



What's New with the Online Textbook for Tropical Meteorology?



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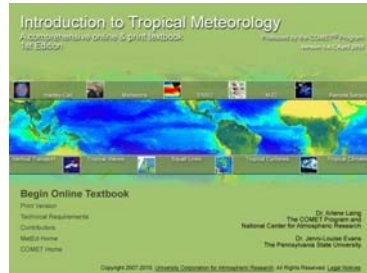
This FREE textbook covers the fundamental science of the tropical atmosphere and synthesizes the tremendous increase in our knowledge of tropical meteorology during the past two decades. The book also takes advantage of the great advances that have occurred in learning technologies.

Many chapters focus on topics not covered in older tropical meteorology textbooks, such as tropical remote sensing instruments and applications, convectively-coupled equatorial waves, and tropical cyclone ensemble prediction.

The target audience of this book includes undergraduate, early graduate students, forecasters, and others interested in the impacts of tropical weather and climate.

The material is reviewed for scientific accuracy and appropriateness of academic level by scientists and professors with expertise in diverse aspects of tropical meteorology.

INTRODUCTION TO TROPICAL METEOROLOGY
<http://www.meted.ucar.edu/tropical/textbook>
http://www.meted.ucar.edu/tropical/textbook_es



CHAPTERS

Added to the Website as they are completed

Available:

Tropical Remote Sensing Applications (English & Spanish)

Tropical Cyclones (English, Spanish)

Tropical Variability (English, Spanish coming soon)

The Distribution of Moisture and Precipitation (English & Spanish)
Observations, Analysis, & Prediction of Tropical Weather (English)

Coming Soon:

Introduction, Global Circulations and the Tropics

ANIMATIONS & ILLUSTRATIONS

Hector
Evolution of Thunderstorms over the Relatively Flat Thai Islands

Rossby Waves, Sidsr, & Lee-Ariel
Schematics of Theoretical Equatorial (TEQ) Resonance Waves

880 hPa Analysis
1200 UTC 02 Nov 2004

Tropical-Temperate Trough (TTT)
Enhanced IR 1745 UTC 02 Nov 2006

Ensemble Mean & Spread

Hurricane Intensity Scale

Dry Microburst

Monsoon vs. Trade Winds
Chowdhury 16,500 ft AGL, 0877 m

Previously Identified Sources of Tropical Cyclones

LEARNING TOOLS

Focus Sections Quizzes Glossary
Critical Thinking & Review Questions
Operational Focus Keywords Resource Links

11F.2.1 National Hurricane Center Forecasters (Audio Interviews)

11F.2.2 Meteorological Regional Spécialists / Cent. Français de La Réunion, Réunion

13F.2.2.1 **Spanish**
¿Cuándo y cómo decidí usted ser pronosticador de ciclones tropicales?
¿Puede describir la trayectoria de su carrera? ¿Hay algo especial en el escuela primaria o secundaria para favorecer sus objetivos?

PDFs for Printing each Chapter

10.3.5 Summary of Possible Tropical Cyclogenesis Mechanisms

10.3.5.1 Sources of Tropical Cyclogenesis and Mitigating Influences Recognized in the Late 20th and Early 21st Century

10.3.5.2 Previously Identified Sources of Tropical Cyclones

EXTRAS

Interviews with Tropical Cyclone Forecasters Miami & La Réunion

Spanish

Biographies

Dr. William H. Gray
He's still only... like the baseball player he used to be back at Winthrop Union High School as a teenager in the 1940s, not the guy who, every year, predicts the number of hurricanes that will form during the coming tropical storm season. He's mentioned dozens of "coincidents" throughout his life (see 2006).

Dr. Sarah Hameed
I got interested in the meteorology in the Junior High school year, and more than a half century later I'm still a professional meteorologist in the field of tropical meteorology and related studies such as climate change and air pollution. I am sure I have had a lot of interesting experiences since then, but I will leave that for you to discover.

Dr. Abdo Arakawa
Boris Vilen (1925-2007) was a pioneer in global numerical weather prediction (NWP). He received his BS in physics and MS in meteorology from Yale University in 1950 and PhD in 1954. He developed the first global atmospheric circulation model, having been inspired by Lorenz's discovery of chaotic behavior in the atmosphere. He joined the University of California, Berkeley in 1962 and worked on the UCLA General Circulation Model, which later became known as the GCM. He was also involved in the first global model to include middle and low latitude distribution, and the first global model to include the effects of the greenhouse effect on the climate system. He was also involved in the development of the first global model to include the effects of the greenhouse effect on the climate system.