

1. Record Nr.	UNINA9910299383903321
Autore	Trauth Martin H
Titolo	Collecting, Processing and Presenting Geoscientific Information : MATLAB® and Design Recipes for Earth Sciences / / by Martin H. Trauth, Elisabeth Sillmann
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2018
ISBN	3-662-56203-0
Edizione	[2nd ed. 2018.]
Descrizione fisica	1 online resource (XIII, 274 p. 53 illus., 48 illus. in color.)
Collana	Springer Textbooks in Earth Sciences, Geography and Environment, , 2510-1307
Disciplina	550.285
Soggetti	Earth sciences Statistics Computer graphics Computer software Earth Sciences, general Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences Computer Graphics Mathematical Software
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Scientific Information in Earth Sciences -- Searching and Reviewing Scientific Literature -- Internet Resources for Earth Science Data -- MATLAB as a Visualization Tool -- Visualizing Two-Dimensional Earth Science Data -- Visualizing Three-Dimensional Earth Science Data -- Processing and Displaying Images in Earth Sciences -- Editing Graphics, Text, and Tables -- Creating Conference Presentations -- Creating Conference Posters -- Creating Manuscripts, Flyers, and Books.
Sommario/riassunto	The overall aim of the book is to introduce students to the typical course followed by a data analysis project in earth sciences. A project usually involves searching relevant literature, reviewing and ranking published books and journal articles, extracting relevant information from the literature in the form of text, data, or graphs, searching and

processing the relevant original data using MATLAB, and compiling and presenting the results as posters, abstracts, oral presentations and multimedia publications using graphics design software. The text of this book includes numerous examples on the use of internet resources, on the visualization of data with MATLAB, and on preparing scientific presentations. As with its sister book MATLAB Recipes for Earth Sciences—4th Edition (2015), which demonstrates the use of statistical and numerical methods on earth science data, this book uses state-of the art software packages, including MATLAB and the Adobe Creative Suite, to process and present geoscientific information collected during the course of an earth science project. The book's supplementary electronic material (available online through the publisher's website) includes recipes with all the MATLAB commands featured in the book, the example data, exported MATLAB graphics, and screenshots of the most important steps involved in processing the graphics. System requirements Users of this book will require the MATLAB® software, which is available for Windows, Mac OS X and Linux. The M-files and example data available online through Springer Extras should run on all platforms without requiring any modification. For this edition we have used MATLAB Version 9 (Release 2017a), the Image Processing Toolbox Version 10.0, the Mapping Toolbox Version 4.5 and the Simulink 3D Animation Toolbox Version 7.7. Furthermore, we used the Adobe Creative Cloud 2017 including Acrobat, Illustrator, Photoshop and Audition. MATLAB® and Simulink® are registered trademarks of The MathWorks, Inc. For MATLAB and Simulink product information, please contact: The MathWorks, Inc. 3 Apple Hill Drive Natick, MA, 01760-2098 USA Tel: 508-647-7000 Fax: 508-647-7001 E-mail: info@mathworks.com Web: <http://www.mathworks.com> How to buy: www.mathworks.com/store.
