

Jochen Kämpf

## Ocean Modelling for Beginners – Using Open-Source Software

The book gives an introduction to computer-based modelling of oceanic processes. It is the first of its kind and contains over twenty practical exercises, using freely available Open-Source software, and covers a wide range of topics from long surface waves, geostrophic flows, through to the general wind-driven circulation including western boundary currents and mesoscale eddies. Results are animations rather than still images. Model codes and animation scripts for all exercises are supplied on a CD-ROM. The reader can adopt model codes for own independent studies. This author offers excellent interactive learning material for graduate students and researchers interested in dynamical processes occurring in the ocean and the computer-based modelling thereof. Only minimum mathematical background knowledge is required and the many exercises of this book are based on freely available open-source software. Complete model codes and animation scripts are provided for each exercise.



**Jochen Kämpf**, a Senior Lecturer in Oceanography at Flinders University, Australia, is known for the discovery of the South Australian Coastal Upwelling System. His research interests cover a broad range of subjects including surface mixed-layer physics, coastal and estuarine circulations, density-driven flows, benthic storms, and more recently dispersal of desalination brine.



### Operating systems:

For Windows 2003/XP and Vista the installation files are stored on the CD-ROM. For some other OS (Macintosh, Linux ...) you may download the installation files free of charge from <http://www.scilab.org>.

**Software:** Adobe Acrobat Reader 8.x or later and software to view jpg-, txt- and tif-files



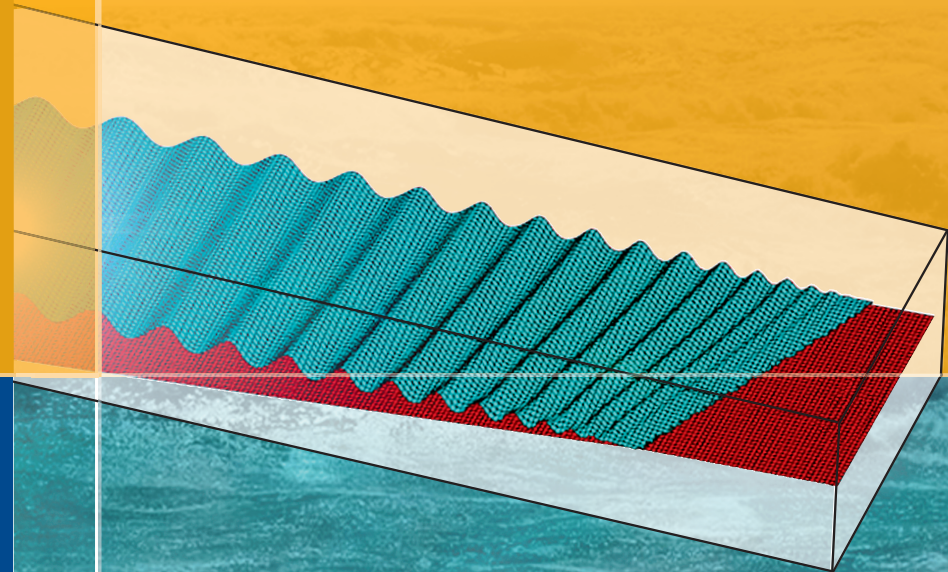
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