

OM 3 Instructions for installation on MS Windows, Mac and Linux

INSTALLATION ON MS WINDOWS

1. Download **appropriate** version of R for Windows

(R 4.1.3 for Windows for *GCDkit.Mineral* 1.0)

from the CRAN site via <http://mineral.gcdkit.org> or directly at: <http://cran.r-project.org>

2. Install R

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

3. Download the GCDkit.Mineral installer (*GCDkit.Mineral_1.0.0_for_R_4.1.3.zip*) from <http://mineral.gcdkit.org>

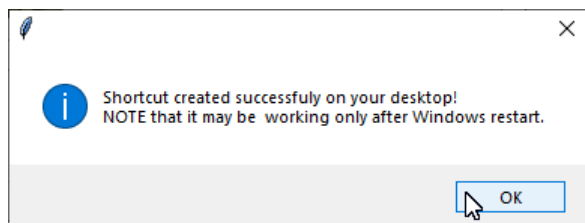
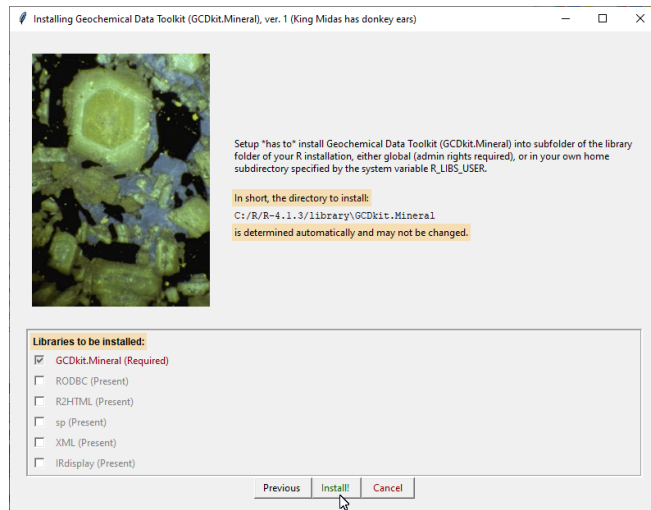
4. Gain administrative rights

(if you want to have the Desktop shortcut created automatically)

5. Install GCDkit.Mineral

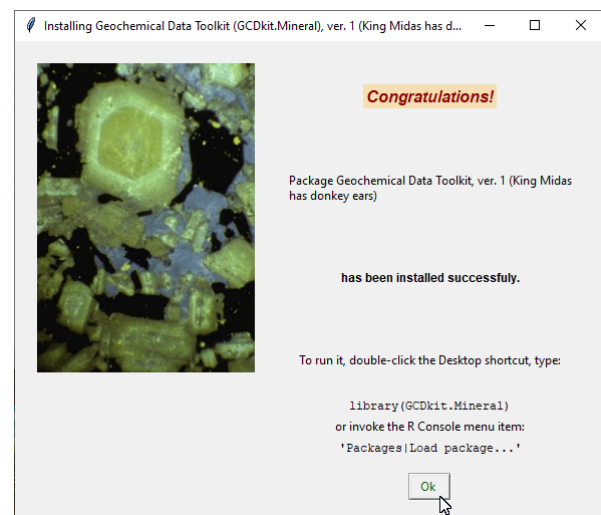
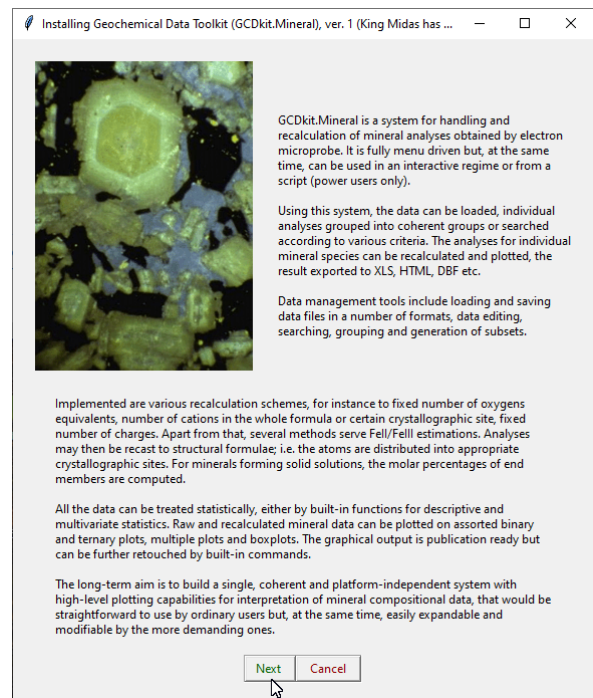
- Unzip the installer into some convenient temporary folder
- Run RGUI, 32 bit version (shortcut labelled *R i386*)
- Drag and drop the file *@INSTALL_Mineral.r* onto the *R Console window*.
- Read the initial information screen
- Accept the license agreement
- Select libraries to be (re)installed – note that some of the are required, if not present already in the system (packages *sp*, *R2HTML*, *RODBC*, *IRdisplay* and *XML* are essential).
- 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).
- If done, shortcut should have been appeared automatically on your desktop



Running the *GCDkit.Mineral*

- Either double click the icon on the desktop, or type `library(GCDkit.Mineral)` into the R command prompt.
- In the latter case, if the Tcl/Tk menu system does not start automatically, it may be invoked manually by typing `menuet()`.



INSTALLATION ON MAC

1. Download ***appropriate* binary version of R for Mac** (R 4.1.3 for *GCDkit.Mineral* 1.0) from the CRAN site at: <http://cran.r-project.org>

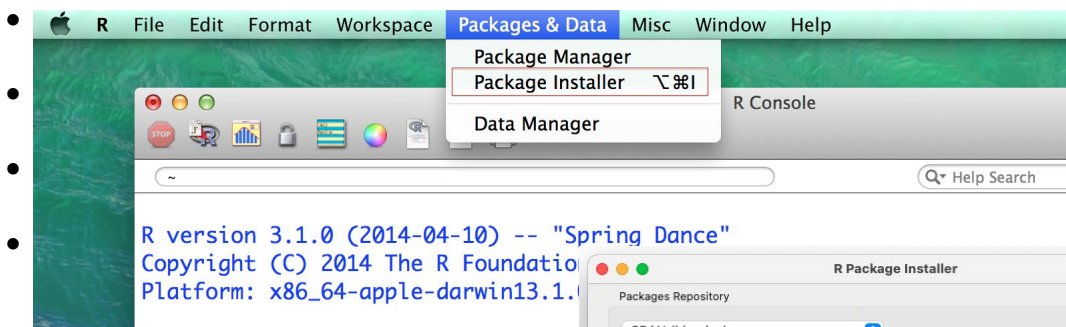
2. Install the XQuartz graphical device [if not already present in your system]

3. Start the R

4. Install the RODBC, R2HTML, XML, IRdisplay and sp libraries

[working Internet connection is required]:

- Under *Packages & Data* pull-down menu, select *Package Installer*

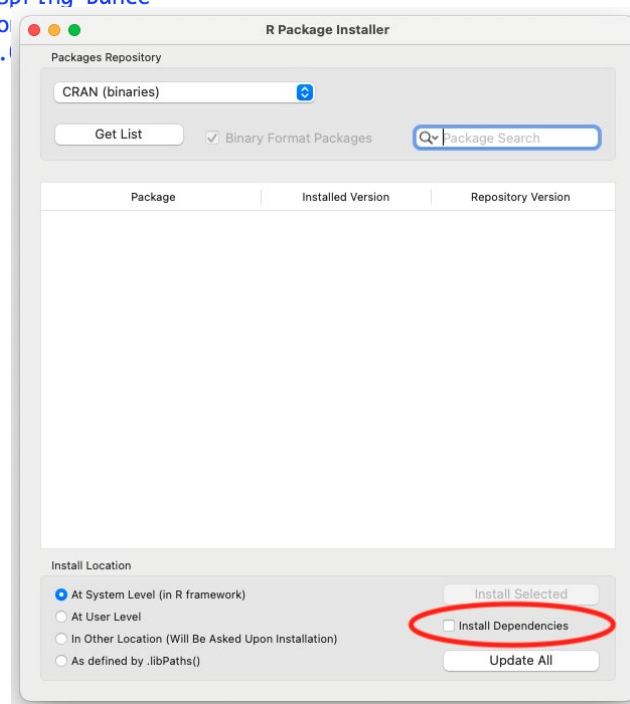


- Pull down the top-left menu and select *CRAN (binaries)*
- Navigate to the correct items (*RODBC*, *R2HTML*, *XML*, *IRdisplay* and *sp*)
- Do not forget to click the “Install dependencies” checkbox

[optional replacement for step 4]:

From within R, type:

```
install.packages(c("RODBC", "R2HTML", "XML", "sp", "IRdisplay"),  
dependencies = TRUE)
```



5. Downloading and installing the *GCDkit.Mineral* library to your Rapp

- Download the file *GCDkit.Mineral_1.0.0.zip* from <http://mineral.www.gcdkit.org>
- Under *Packages & Data* pull-down menu, select *Package Installer*
- Pull down the top-left menu and go for *Local Binary Package*
- Select the *GCDkit.Mineral_1.0.0.zip* file directly (so do not unzip it beforehand)
- Click *Install* button and navigate to the file.

If the above installation of binary package fails

(typically the system complains that it is not a Mac OS X binary)

[optional replacement for step 4]:

- Download and the *GCDkit.Mineral_1.0.0.tar.gz* file from <http://mineral.gcdkit.org>
- Under *Packages & Data* pull-down menu, select *Package Installer*
- Pull down the top-left menu and go for *Local Source Package*
- Select the *GCDkit.Mineral_1.0.0.tar.gz* file directly (so do not uncompress it beforehand)
- Click *Install* button and navigate to the file.

If necessary, see also: <http://outmodedbonsai.sourceforge.net/InstallingLocalRPackages.html>
<https://cran.r-project.org/bin/macosx/RMacOSX-FAQ.html>

Running *GCDkit.Mineral* on Mac

- Launch R
- Type `library(GCDkit.Mineral)` into the R command prompt.
- If the Tcl/Tk menu system does not start automatically, it may be invoked manually by typing `menuet()`.

INSTALLATION ON LINUX

1. Install R:

- In bash, type: `sudo apt-get install r-base`

2. Install *RODBC* library:

Still in bash, type: `sudo apt-get install r-cran-rodbc`

3. Install the *R2HTML*, *XML*, *IRdisplay* and *sp* libraries

[working Internet connection is required]:

- Launch R (type R at the bash prompt).
- From within R, type:

```
install.packages(c("R2HTML", "XML", "IRdisplay", "sp"),  
dependencies = TRUE)
```

4. Downloading and installing *GCDkit.Mineral*

- Download the *GCDkit.Mineral_1.0.0.tar.gz* file from <http://mineral.gcdkit.org>
- Install the *GCDkit.Mineral* library from source. From within R, type:

```
install.packages("FULL_PATH/GCDkit.Mineral_1.0.0.tar.gz",  
  repos = NULL, type = "source", INSTALL_opts = c("--html"))
```

whereby 'FULL_PATH' leads to the installation (.tar.gz) file on your system
- If copying to clipboard is required, install also the *xclip* application:

```
xclip --enable-prebuilt-html
```
- NB that system has to be set up beforehand enabling building the packages from the source. See Details at R manual page, `?install.packages`

Running *GCDkit.Mineral* on Linux

- Launch R
- Type `library(GCDkit.Mineral)` into the R command prompt.
- If the Tcl/Tk menu system does not start automatically, it may be invoked manually by typing `menuet()`.