# How to Install R and R Studio MAC OS Users Version Fall 2023

R is a free software for statistical computing and graphics. Its learning curve is a bit steep. But, fortunately for us, there is also R-Studio. R-Studio is a user interface that allows the user to run R in an environment that is much more friendly, especially for new users. In this course, we will be using R from within R-Studio.

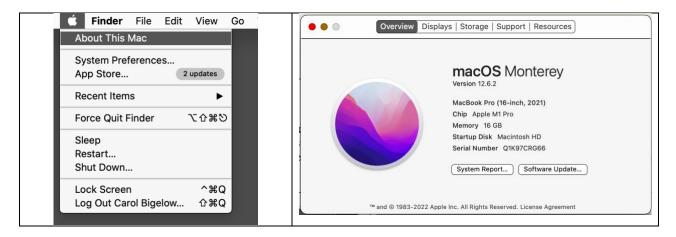
R and R Studio are separate packages! You <u>must</u> install R (and optionally XQuartz) first.

## Preliminary - Consider Watching a Video First

<u>Mac Users (video, 3:54)</u> <u>https://www.youtube.com/watch?v=n8kP7c\_QbLA</u>

### Preliminary – Determine the version of your operating system (e.g., I have MAC OS Monterey)

*Why?* If your operating system happens to be an older one, then in installing R you may have to choose an older version of R because your operating system may or may not be able to accommodate the most recent version of R.



Example – This tells me that my operating system is macOS Monterey Version 12.6.2

#### PART I (must be done before downloading and installing R Studio) Download and Install R and XQuartz

\_\_\_\_1. Go to: <u>https://posit.co/download/rstudio-desktop/</u>

<b>posit</b> products ~ solutions ~ learn & support ~	XPLORE HORE ~ PRICING Q	
DOWNLOAD		
RStudio Deskto	0	
Used by millions of people weekly, the RStudio integrat development environment (IDE) is a set of tools built to be more productive with R and Python.	d	
Don't want to download or install anything? Get started RStudio on <u>Posit Cloud for free</u> . If you're a professional scientist looking to download RStudio and also need co enterprise features, don't hesitate to <u>book a call with u</u> r	lata Imon	
1: Install R	2: Install RStudio	
RStudio requires R 3.3.0+. Choose a version of R that matches your computer's operating system.	DOMNLOAD RETURID DESITOR FOR MACOS 11+	
DOWNLOAD AND INSTALL #	This version of RStudio is only supported on macOS 11 and higher. For earlier macOS environments, please <u>download</u> <u>a previous version.</u>	
	Size: 375.38 MB   SHA-256: EBA48A60   Version: 2023.06.2+561	

At left, under "1: Install R", click DOWNLOAD AND INSTALL R

\_2. You should then see:

	The Comprehensive R Archive Network		
	Download and Install R		
	Precompiled binary distributions of the base system and contributed packages, Windows and Mac users most likely want one of these versions of R:		
CRAN	Download R for Linux (Debian, Fedora/Redhat, Ubuntu)     Download R for macOS		
Mirrors	Download K for macOS     Download R for Windows		
What's new? Search	R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.		
CRAN Team	Source Code for all Platforms		
About R R Homepage The R Journal	Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!		
Software	• The latest release (2023-06-16, Beagle Scouts) R-4.3.1.tar.gz, read what's new in the latest version.		
R Sources R Binaries	• Sources of <u>R alpha and beta releases</u> (daily snapshots, created only in time periods before a planned release).		
Packages Task Views	<ul> <li>Daily snapshots of current patched and development versions are <u>available here</u>. Please read about <u>new features and bug fixes</u> before filing corresponding feature requests or bug reports.</li> </ul>		
Other Documentation	Source code of older versions of R is <u>available here</u> .		
Manuals FAOs	Contributed extension packages		
Contributed	Questions About R		
	<ul> <li>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</u> asked questions before you send an email.</li> </ul>		

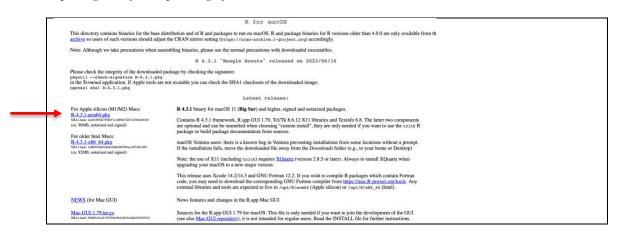
At top right, under Download and Install R, click Download R for macOS

3. You should then see:

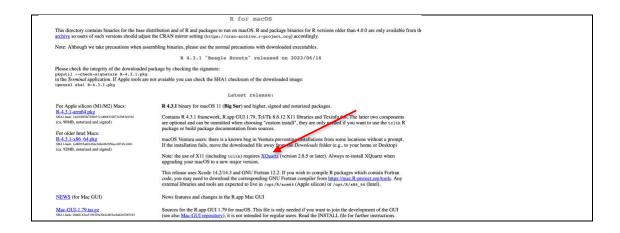
		R for macOS		
		istribution and of R and packages to run on macOS. R and package binaries for R versions older than 4.0.0 are only available from th st the CRAN mirror setting (https://cran-archive.r-project.org) accordingly.		
	Note: Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.			
	R 4.3.1 "Beagle Scouts" released on 2023/06/16 Please check the integrity of the downloaded package by checking the signature: psynt11check-signature R-1.1.pdg in the <i>Terminal</i> application. If Apple toolsh are not available you can check the SHA1 checksum of the downloaded image: opensa: Na1 R-4.3.1.pdg			
		Latest release:		
	For Apple silicon (M1M2) Macs: Ref 1.1 and the second sec	R 4.3.1 binary for macOS 11 (Big Sur) and higher, signed and notarized packages. Contains R 4.3.1 framework, R app C(UI 1.79, Tc/Tk 5.6.12 XU libraries and Texinfo 6.8. The latter two components are optional and can be ommitted when choosing "coston install", they are only needed if you want to use the teltx R package or build package documentation from sources. macOS Ventura users: there is a known bug in Ventura preventing installations from some locations without a prompt. If the installation fails, more the divenheaded file away from the Downhead folder (g, a, top work how of the Ventura hyperball of the divention fails, more the divenheaded file away from the Downhead folder (g, a, top work how of the Ventura Note: the use of X11 (lincluding teltx) requires XQuartz (version 2.8.5 or later). Always re-install XQuartz when uppgrading your macOS to a new major version. This release uses Xcode 14.21/1.3 and CNUF Fortura 12.2. If you wish to compile R packages which contain Fortran code, you may need to download the corresponding GNUF fortung the from <u>Marcy. Marc. Reprode top Packages</u> , eq. (Incl.), Asy		
	NEWS (for Mac GUI)	News features and changes in the R app Mac GUI		
	Mac-GUI-1.79.tar.gz SHA1-bash: 2666(142ca5130)29430c2c663cc844245265183	Sources for the R app GUI 1.79 for macOS. This file is only needed if you want to join the development of the GUI (see also <u>Mac-GUI repository</u> ), it is not intended for regular users. Read the INSTALL file for further instructions.		

Under "R for MAC OS", take care to read the first paragraph

4. IIII Under the heading "Latest release", check that the R package is suitable for your operating system. For most of you, the most recent release will be fine. But if you have an older MAC operating system, you may need to scroll down to find the appropriate R package for your operating system. **Click to download**.



\_5. Next, install **XQuartz** by clicking on the link and downloading and installing the dmg file.



All done? At this point you should see the R icon on your dock:



### PART II – Download and Install R-Studio (R must be downloaded and installed first)

. Go to: https://posit.co/download/rstudio-desktop/					
You should then see:					
posit products - solutions - learn & support - explore	MDRE - PRICING	Q			
RStudio Desktop					
Used by millions of people weekly, the RStudio integrated development environment (IDE) is a set of tools built to help yo be more productive with R and Python.	u.				
Don't want to download or install anything? Get started with RStudio on <u>Posit Cloud for free</u> . If you're a professional data scientist looking to download RStudio and also need common enterprise features, don't hesitate to <u>book a call with us</u> .					
1: Install R	2: Install RStudio				
RStudio requires R 3.3.0+. Choose a version of R that matches your computer's operating system.	DOWNLOAD RSTUDIO DESKTOP FOR MACOS 11+				
DOMILOAD AND INSTALL R	This version of RStudio is only supported on macOS 11 and higher. For earlier macOS environments, please <u>download</u> <u>a previous version.</u>				
	Size: 375:38 MB   5HA-256: EBA48A60   Version: 2023.06.2+561   Released: 2023-08-30	51			

At right, under "2: Install RStudio", **click DOWNLOAD RSTUDIO DESKTOP** A ".dmg" file will be automatically downloaded to your computer. In my case, *RStudio-2023.06.2-561.dmg* was downloaded to my desktop

\_2. Double click the ".dmg" file Drag the RStudio download to your Applications folder Rstudio-2022.12.0-353

