

# Software Tools for Earth and Environmental Science

## Week1 - Introduction

- Syllabus
- Book
- Data
- Code
- New Accounts

## Course

- Syllabus
- Book

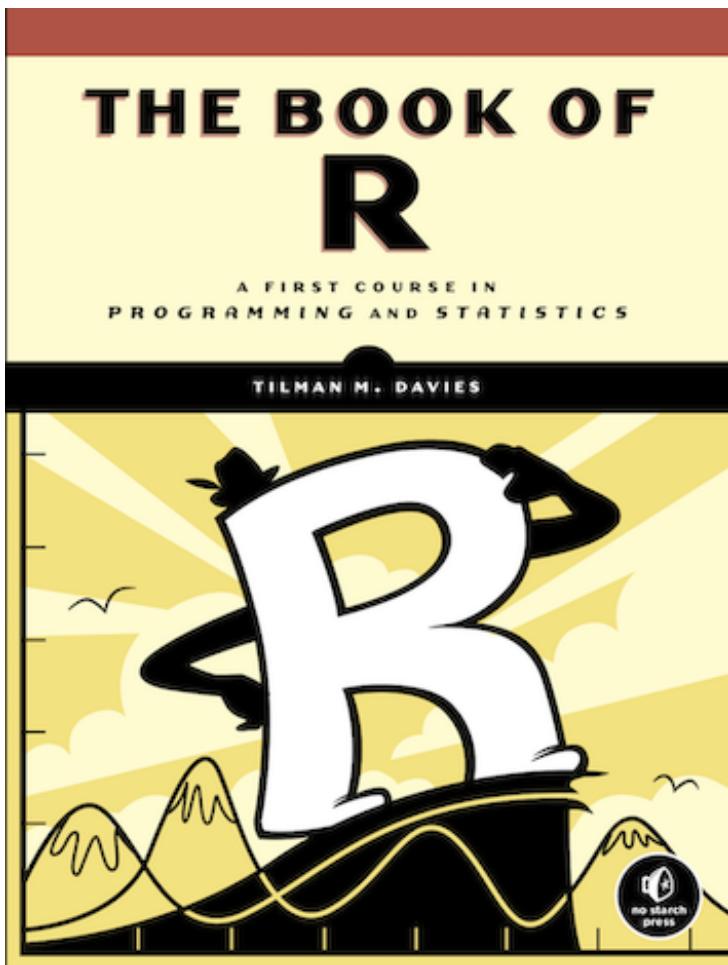
## Syllabus

**Software Tools for Earth & Environmental Sciences – 2019 Fall Term** (16 Sept-27 Dec, Total : 15 Week)

<a href="#"><u>1st Week – 20 Sept</u></a>	<a href="#"><u>2nd Week – 27 Sept</u></a>	<a href="#"><u>3rd Week – 4 Oct</u></a>	<a href="#"><u>4th Week – 11 Oct</u></a>
<b>Data and Code</b> <ul style="list-style-type: none"><li>• Syllabus</li><li>• Data</li><li>• Coding</li><li>• New Accounts</li></ul>	<b>Linux and Python</b> <ul style="list-style-type: none"><li>• Terminal</li><li>• Script and vi Editor</li><li>• Anaconda-Jupyter Python</li></ul>	<b>Data Types, Download and NCL</b> <ul style="list-style-type: none"><li>• Data Types</li><li>• Data Download</li><li>• NCL</li></ul>	<b>Introduction to R</b> <ul style="list-style-type: none"><li>• Getting Started</li><li>• Preview of Course</li><li>• Introduction to R</li></ul>
<b>5th Week – 18 Oct</b> <b>R, The Language – Part 1</b> <ul style="list-style-type: none"><li>• Class</li><li>• Types of Variables</li><li>• Vectors</li></ul>	<b>6th Week – 25 Oct</b> <b>R, The Language – Part 2</b> <ul style="list-style-type: none"><li>• Matrices and Arrays</li><li>• Strings</li><li>• Factors</li></ul>	<b>7th Week – 1 Nov</b> <b>R, The Language – Part 3</b> <ul style="list-style-type: none"><li>• List</li><li>• Data Frames</li><li>• <b>Midterm Project</b></li></ul>	<b>8th Week – 8 Nov</b>  <b>ITU Fall-Term Break (no class)</b>
<b>9th Week – 15 Nov</b> <b>R Programming – Part 1</b> <ul style="list-style-type: none"><li>• Calling Function</li><li>• Conditional statements</li></ul>	<b>10th Week – 22 Nov</b> <b>R Programming – Part 2</b> <ul style="list-style-type: none"><li>• Loops</li><li>• Other Control Flow Mechanism</li></ul>	<b>11th Week – 29 Nov</b> <b>R, Data Import and Plot</b> <ul style="list-style-type: none"><li>• Reading and Writing Data</li><li>• Basic Plotting - Graphics</li></ul>	<b>12th Week – 6 Dec</b> <b>R, Statistics</b> <ul style="list-style-type: none"><li>• Elementary Statistics</li><li>• Basic Data Visualization</li></ul>
<b>13th Week – 13 Dec</b> <b>R, Probability</b> <ul style="list-style-type: none"><li>• Elementary Probability</li><li>• Probability Distributions</li></ul>	<b>14th Week – 20 Dec</b> <b>R, Advance</b> <ul style="list-style-type: none"><li>• Data Analysis</li><li>• readr, dplyr, tidyverse</li><li>• ggplot2, lattice</li></ul>	<b>15th Week – 27 Dec</b>  <b>R - Final Project Workshop</b>	

PDF

## Book



PDF

## Data

- What is the Data
- Data Collection and Production
- Data Types, Formats and Source
- Popular Terms About Data
- Obtain and Get the Data

### What is the Data

### Data Collection and Production

### Data Types, Formats and Source

### Popular Terms About Data

- Data Science
- Data Analysis
- Big Data
- Data Mining
- Data Assimilation and Manipulation

**Data Science**

**Data Analysis**

**Big Data**

**Data Mining**

**Data Assimilation and Manipulation**

**Obtain and Get the Data**

**Code**

- Operational Systems
- Programming Languages
- Fields of Programming
- Popular Terms About Programming
- Interpretation and Visualization
- Algorithm, Simulation and Modeling

**Operational Systems**

- Microsoft Windows
- Unix
- Apple Macintosh OS
- Linux OS

**Programming Languages**

- C
- Fortran
- JavaScript
- Python
- R
- NCL

**Fields of Programming**

**Popular Terms About Programming**

- Artificial Intelligent
- Machine Learning
- Deep Learning
- Internet of Things

## **NEW ACCOUNTS**

- Github, Researchgate, DOI Code, ORCID, Overleaf(LaTeX)
- Mendeley, Panoply, Sublime Text, Filezilla
- ArcGIS, QGIS
- Anaconda, Jupyter, Cygwin, R Studio, NCL
- Meted, Coursera, Udemy, Datacamp, Edx, Khanacademy
- Stackoverflow, Wolfram-alpha, Dropbox, Wetransfer

## Github

The screenshot shows the GitHub dashboard. At the top, there's a search bar and navigation links for Pull requests, Issues, Marketplace, and Explore. Below the search bar, there's a sidebar titled "Repositories" with a "New" button and a "Find a repository..." input field. A list of repositories owned by the user "emirtoker" is shown, including "Software\_Tools\_R\_Github", "HSK531E\_Hydro\_Paper\_Time...", "Pantanal\_Project", "HSK\_531E\_SM\_Moselle\_Mask", and "ysb801e". The main area displays several repository cards: "automl/ConfigSpace" (Python, 70 stars, updated Sep 14), "ESMCI/manage\_externals" (Python, 5 stars, updated Aug 30), "NOAA-EMC/UFS\_UTILS" (Fortran, 1 star, updated Sep 9), and a user profile for "isezen" following "loftytopping". On the right side, there are promotional banners for "Catch Universe early bird pricing" and "GitHub Sponsors Matching Fund", along with a message about the new dashboard. A sidebar titled "Explore repositories" lists "domoticz/domoticz" (Open source Home Automation System) and "cxxt/cxxt" (A JavaScript / Python / PHP cryptocurrency trading API). Another section shows a user profile for "jwilm/alacrtity" (A cross-platform, GPU-accelerated terminal emulator).

LINK

## Researchgate

The screenshot shows the Researchgate homepage. At the top, there's a navigation bar with "Home", "Questions", "Jobs", and a search bar. A "Start sorting" button is visible. The main content features a call-to-action for users to make their work more discoverable by sorting it into projects. Below this, a publication titled "The Operational Recognition of Supercell Thunderstorm Environments and Storm Structures" is displayed, with options to "View", "Download", "Recommend", "Follow", and "Share". To the right, there's a "Do you have a research question?" section with a "Ask a question" button and a "Jobs you may be interested in" section listing various academic positions.

LINK

## DOI Code - (digital object identifier) - Zenodo

The screenshot shows the Zenodo homepage with a blue header bar. The header includes the Zenodo logo, a search bar, an upload button, and a communities link. A user account dropdown is also present. Below the header, there's a section for "Recent uploads". One item listed is "Analysis of correlation-based biomolecular networks from different omics data by fitting stochastic block models" by Baum, Katharina; Rajapakse, Jagath C.; Azuaje, Francisco. It was uploaded on August 8, 2019, and is a Dataset with Open Access. The description mentions "Supplementary Figures.pdf" and "sbm-for-correlation-based-networks-master.zip". To the right of this listing is a box stating "Zenodo now supports usage statistics!" with a graph icon and a link to a blog post. Another box below it says "Using GitHub?" with a GitHub icon and a link to their GitHub integration page. A third box on the right is titled "Zenodo in a nutshell" with a bulleted list about research sharing and discoverability.

Recent uploads

August 8, 2019 (v3) Dataset Open Access

Analysis of correlation-based biomolecular networks from different omics data by fitting stochastic block models

View

Baum, Katharina; Rajapakse, Jagath C.; Azuaje, Francisco

Baum\_et\_al\_2019\_Supplementary\_Figures.pdf: Supplementary Figures S1-S4. Legends are included under each figure. sbm-for-correlation-based-networks-master.zip: Archived source code of R and Python functions for the analyses and example workflow description at time of publication. Files are...

Uploaded on August 8, 2019  
2 more version(s) exist for this record

View

August 6, 2019 (v3.1) Software Open Access

OpenScienceMOOC/Module-5-Open-Research-Software-and-Open-Source: 3.1

View

Jon Tennant; Julien Colomb; Lisa Matthias; Simon Worthington; Florian Kohrt; irrubio; Tania Allard; Philipp Zumstein; Daniel S. Katz; Alexander Morley; Tobias Steiner; Stephan Druska; Zoran Pandovski; Arfon Smith; Gabriele Orlandi; Rutger Vos; José Raúl Canay Pazos; Paul Griffiths; Nithiya Streetharan; Hollie Marshall; Luke W Johnston; Luis Camacho; Konrad Förstner; Heidi Seibold; Eric DWilkey; Encarnación Martínez Álvarez; Brendan Palmer; Alessandro Sarretta; Alberto Marocchino; Abiaail

LINK

Using GitHub?

Check out our GitHub integration. Software Preservation Made Simple!

Zenodo in a nutshell

- **Research. Shared.** – all research outputs from across all fields of research are welcome! Sciences and Humanities, really!
- **Citeable. Discoverable.** – uploads gets a Digital Object Identifier

## ORCID

The screenshot shows the ORCID homepage. The top navigation bar includes a search bar, a language dropdown set to English, and a sign-out link. Below the header, there's a main menu with tabs for "FOR RESEARCHERS", "FOR ORGANIZATIONS", "ABOUT", "HELP", and "SIGN OUT". A sub-menu for "FOR RESEARCHERS" shows links to "MY ORCID RECORD", "INBOX", "ACCOUNT SETTINGS", "DEVELOPER TOOLS", and "LEARN MORE". A counter at the bottom of the header indicates "7,132,113 ORCID IDs and counting. See more...". The main content area features a large green arrow pointing down over the letters "ID". Below this graphic, the text "DISTINGUISH YOURSELF IN THREE EASY STEPS" is displayed. Three steps are outlined: 1. REGISTER (Get your unique ORCID identifier Register now! Registration takes 30 seconds.), 2. ADD YOUR INFO (Enhance your ORCID record with your professional information and link to your other identifiers (such as Scopus or ResearcherID or LinkedIn).), and 3. USE YOUR ID (Include your ORCID identifier on your Webpage.). A sidebar on the right lists "LATEST NEWS" with items like "Fri, 13 Sep 2019 ORCID in Europe, the Middle East, and Africa- An Update" and "Thu, 05 Sep 2019 Reports and ORCID". A "Yardim" (Help) button is also present.

Search

English

FOR RESEARCHERS FOR ORGANIZATIONS ABOUT HELP SIGN OUT

MY ORCID RECORD INBOX ACCOUNT SETTINGS DEVELOPER TOOLS LEARN MORE

7,132,113 ORCID IDs and counting. See more...

DISTINGUISH YOURSELF IN THREE EASY STEPS

1 REGISTER Get your unique ORCID identifier Register now! Registration takes 30 seconds.

2 ADD YOUR INFO Enhance your ORCID record with your professional information and link to your other identifiers (such as Scopus or ResearcherID or LinkedIn).

3 USE YOUR ID Include your ORCID identifier on your Webpage.

LATEST NEWS

Fri, 13 Sep 2019 ORCID in Europe, the Middle East, and Africa- An Update

Thu, 05 Sep 2019 Reports and ORCID

Yardim

LINK

## Overleaf (LaTeX)

The easy to use, online, collaborative LaTeX editor

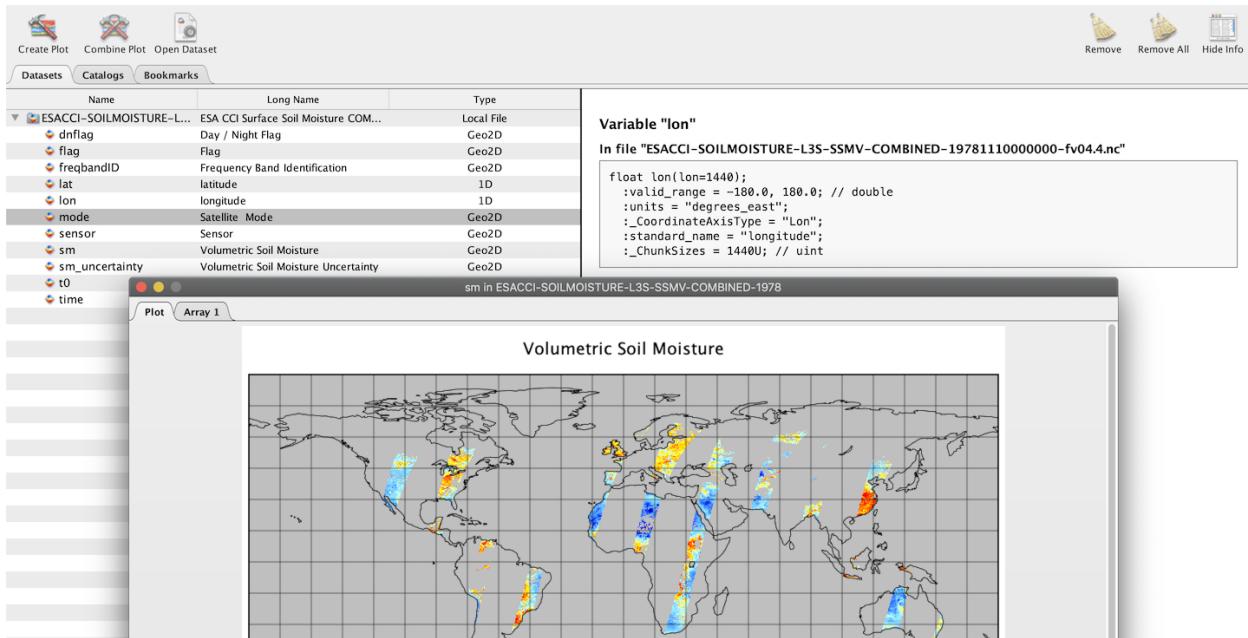
[LINK](#)

## Mendeley

Authors	Title	Year	Published In	Added
Kerr, Yann H.; Waldteufel, Philippe; Wigneron, Jean...	The SMOS L: New tool for monitoring key elements of the global water cycle	2010	Proceedings of the IEEE	Sep 4
Wagner, Wolfgang; Naeimi, Vahid; Scipal, Kl...	Soil moisture from operational meteorological satellites	2007	Hydrogeology Journal	Sep 4
Dorigo, W.; Wagner, W.; Gruber, A.; Scanlon, T.; ...	ESA Soil Moisture Climate Change Initiative (Soil_Moisture_cci): Version 04.4 data collection <Gcos-138 (1).Pdf>	2019	Centre for Environment...	Sep 4
Dorigo, W.; Gruber, A.; Scanlon, T.; Hahn, S.; Kl...	ESA Soil Moisture Climate Change Initiative (Soil_Moisture_cci): Version 04.4 data collection <Gcos-138 (1).Pdf>	2019	Centre for Environment...	Sep 4
Meteorological, World; Commission, Oceanogra...	<Gcos-138 (1).Pdf>	2010		Sep 4
Dorigo, W.; Gruber, A.; Scanlon, T.; Hahn, S.; Kl...	ESA Soil Moisture Climate Change Initiative (Soil_Moisture_cci): Version 04.4 data collection <Gcos-138 (1).Pdf>	2010	Centre for Environment...	Sep 4
Meteorological, World; Commission, Oceanogra...	<Gcos-138 (1).Pdf>	2010		Sep 4
Meteorological, World; Commission, Oceanogra...	<Gcos-138 (1).Pdf>	2010		Sep 4
Wagner, W.; Dorigo, Wouter; De Jeu, Richard; ...	FUSION of ACTIVE and PASSIVE MICROWAVE OBSERVATIONS to CREATE AN ESSENTIAL CLIMATOLOGICAL SOIL MOISTURE PRODUCT	2012	ISPRS Annals of the Photog...	Sep 4
Parinussa, Robert M.; Holmes, Thomas R.H.; ...	Soil moisture retrievals from the windsat spaceborne polarimetric microwave radiometer	2012	IEEE Transactions ...	Sep 4
Li, Li; Gaiser, Peter W.; Gao, Bo Cai; Bevilacqua, ...	WindSat global soil moisture retrieval and validation	2010	IEEE Transactions ...	Sep 4
Wagner, Wolfgang; Hann, Sebastian; Kidd, Richard...	The ASCAT soil moisture product: A review of its specifications, validation results, and emerging ...	2013	Meteorologis...	Sep 4
Wagner, Wolfgang; Brocca, Luca; Naeimi, V...	Clarifications on the "comparison between SMOS, VUA, ASCAT, and ECMWF Soil Moisture Product..."	2014	IEEE Transactions ...	Sep 4
Scipal, K.; Wagner, W.; Trommler, M.; Naumann, ...	The global soil moisture archive 1992–2000 from ERS scatterometer data: First results	2002	International Geoscience a...	Sep 4
Parinussa, Robert M.; Holmes, Thomas R.H.; ...	A preliminary study toward consistent soil moisture from AMSR2	2015	Journal of Hydrometeor...	Sep 4
Gruber, Alexander; Dorigo, Wouter Arnoud; ...	Triple Collocation-Based Merging of Satellite Soil Moisture Retrievals	2017	IEEE Transactions ...	Sep 4
Owe, Manfred; de Jeu, Richard; Holmes, Thomas	Multisensor historical climatology of satellite-derived global land surface moisture	2008	Journal of Geophysical ...	Sep 4
Gruber, Alexander;	Evolution of the ESA CCI Soil Moisture climate	2019	Earth System	Sep 4

[LINK](#)

## Panoply



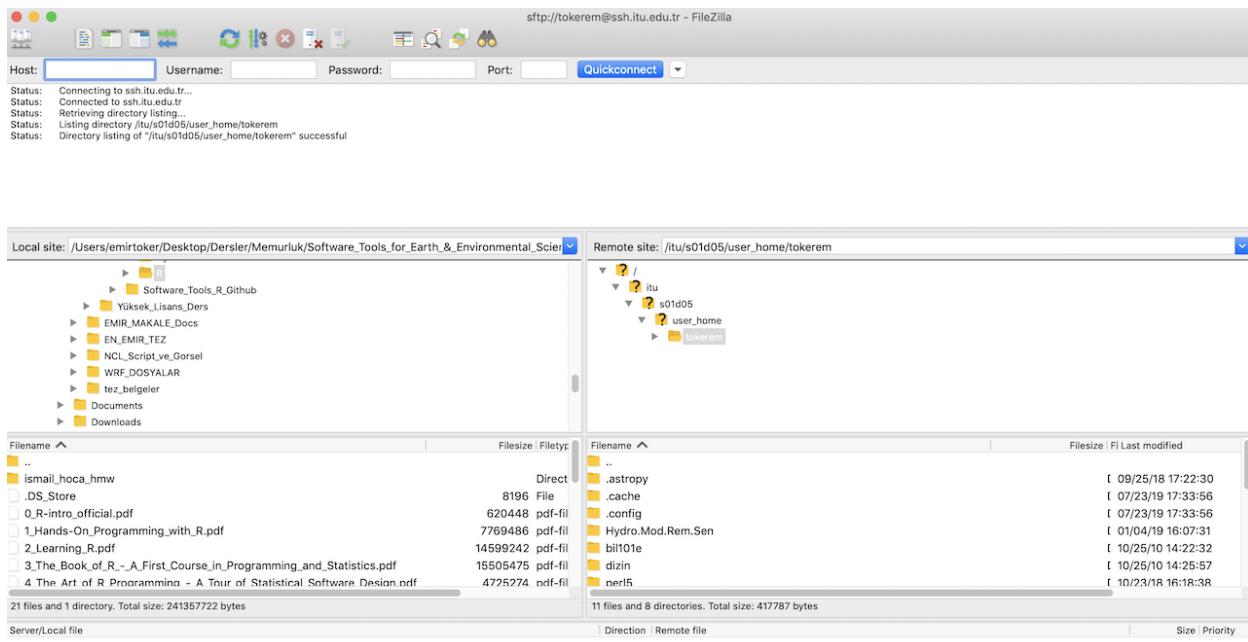
[LINK](#)

## Sublime Text

The screenshot shows the Sublime Text website and application. The website header includes the Sublime Text logo, 'Download', 'Buy', 'Support', 'News', and 'Forum' links. The main content features a banner with the text 'A sophisticated text editor for code, markup and prose' and download links for 'DOWNLOAD FOR MAC' and 'Sublime Text 3 (Build 3207)'. To the right, there's a 'Sublime Merge' plugin section and a screenshot of the application's Git client interface. The application window below shows a file named 'xla\_compilation\_cache.cc' with C++ code, a sidebar with project files like 'tensorflow', 'third\_party', 'tools', 'util', '.gitignore', 'ACKNOWLEDGMENTS', 'ADOPTERS.md', 'AUTHORS', 'BUILD', 'configure', 'CONTRIBUTING.md', 'ISSUE\_TEMPLATE.md', 'LICENSE', and 'models.BUILD', and a status bar at the bottom.

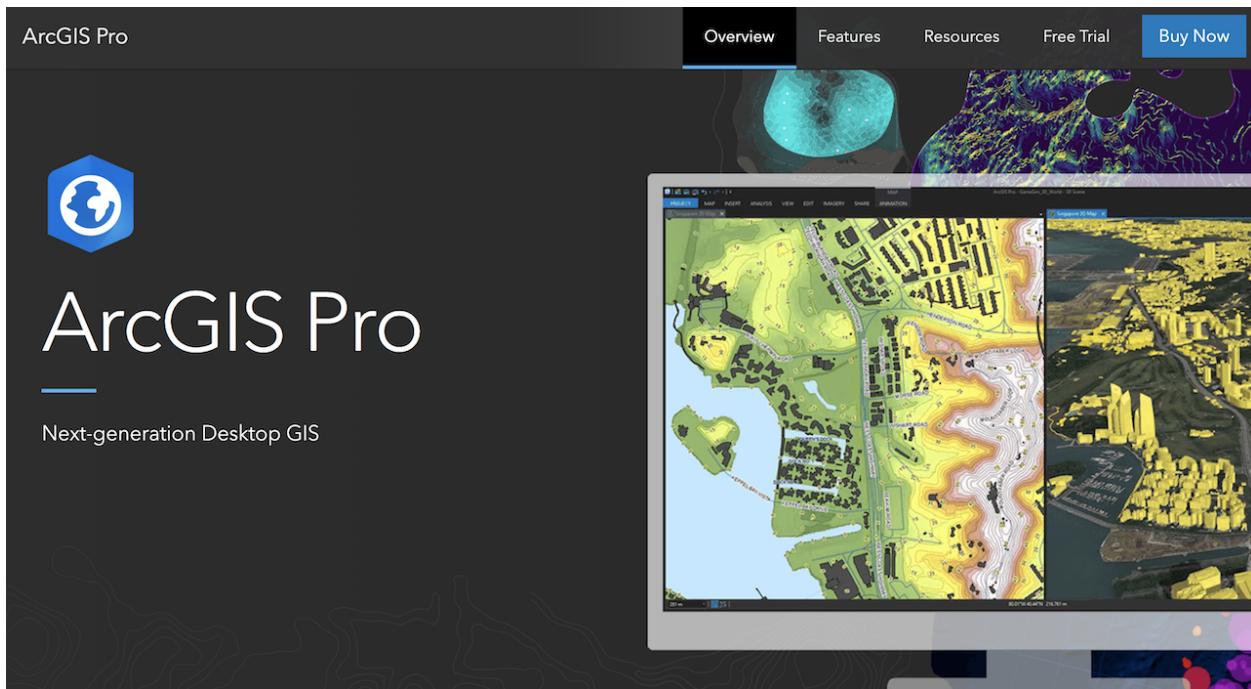
[LINK](#)

## Filezilla



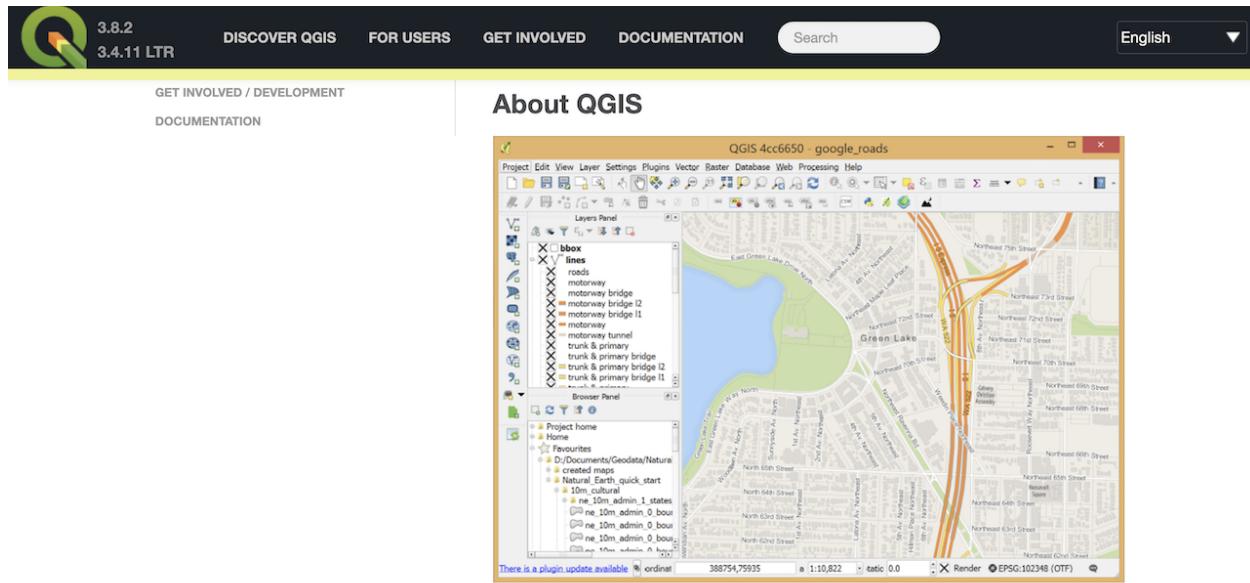
LINK

## ArcGIS



LINK

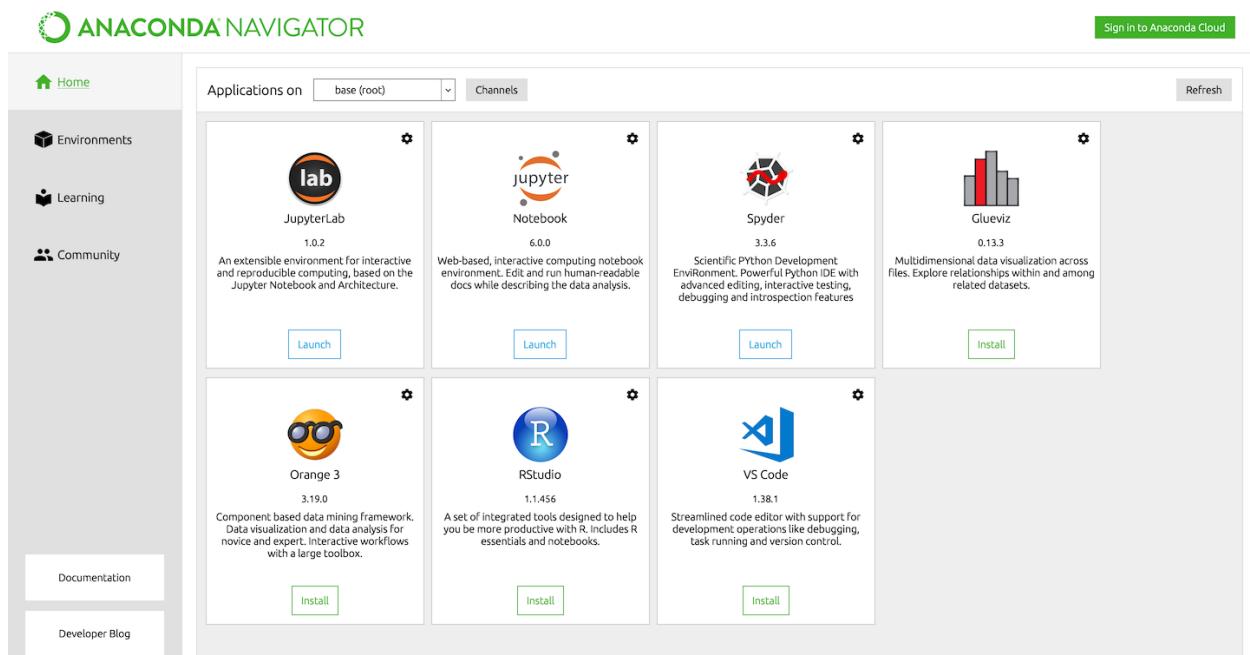
## QGIS



QGIS is a user friendly Open Source Geographic Information System (GIS) licensed under the GNU General Public License. QGIS is an official project of the Open Source Geospatial Foundation (OSGeo). It runs on Linux, Unix, Mac OSX, Windows and Android and supports numerous vector, raster, and database formats and functionalities.

[LINK](#)

## Anaconda



[LINK](#)

## Jupyter

The screenshot shows the Jupyter Notebook interface. At the top, there's a navigation bar with 'jupyter' and buttons for 'Quit' and 'Logout'. Below the bar, there are tabs for 'Files', 'Running', and 'Clusters'. A message 'Select items to perform actions on them.' is displayed above a file list. The file list includes various files and folders like 'Adlm', 'Anaconda', 'Applications', 'Desktop', 'Documents', 'Downloads', 'Movies', 'Music', 'Pictures', 'Public', and several 'Untitled.ipynb' files. On the right side of the file list, there are columns for 'Name', 'Last Modified', and 'File size'. At the bottom right of the interface, there are buttons for 'Upload', 'New', and a refresh icon.

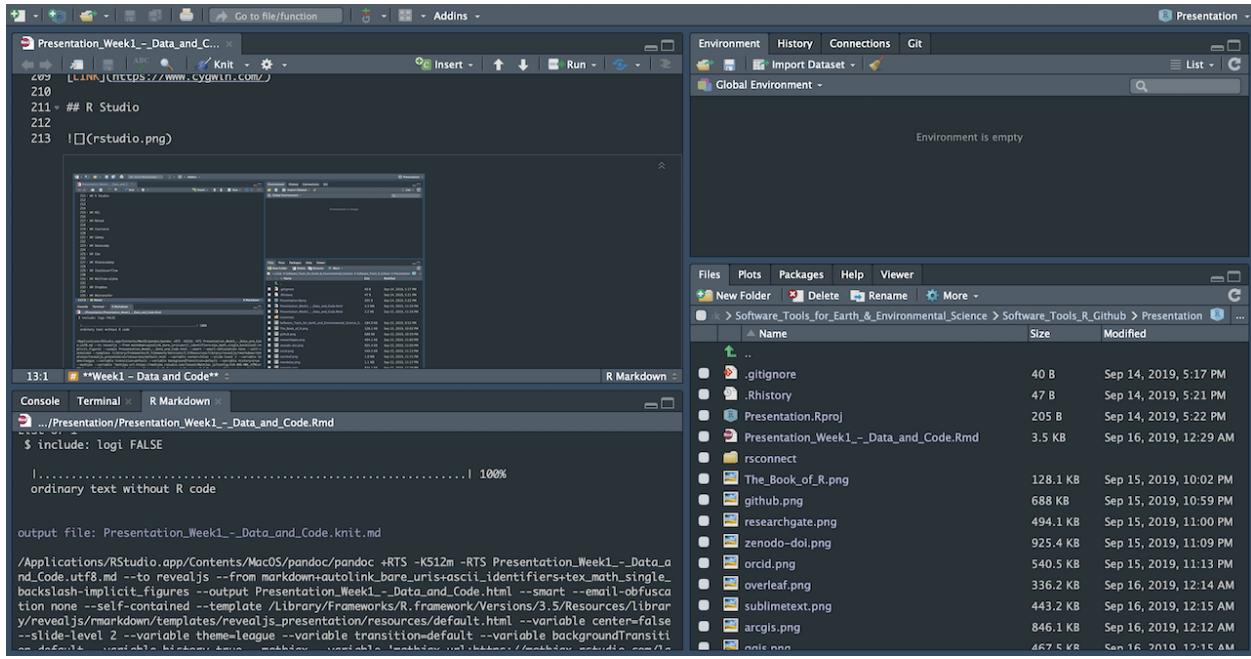
LINK

## Cygwin

The screenshot shows a Cygwin terminal session. The terminal window has a black background with white text. It displays a command-line history and a file manager window titled 'mc - ~'. The file manager shows a left pane with a tree view of the directory structure and a right pane with a detailed list view. Both panes show files like 'cygwin.bat', 'cygwin.ico', and 'mc'. Below the file manager, a message says 'Hint: To look at the output of a command in the viewer, use M-!'. At the bottom of the terminal, there's a menu bar with options like 'File', 'Command', 'Options', 'Right', 'Left', 'File', 'Command', 'Options', 'Right', and a series of numbers from 1 to 10 followed by 'quit'. In the bottom right corner, there's another window titled 'PuTTY' with the IP address '172.30.31.104'. The PuTTY window shows a login prompt for 'root' with the message 'Last login: Mon Jun 13 22:39:05 2005 from graceyves.gy@128' and the message 'Have a lot of fun...'. The PuTTY window has its own set of buttons and a status bar at the bottom.

LINK

## R Studio



LINK

## NCL

The homepage of the NCL (NetCDF-NCAR Library) website. It features a navigation bar with links for UCAR, NCAR, CISL, Download, Citing NCL, Contributors, and a search bar. The main content area contains several sections with text and graphics illustrating NCL's capabilities: "NCL is an interpreted language designed specifically for scientific data analysis and visualization", "Portable, robust, and free, NCL is available as binaries or open source.", "Supports NetCDF 3/4, GRIB 1/2, HDF 4/5, HDF-EOS 2/5, shapefile, ASCII, binary.", "Numerous analysis functions are built-in.", "High-quality graphics are easily created and customized with hundreds of graphic resources.", and "Many example scripts and their corresponding graphics are available." To the right, there are boxes for the National Science Foundation sponsorship, a pivot to Python announcement, release information (version 6.6.2, February 28, 2019), and contributions and support.

LINK

## MetEd

The screenshot shows the MetEd homepage. At the top, there's a dark header bar with the MetEd logo on the left, followed by links for "English" and "Español", and user account options like "Hi, emir!", "Your Account", "Logout", and "Donate". Below the header is a navigation menu with tabs for "HOME", "EDUCATION & TRAINING", "COMMUNITIES", "RESOURCES", "ABOUT", and "MY METED". A sub-header below the menu reads "Teaching and Training Resources for the Geoscience Community". To the right is a search bar with a "Search" button. The main content area features a section titled "What Is MetEd?" which includes a short video thumbnail and a link to a video about MetEd. Below this is a section titled "Recent Publications" with a thumbnail for the "2019 NWS Satellite Applications Workshop". To the right of the main content is a sidebar titled "News and Updates" containing a donation message.

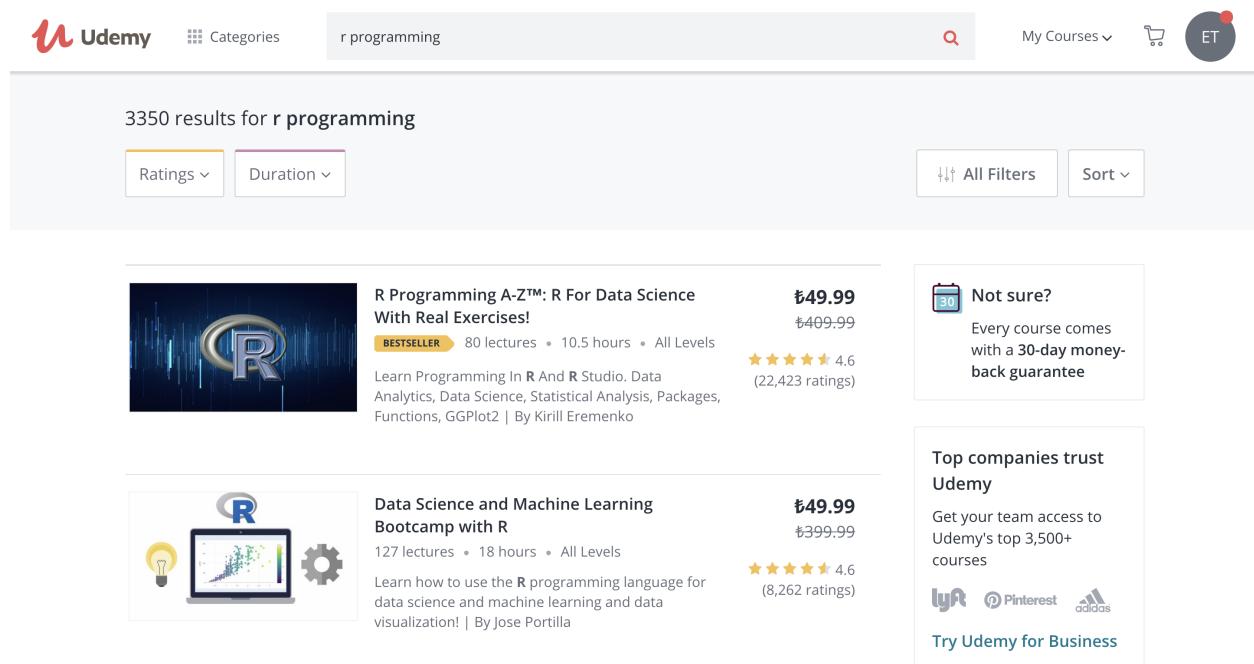
LINK

## Coursera

The screenshot shows the Coursera "Data Analysis" course page. At the top, there's a navigation bar with "Explore", a search bar, and user account options for "For Enterprise" and "Emir Toker". Below the navigation is a breadcrumb trail: "Explore > Data Science > Data Analysis". The main title is "Data Analysis". A brief description states: "Data analysis courses address methods for managing and analyzing large datasets. Start your career as a data scientist by studying data mining, big data applications, and data product development." Below this are filtering options: "Skills", "Job Title", "Level", "Language", "Type", "Creator", and "Clear all filters". The results section shows 4 results, with the first two listed: "Data Science" from Johns Hopkins University and "Statistics with R" from Duke University. Each course listing includes a thumbnail, the course name, university, specialization, rating (4.5 stars), course count (10 COURSES), duration (136 HOURS), level (BEGINNER), and a "View Syllabus" button.

LINK

## Udemy



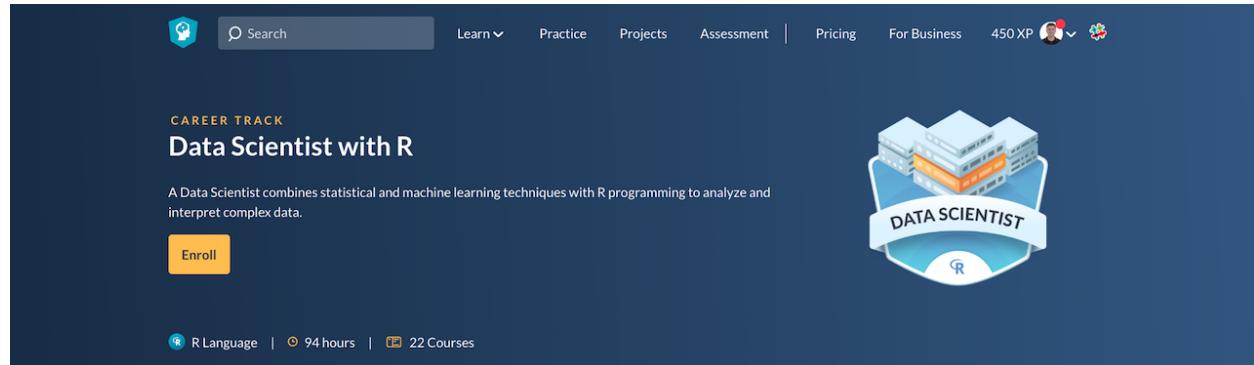
The screenshot shows the Udemy website search results for "r programming". The search bar at the top contains the query "r programming". Below the search bar, there are filters for "Ratings" and "Duration", and buttons for "All Filters" and "Sort". The search results display two course cards:

- R Programming A-Z™: R For Data Science With Real Exercises!**  
BESTSELLER • 80 lectures • 10.5 hours • All Levels  
Learn Programming In R And R Studio. Data Analytics, Data Science, Statistical Analysis, Packages, Functions, GGPLOT2 | By Kirill Eremenko  
**₹49.99** ₹409.99  
★★★★★ 4.6 (22,423 ratings)
- Data Science and Machine Learning Bootcamp with R**  
127 lectures • 18 hours • All Levels  
Learn how to use the R programming language for data science and machine learning and data visualization! | By Jose Portilla  
**₹49.99** ₹399.99  
★★★★★ 4.6 (8,262 ratings)

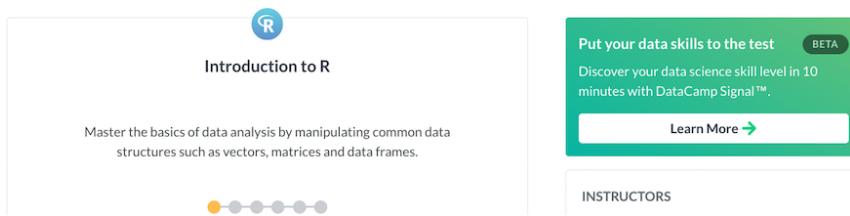
On the right side of the results, there are promotional boxes: "Not sure? Every course comes with a 30-day money-back guarantee" and "Top companies trust Udemy" featuring logos for Lyft, Pinterest, and Adidas.

[LINK](#)

## Datacamp



The screenshot shows the Datacamp website for the "Data Scientist with R" career track. The top navigation bar includes "Search", "Learn", "Practice", "Projects", "Assessment", "Pricing", "For Business", and user account information. The main section features a large badge for "DATA SCIENTIST" with an R logo. Below the badge, it says "A Data Scientist combines statistical and machine learning techniques with R programming to analyze and interpret complex data." A yellow "Enroll" button is visible. At the bottom, it shows "R Language", "94 hours", and "22 Courses".



The screenshot shows the first course in the Datacamp career track: "Introduction to R". It includes a brief description: "Master the basics of data analysis by manipulating common data structures such as vectors, matrices and data frames.", a progress bar showing step 1 completed, and a call-to-action button "Learn More →".

[LINK](#)

## Edx

**edX** Courses ▾ Programs & Degrees ▾ Schools & Partners edX for Business Sign In Register

Viewing 50 results matching "programming r" ×

Search:  Search

CLEAR ALL

Refine your search

Availability

- Current 23
- Starting Soon 2
- Upcoming 6
- Self-Paced 27
- Archived 11

Subjects

- Biology & Life Sciences 10
- Business & Management 6
- Computer Science 16
- Data Analysis & Statistics 27
- Economics & Finance 2
- Education & Teacher Training 1

 HarvardX Statistics and R VERIFIED

 HarvardX Data Science: R Basics VERIFIED

 Microsoft Introduction to R for Data Science VERIFIED

LINK

## Khan academy

Courses ▾ Search Q Khan Academy Donate Login Sign up

Math

### Statistics and probability

15,200 Mastery points available in course

Course summary

Analyzing categorical data

Displaying and comparing quantitative data

Summarizing quantitative data

Modeling data distributions

Exploring bivariate numerical data

Course challenge Test your knowledge of the skills in this course.

 Analyzing categorical data 0/1300 Mastery points

Analyzing one categorical variable  
Two-way tables  
Distributions in two-way tables

 Displaying and comparing quantitative data 0/1200 Mastery points

Displaying quantitative data with graphs  
Describing and comparing distributions  
More on data displays

 Summarizing quantitative data 0/1700 Mastery points

Measuring center in quantitative data  
More on mean and median  
Interquartile range (IQR)  
Variance and standard deviation of a sample  
More on standard deviation  
Box and whisker plots

LINK

## Stack overflow

The screenshot shows the Stack Overflow homepage with a search bar at the top containing 'R programming'. Below the search bar, there's a sidebar with links for Home, PUBLIC, Stack Overflow, Tags, Users, Jobs, TEAMS, and a 'First 10 Free' button. The main content area is titled 'Search Results' and shows a search for 'r programming'. It displays 500 results, with three questions listed:

- 1548 votes**: Q: With arrays, why is it the case that `a[5] == 5[a]`? (asked Dec 19 '08 by Dinah)
- 23 votes**: Q: using R programming in java (asked Oct 27 '10 by Prashant)
- 157 votes**: Q: How to organize large R programs? (asked Oct 27 '10 by Prashant)

To the right of the search results, there's a yellow sidebar with job listings for Data Analyst, Senior/Backend Developer, Data Science Curriculum Writer, and QA Automation/Load Testing. At the bottom of the sidebar, there's a section for 'Hot Network Questions'.

LINK

## Wolfram alpha

The screenshot shows the Wolfram Alpha search interface. The input field contains 'what is the age of the earth'. Below the input field, there are buttons for 'Extended Keyboard' and 'Upload'. To the right, there are buttons for 'Examples' and 'Random'. The search results are displayed in sections:

- Input interpretation:** Earth age
- Result:** 4.54 billion years
- Unit conversion:**  $1.43 \times 10^{17}$  seconds
- Comparison as time:**  $\approx 69 \times$  time since the Cretaceous-Tertiary boundary ( $\approx 65$  Myr)

LINK

## Dropbox

The screenshot shows the Dropbox dashboard. On the left, there's a sidebar with 'Files' selected, followed by 'My files', 'Sharing', 'File requests', and 'Deleted files'. A promotional overlay for 'Dropbox Business' offers 'Try it free'. The main area displays a list of folders:

Name	Modified	Members	Actions
BROWN BAG Readings	--	15 members	...
ezgi	--	2 members	...
Paper_HSK531E	--	Only you	...
Polar_Oceanography	--	7 members	...

A large empty space on the right is labeled 'Select a file to see more details'. At the bottom right are 'Create' and '...' buttons.

LINK

## Wetransfer

The screenshot shows the WeTransfer interface. On the left, there's a form for uploading files with a 'Dosyalarınızı ekleyin' button and a link 'Ya da bir klasör seçin'. Below it are fields for 'Mesaj' (Message) and a 'Aktar' (Send) button. A tooltip message says: 'İyi bir haberimiz var; bir seferde 2 GB'a kadar aktarm yapabilirsiniz. Daha da iyi, bu hizmeti istediğiniz sıklıkta kullanabilirsiniz.' To the right, there's a featured image for 'Sun, circles and other shapes' by Eloisa Iturbe, showing abstract wooden shapes. Navigation links at the top include 'Yardım', 'Hakkında', 'Oturum aç', and 'Hesap Yükseltme'.

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