Downloading R

R

- 1. Download *appropriate* version of R for Windows
 from the CRAN site via
 <u>http://gcdkit.org</u>
 or directly at:
 <u>http://cran.r-project.org</u>
- IMPORTANT! The current version of *GCDkit*, 6.1, has been developed in
 R 4.1.3 for Windows. The function under a different version of R cannot be guaranteed.



[Home]

Download

The R Project for Statistical Computing

Getting Started

R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS. To **download R**, please choose your preferred CRAN mirror.

If you have questions about R like how to download and install the software, or what the license terms are, please read our answers to frequently asked questions before you send an email.

News

- R version 3.6.1 (Action of the Toes) has been released on 2019-07-05.
- useR! 2020 will take place in St. Louis, Missouri, USA.
- R version 3.5.3 (Great Truth) has been released on 2019-03-11.
- The R Foundation Conference Committee has released a call for proposals to host useR! 2020 in North America.
- You can now support the R Foundation with a renewable subscription as a supporting member
- The R Foundation has been awarded the Personality/Organization of the year 2018 award by the professional association of German market and social

CRAN R Project About R Logo Contributors What's New? Reporting

Reporting Bugs Conferences Search Get Involved: Mailing Lists Developer

Pages R Blog

R Foundation

Foundation Board Members Donors Donate

Installing R

- Run the executable file and select the required items as well as the target directory. Follow further instructions of the installation wizard
- Go for custom installation
- Install the SDI (multiple windows) interface
- If behind proxy, select
 Internet2

Soubor Úprawy Zobrazení Historie Záložby	Nátroje Nánověda	
M Inbox - voitechianousek@ X M Inbox - editor@ineosci.org X @ The Comprehensive RArc X +		
The interps://cran.r-project.org		*** T =
M Inbox - vojtech.janous 🕐 Školka Rybička 🤌 Nejnavštěvovanější 🖸 YouTube 👖 Stream 🔯 Google Scholar 🍱 SIS 🚺 IS MU 🖹 ResearchGate 🛞 GCDkit		
	The Comprehensive R Archive Network	
	Download and Install R	1
	Precompiled binary distributions of the base system and contributed packages, Windows and Mac users most likely want one of these versions of R	
CRAN	while one of the or the	
Mirrors	Download R for Linux Download R for (Mac) OS X	
What's new?	Download R for Windows	
<u>Task Views</u> Search	R is part of many Linux distributions, you should shade with your Linux package	
	management system in addition to the link above.	
About R R Homenage	Source Code for all Platforms	
The R Journal	Windows and Mac users most likely want to download the precompiled binaries listed	
Satura	in the upper box, not the source code. The sources have to be compiled before you can	
<u>R Sources</u>	use them. If you do not know what this means, you probably do not want to do it!	
<u>R Binaries</u>	• The latest release (Tuesday 2016-06-21, Bug in Your Hair) R-3.3.1.tar.gz, read	
<u>Packages</u> Other	what's new in the latest version.	
	• Sources of <u>R alpha and beta releases</u> (daily snapshots, created only in time	
Documentation Manuals	periods before a planned release).	
FAQs	 Daily snapshots of current patched and development versions are available here. 	
Contributed	Please read about new features and bug fixes before filing corresponding feature	
	requests or bug reports.	
	 Source code of older versions of R is <u>available here</u>. 	
	Contributed extension <u>packages</u>	
	Questions About R	
	 If you have questions about R like how to download and install the software, or what the license terms are, please read our <u>answers to frequently asked</u> <u>questions</u> before you send an email. 	

• Note that under the MDI interface (default of the R installation), some functions of *GCDkit*, notably those dealing with plates of diagrams, are not working properly.

- 2. Download the GCDkit standard installer from <u>http://www.gcdkit.org</u>
- 3. Gain administrative rights if you want to have the Desktop shortcut created automatically (the rest of installation should work without admin rights, though)
- 4. Connect to Internet; the working Internet connection is needed, unless packages sp, R2HTML, RODBC and XML have been installed beforehand



5. Install GCDkit

- Unzip the installer into some convenient temporary folder
- Run RGUI, 32 bit
 version (shortcut labelled
 R i386)
- Drag and drop the file
 @INSTALL.r onto the
 R Console window.
- Read the initial information screen
- Accept the license agreement

Installing Geochemical Data Toolkit (GCDkit), ver. 6 (Il pad...



GCDkit is a system for handling and recalculation of whole-rock major- and trace-element analyses and radiogenic isotope data from igneous rocks. It is fully menu driven but, at the same time, can be used in an interactive regime (power users only).

Note that recommended systems to run GCDkit are Windows 10/8/7/Vista/XP. The

current version should X (release 10.6 and ab distributions of Linux (Ubuntu).

Using this system, the data can be loaded, individua coherent groups or searched according to various c plotted into commonly used classification diagram: AFM, R1-R2) as well as a variety of user-defined plc plots, multiple plots, spider diagrams).

Moreover, some basic statistical methods are imple whole data set and individual groups) using a fracti R. Included are the descriptive statistics, boxplots, h component and cluster analysis. GCDkit also makes common normative calculations to be performed.

Functions for interpreting radiogenic (Sr–Nd) isotor been also included (calculating Sr and Nd initial cc ages etc.).

The long-term aim is to built a single, coherent and platform-independent system with high-level plotti interpretation of whole-rock geochemical data, tha straightforward to use by ordinary users but, at the expandable by the more demanding ones.





Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.

NOTE the authors cannot guarantee correct function of this software and should not be hold liable for any damage caused by its use (or misuse ;-)).

GCDkit is free for academic use but if you find it of help, please cite the package 'GCDkit' in your publications as follows:

Installing Geochemical Data Toolkit (GCDkit), ver. 6 (Il pa...

Vojtech Janousek, Colin M. Farrow and Vojtech Erban (2006). Interpretation of whole-rock geochemical data in igneous geochemistry: introducing Geochemical Data Toolkit (GCDkit). Journal of Petrology 47(6): 1255-1259. doi: 10.1093/petrology/egl013

Send any comments, words of encouragement (highly appreciated) and bug reports to vojtech.janousek@geology.cz.





NOTE that installation path of the *GCDkit* system is determined automatically and **cannot be changed**.

NB For correct function of *GCDkit*, packages sp, R2HTML, RODBC and XML are essential.

Secure CRAN mirrors

0-Cloud [https] Algeria [https] Australia (Canberra) [https] Australia (Melbourne 1) [https] Australia (Melbourne 2) [https] Australia (Perth) [https] Austria [https] Belgium (Ghent) [https] Brazil (PR) [https] Brazil (RJ) [https] Brazil (SP 1) [https] Brazil (SP 2) [https] Bulgaria [https] Chile 1 [https] Chile 2 [https] China (Guangzhou) [https] China (Lanzhou) [https] China (Shanghai) [https] Colombia (Cali) [https] Czech Republic [https] Denmark [https] East Asia [https] Ecuador (Cuenca) [https] Estonia [https] France (Lyon 1) [https] France (Lyon 2) [https] France (Marseille) [https] France (Montpellier) [https] France (Paris 2) [https] Germany (Göttingen) [https] Germany (Münster) [https] Greece [https]

Iceland [https] Indonesia (Jakarta) [https]

Indonesia (Jakarla) [Intips] [Ireland [Intips] Italy (Padua) [Intips] Japan (Tokyo) [Intips] Japan (Yonezawa) [Intips] Malaysia [Intips] Mexico (Mexico City) [Intips] Norway [Intips] Philippines [Intips] Serbia [Intips] Spain (A Coruna) [Intips] Soain (Madrid) [Intips]

OK Cancel

- Select libraries to be (re)installed note that some of the are required, if not present already in the system.
- Recommended packages are also rgdal, tkrplot, and curl used for map tool in the EarthChem module
- For their installation, working Internet connection is required
- The R system will prompt you to select a CRAN mirror nearby

- The installation of desired libraries should have commenced by now (you may be prompted to create your own personal library – this is ok).
- Shortcut should have been created automatically
- If not, see Troubleshooting





Shortcut created successfuly on your desktop! NOTE that it may be working only after Windows restart.



Х

- If done, GCDkit is loaded automatically.
- **Specify some** *GCDkit* **options:** you may like to set the default data directory, language for the classification plots and some colour options.
- Do not worry, these can be set up even later, from within *GCDkit*, using the menu *GCDkit* > *Options*...

GCDkit options				
GUI win tcltk Working directory	C:/			
Minimize output on screen Precision of results 3 Plotting symbols magnification 1				
Annotate fields in discrimination plots? Ves No Language Czech English				
Colours for boundaries/labs	Colours for extra texts			
blue gray8	blue gray8	▲ Set to BW □ 		
	Ok/Save Cancel Restore defaults Help			

X

🖡 Installing Geochemical Data Toolkit (GCDkit), ver. 6 (Il padri... 🗖 🗖



Congratulations!

Package Geochemical Data Toolkit, ver. 6 (Il padrino sono io)

has been installed successfuly.

To run it, double-click the Desktop shortcut, type:

library(GCDkit)
or invoke the R Console menu item:
'Packages|Load package...'



• Your installation should be completed by now.

TROUBLESHOOTING

- If the shortcut has not been created automatically, or does not function properly, follow the instructions on the error screen to make your own version.
- If installation fails for any unforeseen reason, you can always resort to the installation as a library from either RGUI or Rterm (see the following slides).
- See also the relevant entries of our blog at <u>http://blog.gcdkit.org</u>



Shortcut could not be created on your desktop! You need to do so later, manually...

23

The command line should look something like: "C:\R\R-3.4.3\bin\i386\Rgui.exe" --silent --no-save --sdi Initial subdirectory: C:\R\R-3.4.3\library\GCDkit\ Icon file: C:\R\R-3.4.3\library\GCDkit\gcdkit2.ico

For your convenience, this info has been copied to clipboard.

ОК

X

NOTE that the library *RODBC* is essential for import/export of many file formats, including Excel (XLS, XLSX), MS Access (MDB) and DBase, IgPet, MinPet and output of the online database NAVDAT (DBF).

Installing *GCDkit* (II via offline installer)

1. Gain administrative rights, install R as usual, but in addition make sure that it is installed in the C:\R folder

Otherwise no shortcut is created on your desktop.

- 2. Download the GCDkit off-line installer from <u>http://www.gcdkit.org</u>
- 3. Install GCDkit
- Unzip the installer into some convenient temporary folder
- Run RGUI, 32 bit version (shortcut labelled R i386)
- Drag and drop the file @OFFLINE_INSTALL.r onto the R Console window.
- If you are installing without admin rights, and if asked whether you like to create Personal library, answer Yes.

Running GCDkit (on Windows RGUI)

Running *GCDkit* is possible in three ways:

• If the **shortcut** has been created successfully on your Windows desktop, simply double click it and R (RGUI) should start loading the *GCDkit* on fly.

Run R, preferentially 32 bit version of RGUI (the R i386 shortcut).

- If in GUI, you can load the *GCDkit* library using the menu *Packages* > *Load package* > *GCDkit*.
- Otherwise type *library(GCDkit)* into the R Console/Rterm window.

• WARNING: DO NOT DELETE the file . Rprofile in your GCDkit directory. Otherwise the desktop shortcut to run the *GCDkit* will stop working.

Installing *GCDkit* (III library on Windows RGUI)

- 2. Install the *R2HTML*, *RODBC*, *XML* and *sp* supporting libraries
- Run the R GUI, 32 bit (R i386 shortcut)
- Select the R2HTML, RODBC, XML and sp items from the menu Packages > Install package(s)... or type: install.packages(c("R2HTML", "RODBC", "XML", "sp")) [working Internet connection is required]
- Alternatively, you can install these three libraries offline from previously downloaded zip files using the menu
 Packages > Install package(s) from local zip files...
- 3. Download the GCDkit_6.1.zip library from http://www.gcdkit.org
- 4. Install GCDkit
- Still from the R console, invoke the menu
 Packages > Install package(s) from local zip files...
- Select the zipped file *GCDkit_6.1.zip* directly (so do not unzip it beforehand)

Installing *GCDkit* (IV library on Windows Rterm)

- 2. Install R2HTML, RODBC, XML and sp supporting libraries
- Run the Rterm
- o Type in [working Internet connection is required]: install.packages(c("R2HTML", "RODBC", "XML", "sp"))
- Alternatively, you can install these three libraries offline using the menu Packages > Install package(s) from local zip files...
- 3. Download the GCDkit_6.0.zip library from http://www.gcdkit.org
- 4. Install GCDkit
- Still in Rterm, type:

install.packages("FULL_PATH\\GCDkit_6.1.zip", repos=NULL)
where FULL_PATH is a full path to the installation (.zip) file

NB that doubled backslashes are to be used in path names as customary in R

Running *GCDkit* (on Windows Rterm)

5. Running GCDkit

- Launch R
- Type *library(GCDkit)* into the R command prompt.
- Moreover, type *menuet()* in order to start the Tcl/Tk menu system.

WARNING! This approach uses a platform-independent (i.e. non-Windows) version of *GCDkit* that is still experimental. Many features are not available and others may work unpredictably. Please use sensibly, at your own risk. For further information, see a dedicated document (R_install_Other.pdf) as well as: <u>http://http://blog.gcdkit.org</u>.