



Modeling Methods for Marine Science (Hardback)

By David M. Glover, William J. Jenkins, Scott C. Doney

CAMBRIDGE UNIVERSITY PRESS, United Kingdom, 2015. Hardback. Book Condition: New. 250 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****. This advanced textbook on modeling, data analysis and numerical techniques for marine science has been developed from a course taught by the authors for many years at the Woods Hole Oceanographic Institute. The first part covers statistics: singular value decomposition, error propagation, least squares regression, principal component analysis, time series analysis and objective interpolation. The second part deals with modeling techniques: finite differences, stability analysis and optimization. The third part describes case studies of actual ocean models of ever increasing dimensionality and complexity, starting with zero-dimensional models and finishing with threedimensional general circulation models. Throughout the book hands-on computational examples are introduced using the MATLAB programming language and the principles of scientific visualization are emphasised. Ideal as a textbook for advanced students of oceanography on courses in data analysis and numerical modeling, the book is also an invaluable resource for a broad range of scientists undertaking modeling in chemical, biological, geological and physical oceanography.



Reviews

Unquestionably, this is actually the greatest function by any author. I was able to comprehended every little thing using this created e ebook. Its been printed in an remarkably straightforward way which is merely following i finished reading this ebook in which in fact altered me, alter the way i think.

-- Arianna Witting

An exceptional book as well as the font used was exciting to read. It is actually rally intriguing through reading time. You will not sense monotony at anytime of the time (that's what catalogues are for about when you ask me).

-- Crystel Hagenes