniquely examines the linkages between climate, buildings and plants. It forms a reference for researchers and professionals such as architects, architectural science, landscape architects, building services engineers, urban planners and urban climatologists. It may also be useful for final year undergraduates or graduate students in these disciplines.*

## [Tropical Cyclones](#)

*After publication of the first volume of the Tropical Rain Forest, the International Journal of Mycology and Lichenology commented ``This is a welcome addition to the literature on the ecology of tropical rain forests. The book provides a wealth of data and stimulating discussions and is of great interest to ecologists interested in tropical areas." Whereas the first volume dealt with system-ecological aspects such as community organization and processes, the present volume concentrates on biogeographical aspects such as species composition, diversity, and geographical variation. Recent ecological research in the tropical rain forest has greatly extended our understanding of biogeographical patterns of variation in the various groups of organisms, and has revealed many of the ecological and evolutionary forces that led to the present patterns of variation. Many important systems of co-evolution between the tropical rain forest ecosystems have also come to light, and the loss of species and related damage is better understood in quantitative terms. This volume presents a comprehensive review of these and other features of the rain forest ecosystem structure, and the ecological processes operating that system. General chapters on abiotic and biotic factors are followed by specific chapters on all major groups of organisms. Prospects for the future are discussed and research needs clearly stated. Also the human exploitation of the system, its effects and its limits are discussed. The book is extensively illustrated by photographs, graphs, and tables, and comprehensive bibliographies follow each chapter. Author, systematic and subject indices complete the book. It is a must for all ecologists, agriculturists, foresters, agronomists, hydrologists, soil scientists, entomologists, human ecologists, nature conservationists, and planners dealing with tropical areas. Biologists and environmentalists will also find the volume of great interest.*

## [Tropical Climatology](#)

*This book offers a selection of the best papers presented during the International conference on Mitigating and Adapting Built Environments for Climate Change in the Tropics, held at Tanri Abeng University (TAU), Jakarta, Indonesia, March 2015. The book is divided into four main parts. The first part deals with the general issue of climate change, the cause and the ways to mitigate and to adapt the built environment for climate change in a number of countries. Part 2 deals with the conceptual ways to mitigate building for climate change. The ways to reduce cooling energy in tropical buildings by means of passive design. Part 3 offers papers that examine the way to overcome disasters in the city caused by climate change. The final part deals with the role of plants in mitigating and adapting built environments to climate change - the use of plants, trees and bushes to directly and indirectly reduce carbon emissions are discussed.*

## [Tropical Meteorology](#)

*The global climate changes that led to the expansion and contraction of high latitude ice sheets during the Quaternary period were associated with equally dramatic changes in tropical environments. These included shifts in vegetation zones, changes in the hydrology and ecology of lakes and rivers, and fluctuations in the size of mountain glaciers and sandy deserts. Until recently it was thought that such changes were triggered by fluctuations in the distribution of polar ice cover. Now there is increasing recognition that the tropics themselves have acted as drivers of global climate change over a range of timescales. The aim of Quaternary Environmental Change in the Tropics is to provide a synthesis of the changes that occurred in tropical terrestrial and marine systems during the Pleistocene and Holocene, complementing data-derived reconstructions with output from state-of-the-art climate models. It is targeted at final-year undergraduate students and research specialists, but will provide an introduction to tropical Quaternary research for a variety of other readers.*

## [Global Precipitations and Climate Change](#)

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## [Introduction to Climatology for the Tropics](#)

'Sound and solid case studies on vulnerability and adaptation have been woefully lacking in the international discourse on climate change. This set of books begins to bridge the gap.' Achim Steiner, UN Under-Secretary General and Executive Director of United Nations Environment Programme 'Important reading for students and practitioners alike.' Martin Parry, Co-Chair, Working Group II (Impacts, Adaptation and Vulnerability), Intergovernmental Panel on Climate Change (IPCC) 'Fills an important gap in our understanding It is policy-relevant and deserves to be widely read.' Richard Klein, Senior Research Fellow, Stockholm Environment Institute (SEI), Sweden The Intergovernmental Panel on Climate Change (IPCC) concluded in its 2001 report that much of the developing world is highly vulnerable to adverse impacts from climate change. But the IPCC also concluded that the vulnerabilities of developing countries are too little studied and too poorly understood to enable determination of adaptation strategies that would be effective at reducing risks. These authoritative volumes, resulting from the work of the Assessments of Impacts and Adaptations to Climate Change (AIACC) project launched by the IPCC in 2002, are the first to provide a comprehensive investigation of the issues at stake. Climate Change and Vulnerability discusses who is vulnerable to climate change, the nature of their vulnerability and the causes of their vulnerability for parts of the world that have been poorly researched until now. Climate Change and Adaptation covers current practices for managing climate risks to food security, water resources, livelihoods, human health and infrastructure, needs for effective management of climate risks, the changing nature of the risks, strategies for adaptation, and the need to integrate these strategies into development planning and resource management.

## [Meteorology Today: An Introduction to Weather, Climate, and the Environment](#)

The design, construction and use of buildings in tropical climates pose specific challenges to built environment professionals. This text seeks to capture some of the key issues of technology and practice in the areas of building design, refurbishment, construction and facilities management in tropical regions. Using a consistent chapter structure throughout, and incorporating the latest research findings, this book outlines: the functional requirements of buildings in tropical climates; the challenges associated with the sustainability of the built environment, building form and whole life performance in the context of a tropical setting; the impact of potentially hostile tropical conditions upon building pathology and the durability of components, structure and fabric; the tasks which face those responsible for appraising the design, condition, maintenance and conservation of built heritage in tropical regions; the facilities management issues faced in tropical climates; and the refurbishment, upgrade and renewal of the tropical built environment. The book is ideal as a course text for students of Architecture, Construction, Surveying and FM as well as providing a sound reference for practitioners working in these regions.

## [Introduction to Climatology for the Tropics](#)

## [Tropical Urban Heat Islands](#)

## [An Introduction to the Meteorology and Climate of the Tropics](#)

Written by meteorologists C. Donald Ahrens and Robert Henson and grounded in the scientific method, METEOROLOGY TODAY: AN INTRODUCTION TO WEATHER, CLIMATE, AND THE ENVIRONMENT shows you how to observe, calculate and synthesize weather information as a scientist. Packed with engaging visuals, the 13th edition offers the latest information on climate change, ozone depletion, air quality, El Nino and other key topics as well as discussions of recent high-profile weather events, including droughts, heat waves, tornado outbreaks and hurricanes. Focus On boxes help you delve deeper into meteorological observation methods, environmental issues and more, while Weather Watch boxes highlight interesting weather facts and meteorological events. In addition, case studies give you direct access to academic and news-worthy papers on recent developments and meteorological trends. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

## [Tropical Climatology](#)

This original book describes the behavior of tropical cyclones in the South Pacific. It investigates the broad range of disturbance effects these violent storms have on the physical

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*environments of the islands that lie in their path and the people who live on them. It is the first book to link these two themes - the characteristics of cyclones and their landscape impacts. Examples and illustrations are drawn widely from across the region, resulting in a highly readable volume.*

[The Daily Telegraph Book of the Weather](#)

[The Geophysiology of Amazonia](#)

[Tropical Climatology](#)

*Tropical Environments presents a comprehensive introduction to the complex systems of the tropics. Covering a broad, cross-regional range of humid through to semi-arid tropical climate zones, the book features a wealth of case studies drawn from throughout the tropical world. The authors tackle the major problems within the tropics, from complex biological interactions and soil nutrient deficiencies, offering a balanced integration of biophysical and human management issues.*

[Quaternary Environmental Change in the Tropics](#)

[Tropical Environments](#)

*This book provides examples of climate change characterization and decision-making tools for subtropical and tropical adaptation planning. It is intended for local operators, physical planners, besides researchers and students of these subjects. The first chapter describes the status of climate planning in large subtropical and tropical cities. The following six chapters discuss hazards (drought, intense precipitations, sea level rise, sea water intrusion) and early warning systems. Nine chapters enlarge on flood risk analysis and preliminary mapping, climate change vulnerability, comparing contingency plans in various scales and presenting experiences centred on adaptation planning. The last three chapters introduce some best practices of weather and climate change monitoring and flood risk mapping and assessment.*

[Tropical Environments](#)

*What do we mean by the tropics? The weather and the climates it produces across the tropical zone are significantly different from those experienced by the people living in higher latitudes, so forecasters across Europe and much of North America are unfamiliar with its effects. In this book, Jim Galvin demystifies the topic in this zone that is increasingly of interest to those studying weather and climate. This book was written for weather forecasters, meteorology, environmental science and geography students as an introductory guide. It builds on the experience of the author, his professional experience in the World Area Forecast Centre at the Met Office, Exeter, using studies into the weather and climate seen within the tropical air mass conducted over many years. Its unique approach presents a practical approach to tropical weather studies, drawing on both academic and practical knowledge, covering air mass dynamics, seasonal changes, moist and dry weather, climate variability and human health in chapters and appendices that build up the overall picture, summarising our current state of knowledge. As an overview, it covers the broad range of effects connected with climate and weather in a straightforward way and is clearly illustrated throughout.*

[Sustainable Building and Built Environments to Mitigate Climate Change in the Tropics](#)

*This book presents a unique and comprehensive view of the fundamental dynamical and thermodynamic principles underlying the large circulations of the coupled ocean-atmosphere system Dynamics of The Tropical Atmosphere and Oceans provides a detailed description of macroscale tropical circulation systems such as the monsoon, the Hadley and Walker Circulations, El Niño, and the tropical ocean warm pool. These macroscale circulations interact with a myriad of higher frequency systems, ranging from convective cloud systems to migrating equatorial waves that attend the low-frequency background flow. Towards understanding and predicting these circulation systems. A comprehensive overview of the dynamics*

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*and thermodynamics of large-scale tropical atmosphere and oceans is presented using both a "reductionist" and "holistic" perspectives of the coupled tropical system. The reductionist perspective provides a detailed description of the individual elements of the ocean and atmospheric circulations. The physical nature of each component of the tropical circulation such as the Hadley and Walker circulations, the monsoon, the incursion of extratropical phenomena into the tropics, precipitation distributions, equatorial waves and disturbances described in detail. The holistic perspective provides a physical description of how the collection of the individual components produces the observed tropical weather and climate. How the collective tropical processes determine the tropical circulation and their role in global weather and climate is provided in a series of overlapping theoretical and modelling constructs. The structure of the book follows a graduated framework. Following a detailed description of tropical phenomenology, the reader is introduced to dynamical and thermodynamical constraints that guide the planetary climate and establish a critical role for the tropics. Equatorial wave theory is developed for simple and complex background flows, including the critical role played by moist processes. The manner in which the tropics and the extratropics interact is then described, followed by a discussion of the physics behind the subtropical and near-equatorial precipitation including arid regions. The El Niño phenomena and the monsoon circulations are discussed, including their covariance and predictability. Finally, the changing structure of the tropics is discussed in terms of the extent of the tropical ocean warm pool and its relationship to the intensity of global convection and climate change. Dynamics of the Tropical Atmosphere and Oceans is aimed at advanced undergraduate and early career graduate students. It also serves as an excellent general reference book for scientists interested in tropical circulations and their relationship with the broader climate system.*

## [Tropical Urban Heat Islands](#)

*The elements of climate; Air temperature (including insolation); Atmospheric pressure and winds; Atmospheric moisture and precipitation; Air masses and fronts; Atmospheric disturbances and their associated weather types; The world pattern of climates; Climatic types and their distribution; Classification of climates and the world pattern; The tropical rainy climates; The dry climates; The humid mesothermal climates; The humid microthermal climates; Polar climates and highland climates; Koppen's classification of climates; Supplementary climatic data for selected stations.*

## [Tropical Rain Forest Ecosystems](#)

*The impact of climate on human activities and the effect of humans on climate are two of the most important areas of inquiry in climatology. These interactions conducted through physical, chemical and biological processes were described as early as Roman and Greek times. Marcus Vitruvius (75-25 B. C. ), a famous Roman engineer and architect, made the following observation about the climatic conditions necessary for founding a city: Land ideal for the health is slightly elevated and there should be neither fog nor frost. The direction of the slope and the distance to the swamps, lakes, and beaches must also be considered. The prevailing wind directions, observed by a wind tower at the center of the city, like Horologium at Athens, should be taken into consideration in city planning. The main and narrow streets should be placed in the middle angle of the two prevailing wind directions. Then the location of the Pantheons and squares should be decided. The influence of humans on climate was a major subject for discussion in the 19th century, inspired in part, by the rapid industrial growth and expanding deforestation of the time. D. L. Howard wrote brilliant pieces on the climate of London in the 1830s, while G. P. Marsh discussed the effects of forests on precipitation in the U. S. A. in the second half of the 19th century.*

## [Hurricanes and Climate Change](#)

*This comprehensive examination of need, capacity and strategies for adaptation to climate change, based on new research initiated by the IPCC, provides an authoritative investigation of the issues at stake.*

## [The Outlines of Tropical Climatology](#)

*This book brings together a wealth of scientific findings and ecological knowledge to survey what we have learned about the "Wet Tropics" rainforests of North Queensland, Australia. This interdisciplinary text is the first book to provide such a holistic view of any tropical forest environment, including the social and economic dimensions. The most thorough assessment of a tropical forest landscape to date. Explores significant scientific breakthroughs in areas including conservation genetics, vegetation modeling, agroforestry and revegetation techniques, biodiversity assessment and modeling, impacts of climate change, and the integration of science into natural resource management. Research achieved, in part, due to the Cooperative Research Centre for Tropical Rainforest Ecology and Management (the Rainforest CRC). Written by a number of distinguished international experts. Contains chapter summaries and section*

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commentaries

## [Manual Of Tropical Housing & Building](#)

*'Sound and solid case studies on vulnerability and adaptation have been woefully lacking in the international discourse on climate change. This set of books begins to bridge the gap.'* Achim Steiner, UN Under-Secretary General and Executive Director of United Nations Environment Programme *'Important reading for students and practitioners alike.'* Martin Parry, Co-Chair, Working Group II (Impacts, Adaptation and Vulnerability), Intergovernmental Panel on Climate Change (IPCC) *'Fills an important gap in our understanding It is policy-relevant and deserves to be widely read.'* Richard Klein, Senior Research Fellow, Stockholm Environment Institute (SEI), Sweden *The Intergovernmental Panel on Climate Change (IPCC) concluded in its 2001 report that much of the developing world is highly vulnerable to adverse impacts from climate change. But the IPCC also concluded that the vulnerabilities of developing countries are too little studied and too poorly understood to enable determination of adaptation strategies that would be effective at reducing risks. These authoritative volumes, resulting from the work of the Assessments of Impacts and Adaptations to Climate Change (AIACC) project launched by the IPCC in 2002, are the first to provide a comprehensive investigation of the issues at stake. Climate Change and Vulnerability discusses who is vulnerable to climate change, the nature of their vulnerability and the causes of their vulnerability for parts of the world that have been poorly researched until now. Climate Change and Adaptation covers current practices for managing climate risks to food security, water resources, livelihoods, human health and infrastructure, needs for effective management of climate risks, the changing nature of the risks, strategies for adaptation, and the need to integrate these strategies into development planning and resource management.*

## [Climates and Societies - A Climatological Perspective](#)

*Tropical Environments presents a comprehensive introduction to the complex systems of the tropics. Covering a broad, cross-regional range of humid through to semi-arid tropical climate zones, the book features a wealth of case studies drawn from throughout the tropical world. The authors tackle the major problems within the tropics, from complex biological interactions and soil nutrient deficiencies, offering a balanced integration of biophysical and human management issues.*

## [Building Design, Construction and Performance in Tropical Climates](#)

*Designed As A Textbook For Students Of Architecture, Housing, Environmental Design And Climate Control In Tropical Countries, This Book Deals With The Theory Of Climatic Design And Shows How Practical Solutions Are Derived From Theoretical Understanding.*

## [Climate Change and Vulnerability](#)

*Synoptic and Dynamic Climatology provides the first comprehensive account of the dynamical behaviour and mechanisms of the global climate system and its components, together with a modern survey of synoptic-scale weather systems in the tropics and extratropics, and of the methods and applications of synoptic climate classification. It is unrivalled in the scope and detail of its contents. The work is thoroughly up to date, with extensive bibliographies by chapter. It is illustrated with nearly 300 figures and plates. \*Part 1 provides an introduction to the global climate system and the space-time scales of weather and climate processes, followed by a chapter on climate data and their analysis \*Part 2 describes and explains the characteristics of the general circulation of the global atmosphere and includes the nature and causes of global teleconnection patterns \*Part 3 discusses synoptic weather systems in the extratropics and tropics and satellite-based climatologies of synoptic features. It also describes the applications of synoptic climatology and summarises current climatic research and its directions.*

## [Climate Dynamics of the Tropics](#)

*Conventional air conditioning is not a sustainable solution to the challenge of a hot or humid climate. The climate problem is compounded in so-called Urban Heat Islands, urban areas where the air can be 3-5°C hotter than its surrounding areas and where pollution levels are consequently raised. Including a colour section with thermal images and maps, this book explores the complex relationships between climate, buildings and plants, especially in urban heat islands. These relationships bear very critically on a range of environmental issues*

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[An Introduction to Climate](#)

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