

*Climate modeling for scientists and engineers*, by John B. Drake, Mathematical Modeling and Computation, Vol. 19, Society for Industrial and Applied Mathematics (SIAM), Philadelphia, PA, 2014, viii+165 pp., ISBN 978-1-611973-53-2

The reader interested in the G. North review [1] of the book *Mathematics & climate* by Hans Kaper and Hans Engler would definitely find interesting the more recent SIAM book *Climate modeling for scientists and engineers* by John B. Drake. Most of the wonderful G. North review applies as a description of the area of this book as well. Therefore, we will just quote the text from its back cover:

Climate modeling and simulation teach us about past, present, and future conditions of life on earth and help us understand observations about the changing atmosphere and ocean and terrestrial ecology. Focusing on high-end modeling and simulation of earth's climate, *Climate Modeling for Scientists and Engineers* presents observations about the general circulations of the earth and the partial differential equations used to model the dynamics of weather and climate, covers numerical methods for geophysical flows in more detail than many other texts, discusses parallel algorithms and the role of high-performance computing used in the simulation of weather and climate, and provides supplemental lectures and MATLAB® exercises on an associated Web page.

This book is intended for graduate students in science and engineering. It is also useful for a broad spectrum of computational science and engineering researchers, especially those who want a brief introduction to the methods and capabilities of climate models and those who use climate model results in their investigations. Information on numerical methods used to solve the equations of motion and climate simulations using parallel algorithms on high-performance computers challenges researchers who aim to improve the prediction of climate on decade to century time scales.

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### **Bibliography**

#### REFERENCES

- [1] G. North (Reviewer), *Mathematics & climate* by Hans Kaper and Hans Engler, Bull. Amer. Math. Soc., **52** (2015), no. 3. DOI: <http://dx.doi.org/10.1090/S0273-0979-2014-01484-3>

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