

The CD-ROM is organized by folders numbered according to the chapters of the present book. In each folder, the MATLAB™ programs mentioned in the chapter are found and can be edited. The files contain comments beginning with % like % this is a comment. It helps identifying the parameters to be changed by the student and the signification of variables and loops.

The CD-ROM contains MATLAB™ scripts rather than programs with a graphical user interface. This is a choice made in order to get students used to programming and automatic chaining of operations encountered in leading modeling centers. The programs are not designed to exploit and optimize MATLAB™ features but rather serve as illustrations of the numerical schemes and not programming languages. Hence, sometimes loops are spelled out in the programs and sometimes more efficient direct matrix operations are used. Also sometimes small programs are written for which MATLAB™ functions exist.

When the execution of programs to prepare animations is time-consuming, the CD contains some precalculated movies in Quicktime .mov format in folder `animations`.

For students not having access to MATLAB™, a freely available clone exists and is called OCTAVE (<http://octave.sourceforge.net>). Most operations used in the programs are portable between MATLAB™ and OCTAVE, only plotting parts might require adaptations.

Input data are stored predominantly in NETCDF format in folder `nc`. Files in NETCDF format are very common in the ocean and atmosphere modeling community since they are platform independent and selfexplaining. To be able to read NETCDF with MATLAB™, you need to install a toolbox found at <http://mexcdf.sourceforge.net/index.html>. Just follow the installation procedure.

Since the programs write out some results and images on disk as in real modeling centers, you cannot run MATLAB™ from a CD but need to execute programs in a folder with writing access.

Finally, do not hesitate to contact the authors for updated versions of the CD-ROM content and additional explanations on the programs.