

MATLAB and Design Recipes for Earth Sciences, by M.H. Trauth and E. Sillmann

The following products were used to create the book material: MATLAB Version 7 Release R2011b, the Image Processing Toolbox Version 7.3 and the Mapping Toolbox Version 3.4. The software MATLAB by The MathWorks Inc. is available on multiple platforms, including Microsoft Windows, UNIX, Linux, and Apple Macintosh. M-files and data on the CD should run on all platforms without modifications. To check the system requirements for specific products, go to the webpage <http://www.mathworks.com/products/> to access the product's web page. In addition to MATLAB, we used the commercial software products Microsoft Office 2011 for Mac, Apple iWork '09, the Adobe Creative Suite CS5, Papers 2.2.10, Endnote X4, as well as the freeware OpenOffice 3.3.0, Inkscape 0.48, Gimp 2.6.12, Scribus 1.3.9, and BibDesk 1.5.9.

SUPPLEMENTARY ELECTRONIC MATERIAL

The supplementary electronic material contains eleven directories for each of the chapters of the book. These directories contain a subdirectory 'figures' with color version of all figures of the book, a subdirectory 'recipes' with all MATLAB commands in Chapters 4 to 7, as well as several subdirectories containing example data, exported MATLAB graphics, and screenshots of the most important steps of processing the graphics.

CREDITS

1. Original satellite images courtesy of NASA/GSFC/METI/ERSDAC/JAROS and U.S./Japan ASTER Science Team (<http://asterweb.jpl.nasa.gov/>).

naivasha.hdf
naivasha.hdf.met
unconform.jpg

2. The global self-consistent, hierarchical, high-resolution shoreline database GSHHS is amalgamated from two public domain data bases by Paul Wessel (SOEST, University of Hawaii, Honolulu, HI) and Walter Smith (NOAA Laboratory for Satellite Altimetry, Silver Spring, MD). The coastline vector data can be downloaded as MATLAB vector data from the web page of the US National Geophysical Data Center (<http://www.ngdc.noaa.gov/mgg/shorelines/shorelines.html>)

coastline_data.txt

3. ETOPO2 is a global database of topography and bathymetry on a regular 2-minute grid. It is a compilation of data from a variety of different sources and can be downloaded from the web page of the US National Geophysical Data Center (<http://www.ngdc.noaa.gov/mgg/fliers/01mgg04.html>).

etopo2_data.txt

4. The GTOPO30 data set has been developed by the Earth Resources Observation System Data Center and is available from the web page of the US Geological Survey (http://eros.usgs.gov/#/Find_Data/Products_and_Data_Available/gtopo30_info).

gtopo30_data.tar.gz

5. The SRTM data were processed at the Jet Propulsion Laboratory and are being distributed through the United States Geological Survey's (USGS) EROS Data

Center by using the USGS Seamless Data Distribution System, which provides access to srtm data from an area defined by the user (<http://www2.jpl.nasa.gov/srtm/>).

srtm_data.hgt

6. The icecore data by R.B. Alley (2000) are available online on a webpage of the National Climatic Data Center (NCDC), which is part of the National Oceanic and Atmospheric Administration (NOAA), on ftp://ftp.ncdc.noaa.gov/pub/data/paleo/icecore/greenland/summit/gisp2/isotopes/gisp2_temp_accum_alley2000.txt.

icecore_snowaccumulation_data.txt

icecore_temperature_data.txt

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