

## Meteorology Understanding The Atmosphere Walmart

A field guide to the weather, including clouds, storm systems, and climate change A resource for those intrigued by events in the sky—clouds, precipitation, storms, aurora, halos—and for those who follow daily weather events. Using a nontechnical approach, the authors describe the flow of energy and moisture through global and local landscapes and how they evolve into day-to-day weather. For those fascinated by the sky's colors and patterns, there are halos, rainbows, iridescent clouds, and other tapestries in the sky. For the cloud-watcher, common and unusual cloud forms are covered; for those entranced by storms, the guide includes severe thunderstorms, winter blizzards, hurricanes, hail, ice storms, and other challenges that the atmosphere inflicts. It even includes a chapter on weather in the atmospheres of the planets and the sun. More than 400 photographs illustrate visible weather, and diagrams explain the more challenging physical concepts. This book is designed for those who want to look up, marvel, and understand what they see.

Andrew Revkin, who is the senior climate reporter at ProPublica after a prize-winning 21-year stint at The New York Times, presents an intriguing illustrated history of humanity's evolving relationship with Earth's dynamic climate system and the wondrous weather it generates.--

We don't just live in the air; we live because of it. It's the most miraculous substance on earth, responsible for our food, our weather, our water, and our ability to hear. In this exuberant book, gifted science writer Gabrielle Walker peels back the layers of our atmosphere with the stories of the people who uncovered its secrets: • A flamboyant Renaissance Italian discovers how heavy our air really is: The air filling Carnegie Hall, for example, weighs seventy thousand pounds. • A one-eyed barnstorming pilot finds a set of winds that constantly blow five miles above our heads. • An impoverished American farmer figures out why hurricanes move in a circle by carving equations with his pitchfork on a barn door. • A well-meaning inventor nearly destroys the ozone layer. • A reclusive mathematical genius predicts, thirty years before he's proved right, that the sky contains a layer of floating metal fed by the glowing tails of shooting stars.

A near-future eco-thriller from the bestselling author of Schismatrix Plus and The Difference Engine. The Storm Troupers are a group of weather hackers who roam the plains of Texas and Oklahoma, hopped up on adrenaline and technology. Utilizing virtual reality, flying robots, and all-terrain vehicles, they collect data on the extreme storms ravaging an America decimated by climate change. But even their visionary leader can't predict the danger on the horizon when a volatile new member joins their ranks and faces a trial by fire: a massive tornado unlike any the world has seen before. "A remarkable and individual sharpness of vision . . . Sterling hacks the future, and an elegant hack it is." —Locus "Lucid and tremendously entertaining. Sterling shows once more his skills in storytelling and technospeak. A cyberpunk winner." —Kirkus Reviews "So believable are the speculations that . . . one becomes convinced that the world must and will develop into what Sterling has predicted." —Science Fiction Age "A very exciting coming-of-age story in a wild future America . . . What's it got? Cyberpunk attitude, genuine humor, nanotechnology, minimal sex but some cool medications and very big weather systems." —SFReviews.net "Brilliant . . . Fascinating . . . Exciting . . . A full complement of thrills." —The New York Review of Science Fiction

Academic publication.

Finally, one book gives you what you need to win the climate argument with friends. No energy. No life. That's the real science. Ask Californians about uncoupling for their daily blackout so energy zealots can feel better. What if climate change is naturally occurring and cyclical? What if trillions of dollars will be spent to accomplish nothing? Forces in Washington are proposing massive new indebtedness for pet projects aimed at eliminating America's production of the life-giving energy that now runs it. Read this before agreeing to end America's energy industry in service of political correctness. Climate expert and renowned meteorologist Joe Bastardi shows in unimpeachable detail how the extreme weather events seen today are nothing new. He goes in-depth to document naturally occurring climate and weather events to stand up to those who would control and ultimately enslave Americans in a mountain of debt, taxation and limited freedoms. "Yes, the climate is changing, and, thanks to an ever-fluctuating level of activity on our Sun, the climate has always been changing," Joe reminds us. "As long as we have a living Sun, changes in climate will be felt on the planets that surround it." So, is this book important? You decide.

A poetic and nuanced exploration of the human experience of flight that reminds us of the full imaginative weight of our most ordinary journeys—and reawakens our capacity to be amazed. The twenty-first century has relegated airplane flight—a once remarkable feat of human ingenuity—to the realm of the mundane. Mark Vanhoenacker, a 747 pilot who left academia and a career in the business world to pursue his childhood dream of flight, asks us to reimagine what we—both as pilots and as passengers—are actually doing when we enter the world between departure and discovery. In a seamless fusion of history, politics, geography, meteorology, ecology, family, and physics, Vanhoenacker vaults across geographical and cultural boundaries; above mountains, oceans, and deserts; through snow, wind, and rain, renewing a simultaneously humbling and almost superhuman activity that affords us unparalleled perspectives on the planet we inhabit and the communities we form.

This book is the second, fully revised edition of The Atmosphere and Weather of Southern Africa. It provides a thorough, in-depth, and well-illustrated introduction to the meteorology of southern Africa, and includes a new emphasis on climatology.

Do you find it strange that some airplanes leave lines in the sky while others don't? Ever heard the word "chemtrails"? Well, something is happening up there in the sky. This book details the

history of weather modification, the dangers it has to our environment, and also includes health related issues and offers advice about living with geoengineering. An introduction to the many covert operations not related to climate control that will be possible should the public accept planes spraying the sky are included. Read on and find out what you can do to help The Fight Against Geoengineering.

This book deals with recent developments and applications of environmental monitoring technologies, with emphasis on rapidly progressing optical and biological methods. Written by worldwide experts, this book will be of interest to environmental scientists in academia, research institutes, industry and the government.

North American Wildland Plants contains descriptions of the salient characteristics of the most important wildland plants of North America. This comprehensive reference assists individuals with limited botanical knowledge as well as natural resource professionals in identifying wildland plants. The two hundred species of wildland plants in this book were selected because of their abundance, desirability, or poisonous properties. Each illustration has been enhanced with labels pointing to key characteristics to facilitate the identification of unknown plants. Each plant description includes plant characteristics, an illustration of the plant with enlarged parts, and a general distribution map for North America. Each species description includes nomenclature; life span; origin; season of growth; inflorescence, flower or spikelet, or other reproductive parts; vegetative parts; and growth characteristics. Brief notes are included on habitat; livestock losses; and historic, food, and medicinal uses. This third edition contains additional refinements in the nomenclature, distribution, illustrations, and descriptions of plants.

Foreword. A transformed scientific method. Earth and environment. Health and wellbeing. Scientific infrastructure. Scholarly communication.

This workbook/study guide is organized by chapter and includes chapter summary, important concepts, self-test true/false, multiple choice, and essay type questions and answers. A list of additional suggested reading material is also included to further enhance student understanding of the subject.

"Surging sea levels are inundating the coasts." "Hurricanes and tornadoes are becoming fiercer and more frequent." "Climate change will be an economic disaster." You've heard all this presented as fact. But according to science, all of these statements are profoundly misleading. When it comes to climate change, the media, politicians, and other prominent voices have declared that "the science is settled." In reality, the long game of telephone from research to reports to the popular media is corrupted by misunderstanding and misinformation. Core questions—about the way the climate is responding to our influence, and what the impacts will be—remain largely unanswered. The climate is changing, but the why and how aren't as clear as you've probably been led to believe. Now, one of America's most distinguished scientists is clearing away the fog to explain what science really says (and doesn't say) about our changing climate. In *Unsettled: What Climate Science Tells Us, What It Doesn't, and Why It Matters*, Steven Koonin draws upon his decades of experience—including as a top science advisor to the Obama administration—to provide up-to-date insights and expert perspective free from political agendas. Fascinating, clear-headed, and full of surprises, this book gives readers the tools to both understand the climate issue and be savvier consumers of science media in general. Koonin takes readers behind the headlines to the more nuanced science itself, showing us where it comes from and guiding us through the implications of the evidence. He dispels popular myths and unveils little-known truths: despite a dramatic rise in greenhouse gas emissions, global temperatures actually decreased from 1940 to 1970. What's more, the models we use to predict the future aren't able to accurately describe the climate of the past, suggesting they are deeply flawed. Koonin also tackles society's response to a changing climate, using data-driven analysis to explain why many proposed "solutions" would be ineffective, and discussing how alternatives like adaptation and, if necessary, geoengineering will ensure humanity continues to prosper. *Unsettled* is a reality check buoyed by hope, offering the truth about climate science that you aren't getting elsewhere—what we know, what we don't, and what it all means for our future.

Discover the Earth's atmosphere, weird weather, the greenhouse effect, and much more, all 30 seconds at a time! Discover how the Earth's atmosphere affects our climates, learn about weird weather across the world, and find out how the greenhouse effect is changing our weather. The 30 Seconds series takes readers on a journey of discovery through a wide range of fascinating subjects. Each topic is presented with a quick 30-second soundbite, supported by flash summaries and full-color artwork. Fun, interactive missions with things to make or do support the topics, encouraging readers to test, explore, and discover even more.

From the National Book Award finalist Lauren Redniss, author of *Radioactive*, comes a dazzling fusion of storytelling, visual art, and reportage that grapples with weather in all its dimensions: its danger and its beauty, why it happens and what it means. WINNER OF THE PEN/E. O. WILSON LITERARY SCIENCE WRITING AWARD • NAMED ONE OF THE BEST BOOKS OF THE YEAR BY SAN FRANCISCO CHRONICLE, KIRKUS REVIEWS, AND SHELF AWARENESS *Weather* is the very air we breathe—it shapes our daily lives and alters the course of history. In *Thunder & Lightning*, Lauren Redniss tells the story of weather and humankind through the ages. This wide-ranging work roams from the driest desert on earth to a frigid island in the Arctic, from the Biblical flood to the defeat of the Spanish Armada. Redniss visits the headquarters of the National Weather Service, recounts top-secret rainmaking operations during the Vietnam War, and examines the economic impact of disasters like Hurricane Katrina. Drawing on extensive research and countless interviews, she examines our own day and age, from our most personal decisions—Do I need an umbrella today?—to the awesome challenges we face with global climate change. Redniss produced each element of *Thunder & Lightning*: the text, the artwork, the covers, and every page in between. She created many of the images using the antiquated printmaking technique copper plate photogravure etching. She even designed the book's typeface. The result is a book unlike any other: a spellbinding combination of storytelling, art, and science. Praise for *Thunder & Lightning* "[An] aesthetically charged and deeply researched account . . . a wild rainstorm of a book, pelting the reader with ideas and inspiration."—*Nature* "A gorgeous and illuminating illustrated study of weather in all its tempestuous variety . . . Redniss's combo of fact, folklore, and vibrant etched copperplate prints enthralls."—*O: The Oprah Magazine* "Eerily beautiful . . . Contains plenty of scientific explanation (including more than a few nods toward global warming), but also far-flung personal stories that illuminate the beauty, wonder and chaos inherent in the elements."—*The New York Times* "Magical . . . Redniss has . . . shown us how human beings live with nature—fighting, coexisting, taming, predicting via leech barometer and radar and intuition."—*The New York Times Book Review* "[A] twenty-first-century genius . . . Redniss is inventing a new literary genre. . . . The reader willing to put herself fully in Redniss's hands will be rewarded with a delicious feeling of being enveloped by a phenomenon that eclipses the chiming trivialities of daily life."—*Elle* "Lends a graphic-novel-like allure to some of nature's most curious paradoxes."—*Vogue* "Redniss is one of the most creative science writers of our time—her combination of beautiful artwork, reporting, and poetic prose brings science to life in ways that words alone simply cannot."—*Rebecca Skloot* "Redniss combines her own dual punch of expressive art and impressive erudition to give an entirely new take on all that happens above our heads. This is an illuminated book that is also an illuminating one."—*Adam Gopnik* "A strange and wonderful thing, the work of a first-class mind that refuses to submit to any categories or precedent."—*Dave Eggers* "Beautiful and totally original."—*Elizabeth Kolbert*

An exploration of artworks that use weather or atmosphere as the primary medium, creating new coalitions of collective engagement with the climate crisis. In a time of climate crisis, a growing number of artists use weather or atmosphere as an artistic medium, collaborating with scientists, local communities, and climate activists. Their work mediates scientific modes of knowing and experiential knowledge of weather, probing collective anxieties and raising urgent ecological questions, oscillating between the "big picture systems view" and a ground-based perspective. In this book, Janine Randerson explores a series of meteorological art projects from the 1960s to the present that draw on sources ranging from dynamic, technological, and physical systems to indigenous cosmology. Randerson finds a precursor to today's meteorological art in 1960s artworks that were weather-driven and infused with the new sciences of chaos and indeterminacy, and she examines work from this period by artists including Hans Haacke, Fujiko Nakaya, and Aotearoa-New Zealand kinetic sculptor Len Lye. She looks at live experiences of weather in art, in particular Fluxus performance and contemporary art that makes use of meteorological data streams and software. She describes the use of meteorological instruments, including remote satellite sensors, to create affective atmospheres; online projects and participatory performances that create a new form of "social meteorology"; works that respond directly to climate change, many from the Global South; artist-activists who engage with the earth's diminishing cryosphere; and a speculative art in the form of quasi-scientific experiments. Art's current eddies of activity around the weather, Randerson writes, perturb the scientific hold on facts and offer questions of value in their place.

"From tornadoes and volcanoes to tsunamis and monsoons and everything in between, find out all the ... facts about the weather we experience every day with the ... host of Survivor, ... Jeff Probst"--  
With a long history of innovation in the calculus market, the Larson/Edwards' CALCULUS program has been widely praised by a generation of students and professors for solid and effective pedagogy that addresses the needs of a broad range of teaching and learning styles and environments. Each title in the series is just one component in a comprehensive calculus course program that carefully integrates and coordinates print, media, and technology products for successful teaching and learning. For use in or out of the classroom, the companion website LarsonCalculus.com offers free access to multiple tools and resources to supplement students' learning. Stepped-out solution videos with instruction are available at CalcView.com for selected exercises throughout the text. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

In the New York Times bestseller Everything All at Once, Bill Nye shows you how thinking like a nerd is the key to changing yourself and the world around you. Everyone has an inner nerd just waiting to be awakened by the right passion. In Everything All at Once, Bill Nye will help you find yours. With his call to arms, he wants you to examine every detail of the most difficult problems that look unsolvable--that is, until you find the solution. Bill shows you how to develop critical thinking skills and create change, using his "everything all at once" approach that leaves no stone unturned. Whether addressing climate change, the future of our society as a whole, or personal success, or stripping away the mystery of fire walking, there are certain strategies that get results: looking at the world with relentless curiosity, being driven by a desire for a better future, and being willing to take the actions needed to make change happen. He shares how he came to create this approach--starting with his Boy Scout training (it turns out that a practical understanding of science and engineering is immensely helpful in a capsizing canoe) and moving through the lessons he learned as a full-time engineer at Boeing, a stand-up comedian, CEO of The Planetary Society, and, of course, as Bill Nye The Science Guy. This is the story of how Bill Nye became Bill Nye and how he became a champion of change and an advocate of science. It's how he became The Science Guy. Bill teaches us that we have the power to make real change. Join him in... dare we say it... changing the world.

A Thoroughly Updated New Edition of an Essential Text in an Ever-evolving Field Ideal for the upper-level undergraduate or introductory-level graduate course on climatology, the thoroughly updated third edition provides students with a comprehensive foundation of the climatic system. It begins with an overview of climatology basics, including a discussion on climatology versus meteorology and an introduction to the atmosphere. Also included in these introductory chapters is a discussion on air/sea interactions to assist readers in understanding this critical aspect of the earth/atmosphere system. Using a regional approach, discussions progress to more advanced concepts, such as microscale processes; climatic water balance; global atmospheric circulation; climatic classification; the spatial variability of climates; and much more. Presenting evidence-based contemporary information and data, Climatology, Third Edition encourages readers to think critically about the climate system while developing a sense of social responsibility. The comprehensive Third Edition provides up-to-date data through graphs and maps, and introduces new key terms that have crept into the science and public discourse. With additional quantitative and paleoclimatology material, Climatology, Third Edition thoroughly explores the processes that make the climate the way it is today, making it an essential resource for students delving into this ever-evolving field.

A history of weather forecasting, and an animated portrait of the nineteenth-century pioneers who made it possible By the 1800s, a century of feverish discovery had launched the major branches of science. Physics, chemistry, biology, geology, and astronomy made the natural world explicable through experiment, observation, and categorization. And yet one scientific field remained in its infancy. Despite millennia of observation, mankind still had no understanding of the forces behind the weather. A century after the death of Newton, the laws that governed the heavens were entirely unknown, and weather forecasting was the stuff of folklore and superstition. Peter Moore's The Weather Experiment is the account of a group of naturalists, engineers, and artists who conquered the elements. It describes their travels and experiments, their breakthroughs and bankruptcies, with picaresque vigor. It takes readers from Irish bogs to a thunderstorm in Guanabara Bay to the basket of a hydrogen balloon 8,500 feet over Paris. And it captures the particular bent of mind—combining the Romantic love of Nature and the Enlightenment love of Reason—that allowed humanity to finally decipher the skies.

Bastardi's love for the weather and climate drove him to write The Climate Chronicles, an expose' of the true climate change agenda. By drawing on many of the over 150 blogs and articles he has written on the matter, he shows how weather and climate are being weaponized, politicized, and in reality distorted by academia, media and even religious leaders to advance a cause that is counter to our nation's best interests, A must-read for anyone that loves weather and climate, and the freedoms that are being attacked in our country today, and is curious enough to question what they are being told.

This revised text presents a cogent explanation of the fundamentals of meteorology, and explains storm dynamics for weather-oriented meteorologists. It discusses climate dynamics and the implications posed for global change. The Fourth Edition features a CD-ROM with MATLAB® exercises and updated treatments of several key topics. Much of the material is based on a two-term course for seniors majoring in atmospheric sciences. \* Provides clear physical explanations of key dynamical principles \* Contains a wealth of illustrations to elucidate text and equations, plus end-of-chapter problems \* Holton is one of the leading authorities in contemporary meteorology, and well known for his clear writing style \* Instructor's Manual available to adopters NEW IN THIS EDITION \* A CD-ROM with MATLAB® exercises and demonstrations \* Updated treatments on climate dynamics, tropical meteorology, middle atmosphere dynamics, and numerical prediction

The science behind global warming, and its history: how scientists learned to understand the atmosphere, to measure it, to trace its past, and to model its future. Global warming skeptics often fall back on the argument that the scientific case for global warming is all model predictions, nothing but simulation; they warn us that we need to wait for real data, “sound science.” In *A Vast Machine* Paul Edwards has news for these skeptics: without models, there are no data. Today, no collection of signals or observations—even from satellites, which can “see” the whole planet with a single instrument—becomes global in time and space without passing through a series of data models. Everything we know about the world's climate we know through models. Edwards offers an engaging and innovative history of how scientists learned to understand the atmosphere—to measure it, trace its past, and model its future.

Now in dynamic full color, *SI ENGINEERING FUNDAMENTALS: AN INTRODUCTION TO ENGINEERING*, 5e helps students develop the strong problem-solving skills and solid foundation in fundamental principles they will need to become analytical, detail-oriented, and creative engineers. The book opens with an overview of what engineers do, an inside glimpse of the various areas of specialization, and a straightforward look at what it takes to succeed. It then covers the basic physical concepts and laws that students will encounter on the job. Professional Profiles throughout the text highlight the work of practicing engineers from around the globe, tying in the fundamental principles and applying them to professional engineering. Using a flexible, modular format, the book demonstrates how engineers apply physical and chemical laws and principles, as well as mathematics, to design, test, and supervise the production of millions of parts, products, and services that people use every day. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

*The Atmosphere: An Introduction to Meteorology* remains the standard introduction in its field, reinforcing basic concepts with everyday, easy-to-grasp examples. This revision retains the hallmarks professors have come to expect from Tarbuck and Lutgens: a friendly, largely non-technical narrative, timely coverage of recent atmospheric events, and carefully crafted artwork by leading science illustrator Dennis Tasa. The Twelfth Edition maintains a student-friendly approach while evolving to address various course challenges and trends. New digital visualization and assessment tools are now available on MyMeteorologyLab, a new resource that both encourages student self-study and enables instructors to manage their courses online, with customizable assessments for students. Each chapter in this revision is organized by a new active learning path to help guide and engage non-science majors. A greater focus on popular and increasingly important Severe & Hazardous Weather applications, new critical visual analysis Eye on the Atmosphere features, as well as new discussions of the real-world career opportunities of meteorology with Professional Profile essays, make the science both relevant and exciting.

A guide to observing and forecasting all types of weather features 350 photographs of natural phenomena and a discussion of all facets of weather

*Invisible in the Storm* is the first book to recount the history, personalities, and ideas behind one of the greatest scientific successes of modern times--the use of mathematics in weather prediction. Although humans have tried to forecast weather for millennia, mathematical principles were used in meteorology only after the turn of the twentieth century. From the first proposal for using mathematics to predict weather, to the supercomputers that now process meteorological information gathered from satellites and weather stations, Ian Roulstone and John Norbury narrate the groundbreaking evolution of modern forecasting. The authors begin with Vilhelm Bjerknes, a Norwegian physicist and meteorologist who in 1904 came up with a method now known as numerical weather prediction. Although his proposed calculations could not be implemented without computers, his early attempts, along with those of Lewis Fry Richardson, marked a turning point in atmospheric science. Roulstone and Norbury describe the discovery of chaos theory's butterfly effect, in which tiny variations in initial conditions produce large variations in the long-term behavior of a system--dashing the hopes of perfect predictability for weather patterns. They explore how weather forecasters today formulate their ideas through state-of-the-art mathematics, taking into account limitations to predictability. Millions of variables--known, unknown, and approximate--as well as billions of calculations, are involved in every forecast, producing informative and fascinating modern computer simulations of the Earth system. Accessible and timely, *Invisible in the Storm* explains the crucial role of mathematics in understanding the ever-changing weather. Some images inside the book are unavailable due to digital copyright restrictions.

Will it be warm or cold? Should we wear shorts or pants? Shoes or rain boots? This picture book explores why the weather can be so hard to predict. Now rebranded with a new cover look, this classic picture book uses colorful, simple diagrams to explain meteorology in a fun, engaging way. Perfect for young readers and budding meteorologists, this bestseller is filled with rich climate vocabulary and clear explanations of everyday weather instruments like thermometers and barometers. Both text and artwork were vetted for accuracy by Dr. Sean Birkel of the Climate Change Institute at the University of Maine. This is a Level 2 Let's-Read-and-Find-Out, which means the book explores more challenging concepts perfect for children in the primary grades and supports the Common Core Learning Standards and Next Generation Science Standards. Let's-Read-and-Find-Out is the winner of the American Association for the Advancement of Science/Subaru Science Books & Films Prize for Outstanding Science Series. From hurricanes to droughts - be an eyewitness to Mother Nature's work with DK Eyewitness Books: Weather. Discover everything from why deserts are dry to what makes raindrops grow and how to put together your own weather forecast in *Eyewitness: Weather*.

An eye-of-the-hurricane view of storm chasing from the star of the Discovery Channel hit series *Storm Chasers*. Only one in ten chases actually intercept a tornado-unless you're Reed Timmer. The thrill-seeking meteorologist and star of *Storm Chasers* has followed and faced down more violent tornadoes than anyone. *Into the Storm* brings readers into the mind of this man and his mission—collecting data on tornadoes and hurricanes that could save lives—in the terrifying, awe-inspiring world of big weather. *Into the Storm* is also a fascinating look at the science of weather—what causes extreme conditions, its connection to climate change, and how a tornado gets its stovepipe structure.

Provides an introduction of the data industry to the field of economics This book bridges the gap between economics and data science to help data scientists understand the economics of big data, and enable economists to analyze the data industry. It begins by explaining data resources and introduces the data asset. This book defines a data industry chain, enumerates data enterprises' business models versus operating models, and proposes a mode of industrial development for the data industry. The author describes five types of enterprise agglomerations, and multiple industrial cluster effects. A discussion on the establishment and development of data industry related laws and regulations is provided. In addition, this book discusses several scenarios on how to convert data driving forces into productivity that can then serve society. This book is designed to serve as a reference and training guide for data scientists, data-oriented managers and executives, entrepreneurs, scholars, and government employees. Defines and develops the concept of a “Data Industry,” and explains the economics of data to data scientists and statisticians Includes numerous case studies and examples from a variety of industries and disciplines Serves as a useful guide for practitioners and entrepreneurs in the business of data technology *The Data Industry: The Business and Economics of Information and Big Data* is a resource for practitioners in the data science industry, government, and students in economics, business, and statistics. CHUNLEI TANG, Ph.D., is a research fellow at Harvard University. She is the co-

founder of Fudan's Institute for Data Industry and proposed the concept of the "data industry". She received a Ph.D. in Computer and Software Theory in 2012 and a Master of Software Engineering in 2006 from Fudan University, Shanghai, China.

From the acclaimed author of *Tubes*, a lively and surprising tour through the global network that predicts our weather, the people behind it, and what it reveals about our climate and our planet. The weather is the foundation of our daily lives. It's a staple of small talk, the app on our smartphones, and often the first thing we check each morning. Yet, behind all these humble interactions is the largest and most elaborate piece of infrastructure human beings have ever constructed—a triumph of both science and global cooperation. But what is the weather machine, and who created it? In *The Weather Machine*, Andrew Blum takes readers on a fascinating journey through the people, places, and tools of forecasting, exploring how the weather went from something we simply observed to something we could actually predict. As he travels across the planet, he visits some of the oldest and most important weather stations and watches the newest satellites blast off. He explores the dogged efforts of forecasters to create a supercomputer model of the atmosphere, while trying to grasp the ongoing relevance of TV weather forecasters. In the increasingly unpredictable world of climate change, correctly understanding the weather is vital. Written with the sharp wit and infectious curiosity Andrew Blum is known for, *The Weather Machine* pulls back the curtain on a universal part of our everyday lives, illuminating our changing relationships with technology, the planet, and our global community.

Tropical forests are an undervalued asset in meeting the greatest global challenges of our time—averting climate change and promoting development. Despite their importance, tropical forests and their ecosystems are being destroyed at a high and even increasing rate in most forest-rich countries. The good news is that the science, economics, and politics are aligned to support a major international effort over the next five years to reverse tropical deforestation. *Why Forests? Why Now?* synthesizes the latest evidence on the importance of tropical forests in a way that is accessible to anyone interested in climate change and development and to readers already familiar with the problem of deforestation. It makes the case to decisionmakers in rich countries that rewarding developing countries for protecting their forests is urgent, affordable, and achievable.

[Copyright: 0156544138161b8350f45219474896de](#)