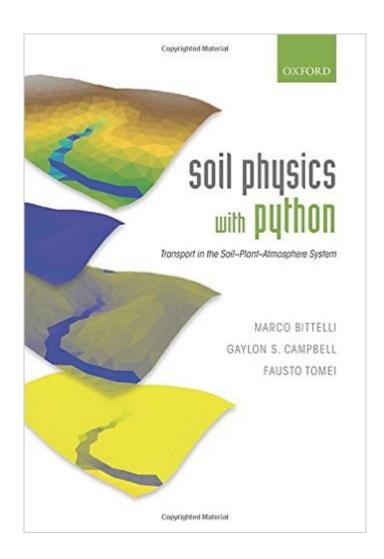
The book was found

Soil Physics With Python: Transport In The Soil-Plant-Atmosphere System





Synopsis

This innovative study presents concepts and problems in soil physics, and provides solutions using original computer programs. It provides a close examination of physical environments of soil, including an analysis of the movement of heat, water and gases. The authors employ the programming language Python, which is now widely used for numerical problem solving in the sciences. In contrast to the majority of the literature on soil physics, this text focuses on solving, not deriving, differential equations for transport. Using numerical procedures to solve differential equations allows the solution of quite difficult problems with fairly simple mathematical tools. Numerical methods convert differential into algebraic equations, which can be solved using conventional methods of linear algebra. Each chapter introduces a soil physics concept, and proceeds to develop computer programs to solve the equations and illustrate the points made in the discussion. Problems at the end of each chapter help the reader practise using the concepts introduced. The text is suitable for advanced undergraduates, graduates and researchers of soil physics. It employs an open source philosophy where computer code is presented, explained and discussed, and provides the reader with a full understanding of the solutions. Once mastered, the code can be adapted and expanded for the user's own models, fostering further developments. The Python tools provide a simple syntax, Object Oriented Programming techniques, powerful mathematical and numerical tools, and a user friendly environment.

Book Information

Hardcover: 432 pages

Publisher: Oxford University Press; 1 edition (July 14, 2015)

Language: English

ISBN-10: 0199683093

ISBN-13: 978-0199683093

Product Dimensions: 9.8 x 1 x 6.9 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #508,624 in Books (See Top 100 in Books) #72 in Books > Science & Math > Agricultural Sciences > Soil Science #400 in Books > Textbooks > Science & Mathematics >

Agriculture #420 in Books > Computers & Technology > Programming > Languages & Tools >

Python

Download to continue reading...

Soil Physics with Python: Transport in the Soil-Plant-Atmosphere System Python: Python Programming Course: Learn the Crash Course to Learning the Basics of Python (Python Programming, Python Programming Course, Python Beginners Course) Plant Operator Selection System Secrets Study Guide: POSS Test Review for the Plant Operator Selection System Beginning Python Programming: Learn Python Programming in 7 Days: Treading on Python, Book 1 Python: Python Programming For Beginners - The Comprehensive Guide To Python Programming: Computer Programming, Computer Language, Computer Science Learn Python in One Day and Learn It Well: Python for Beginners with Hands-on Project. The only book you need to start coding in Python immediately Maya Python for Games and Film: A Complete Reference for Maya Python and the Maya Python API Python: Python Programming For Beginners - The Comprehensive Guide To Python Programming: Computer Programming, Computer Language, Computer Science (Machine Language) Deep Learning: Recurrent Neural Networks in Python: LSTM, GRU, and more RNN machine learning architectures in Python and Theano (Machine Learning in Python) Unsupervised Deep Learning in Python: Master Data Science and Machine Learning with Modern Neural Networks written in Python and Theano (Machine Learning in Python) Deep Learning in Python Prerequisites: Master Data Science and Machine Learning with Linear Regression and Logistic Regression in Python (Machine Learning in Python) Convolutional Neural Networks in Python: Master Data Science and Machine Learning with Modern Deep Learning in Python, Theano, and TensorFlow (Machine Learning in Python) Deep Learning in Python: Master Data Science and Machine Learning with Modern Neural Networks written in Python, Theano, and TensorFlow (Machine Learning in Python) ASTNA Patient Transport: Principles and Practice, 4e (Air & Surface Patient Transport: Principles and Practice) American Horticultural Society Plant Propagation: The Fully Illustrated Plant-by-Plant Manual of Practical Techniques The Soil Will Save Us: How Scientists, Farmers, and Ranchers Are Tending the Soil to Reverse Global Warming Chemical and Process Plant Commissioning Handbook: A Practical Guide to Plant System and Equipment Installation and Commissioning Physics for Scientists and Engineers with Modern Physics: Volume II (3rd Edition) (Physics for Scientists & Engineers) Head First Physics: A learner's companion to mechanics and practical physics (AP Physics B - Advanced Placement) Python for Everybody: Exploring Data in Python 3

<u>Dmca</u>