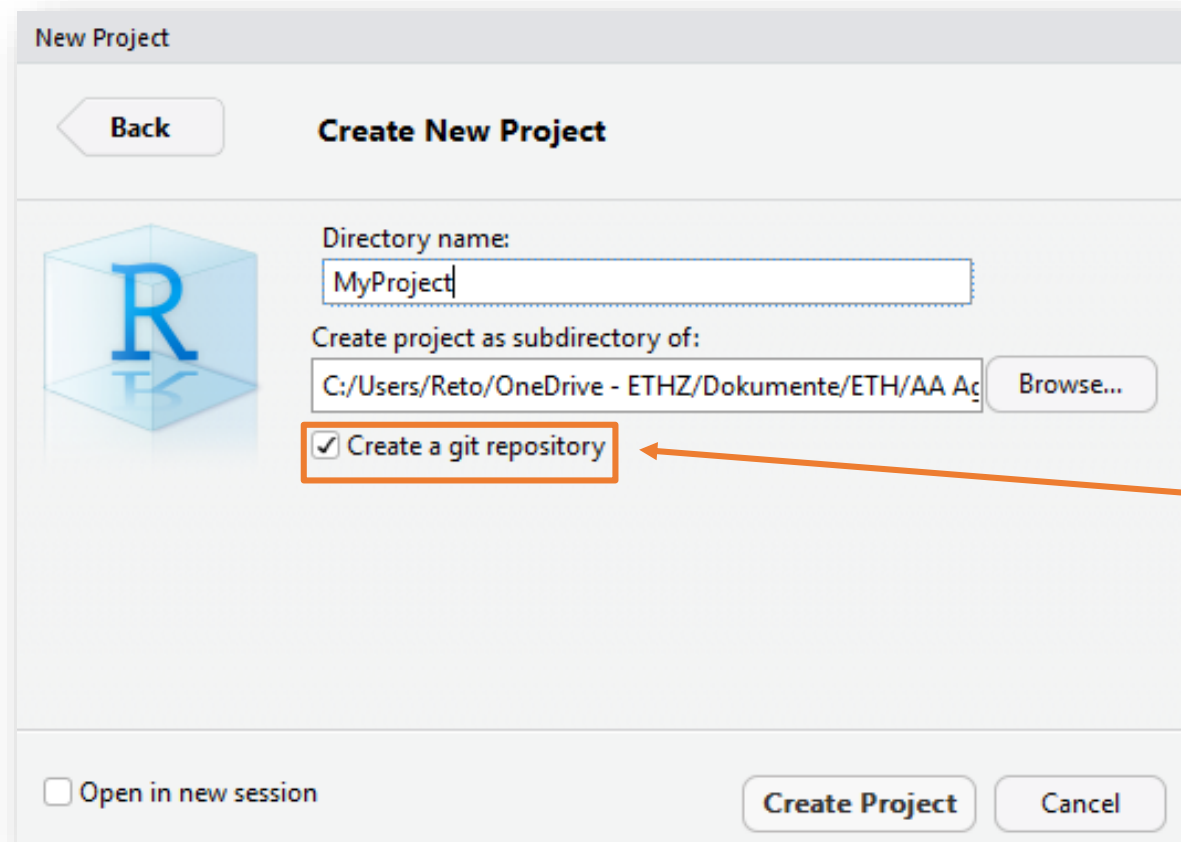


Version control

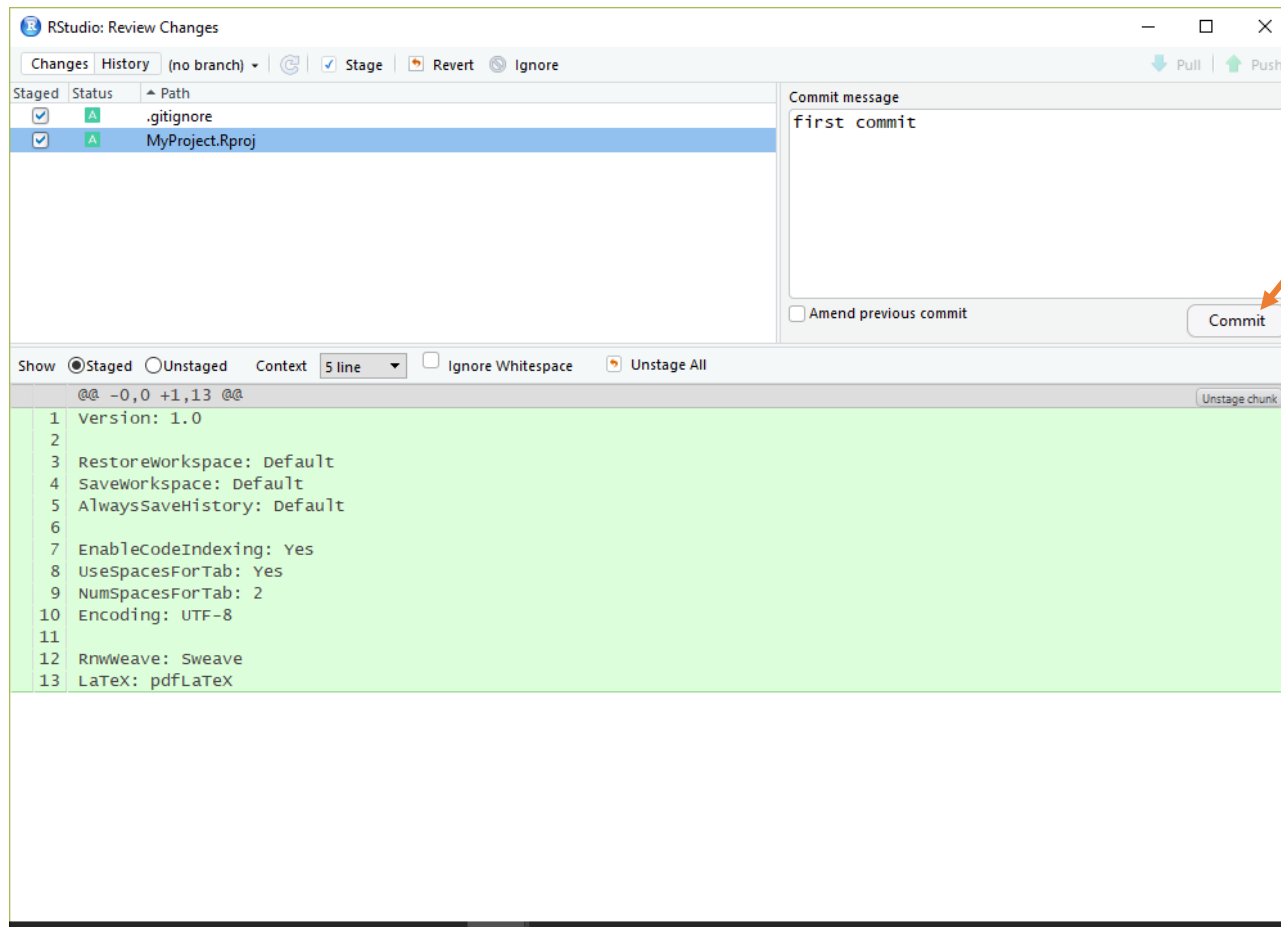
<https://www.rstudio.com/resources/webinars/rstudio-essentials-webinar-series-managing-part-2/>

1) Make new project with git version control



Version control

2) Commit your first files

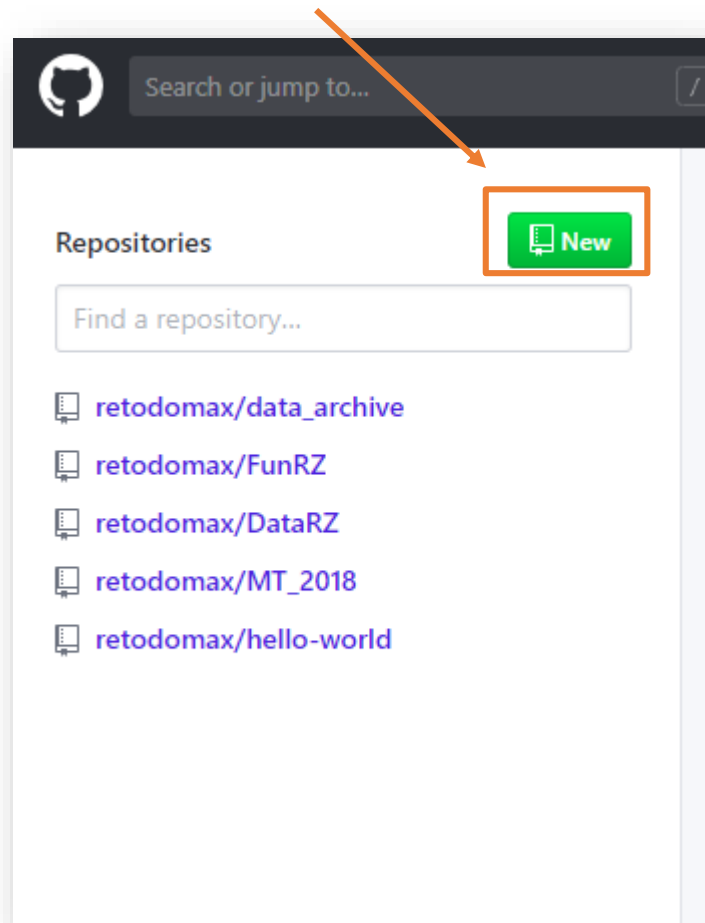


important to have at least one commit

=> it is not possible to push empty (no commit) git file to github

Version control

3) Make new Repository on github.com



Create a new repository

A repository contains all project files, including the revision history.

Owner

retodomax

Repository name *

MyProject

Great repository names are short and memorable. Need inspiration? How about [crispy-octo-palm-tree?](#)

Description (optional)

Test Project for version control

☒ Public

Anyone can see this repository. You choose who can commit.

☐ Private

You choose who can see and commit to this repository.

☒ Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None

Add a license: None



Create repository

Do not cross

Otherwise it might be difficult to connect to your R project



Version control

better use https instead of ssh (less problems with ssh client and passwords)

4) Copy git command to push existing repository

You also find this link later by clicking on the green "clone or download" button

Quick setup — if you've done this kind of thing before

 Set up in Desktop or **HTTPS** SSH `https://github.com/retodomax/FirstProject.git` 

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# FirstProject" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin https://github.com/retodomax/FirstProject.git
git push -u origin master
```

Copy button

`git remote add origin https://github.com/retodomax/R_Ref_Book.git`
`git push -u origin master`

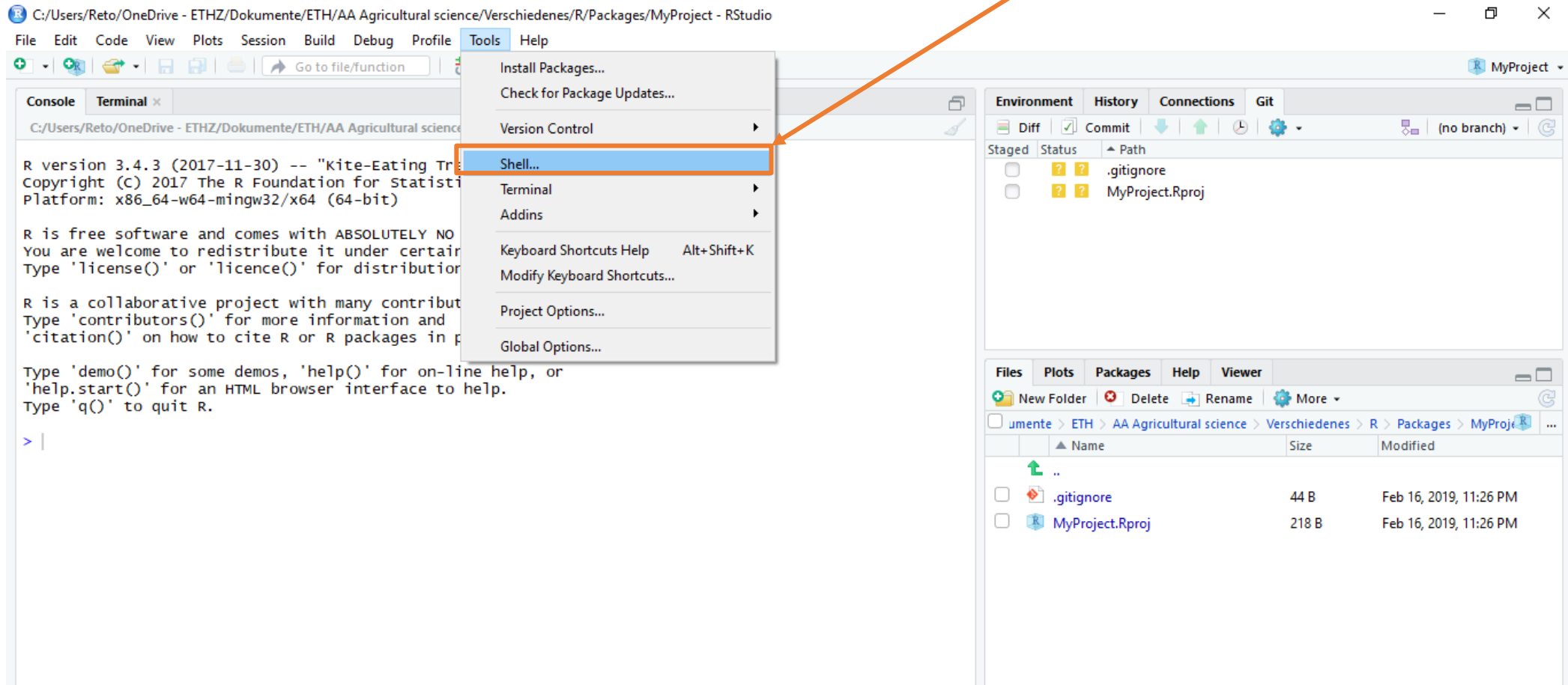
...or push an existing repository from the command line

```
git remote add origin https://github.com/retodomax/FirstProject.git
git push -u origin master
```



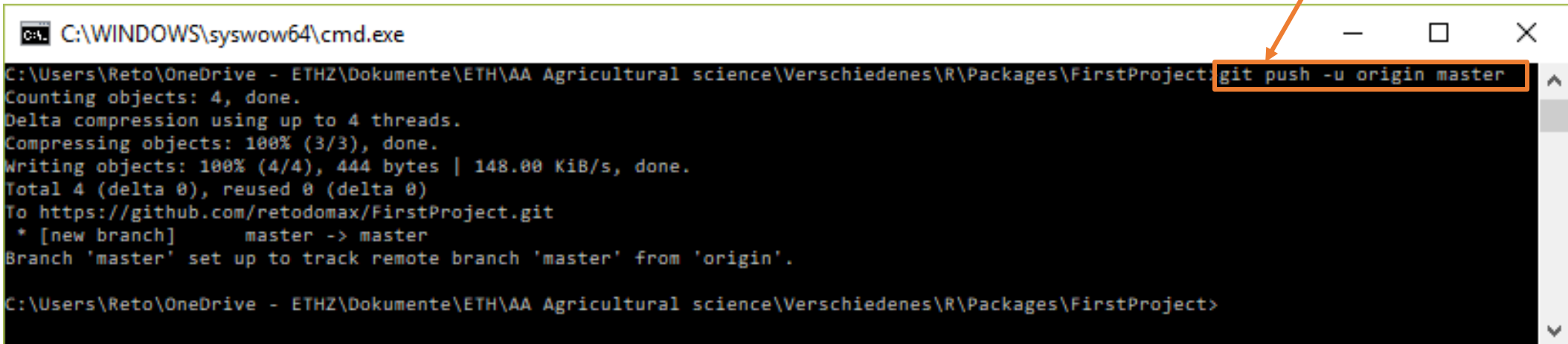
Version control

5) Open Shell in R Studio



Version control

6) Paste copied commands into the shell terminal → Enter



```
C:\WINDOWS\system32\cmd.exe
C:\Users\Reto\OneDrive - ETHZ\Dokumente\ETH\AA Agricultural science\Verschiedenes\R\Packages\FirstProject>git push -u origin master
Counting objects: 4, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 444 bytes | 148.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/retodomax/FirstProject.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
C:\Users\Reto\OneDrive - ETHZ\Dokumente\ETH\AA Agricultural science\Verschiedenes\R\Packages\FirstProject>
```

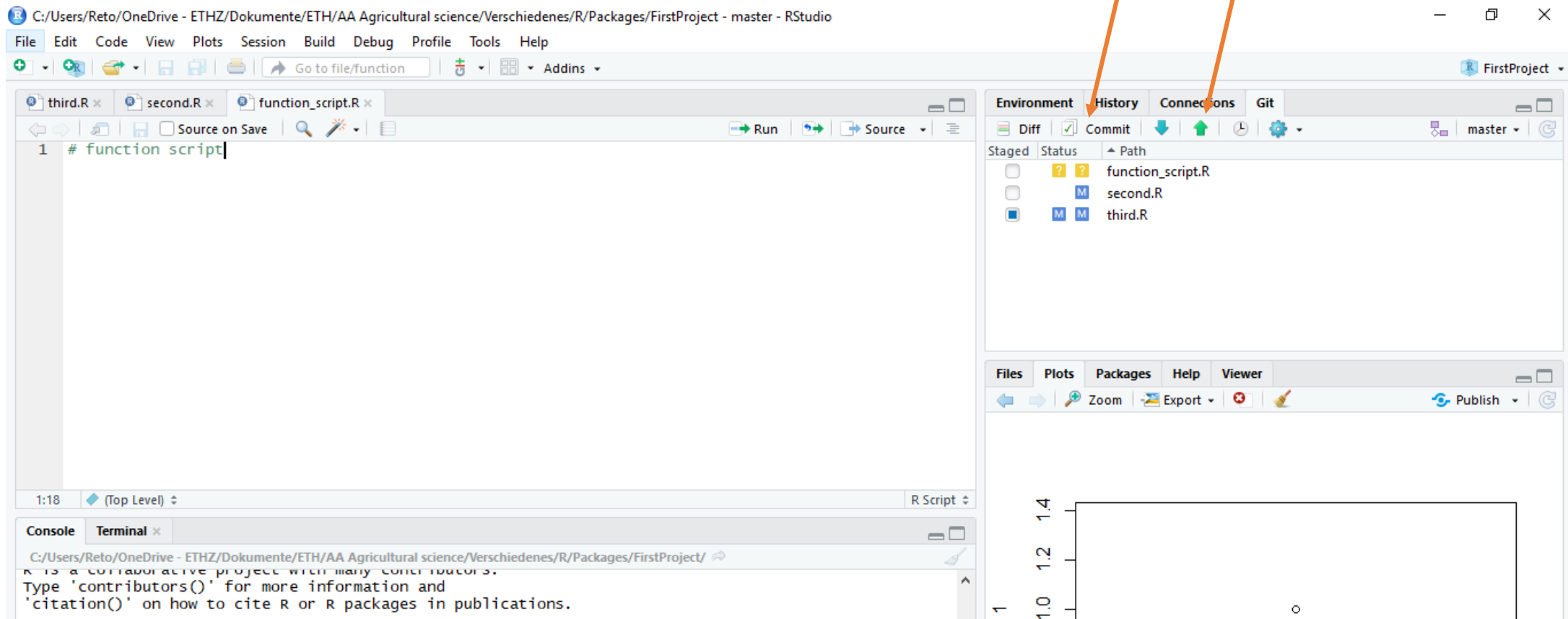
The screenshot shows a Windows command prompt window titled "C:\WINDOWS\system32\cmd.exe". The command prompt is open in the directory "C:\Users\Reto\OneDrive - ETHZ\Dokumente\ETH\AA Agricultural science\Verschiedenes\R\Packages\FirstProject". The command "git push -u origin master" has been entered and executed. The output shows the progress of pushing the master branch to the remote repository "https://github.com/retodomax/FirstProject.git". The command prompt is now at the prompt "C:\Users\Reto\OneDrive - ETHZ\Dokumente\ETH\AA Agricultural science\Verschiedenes\R\Packages\FirstProject>". An orange arrow points from the top right corner of the image to the command "git push -u origin master" in the terminal.

Version control

7) Regularly Commit changes and push newest version on github

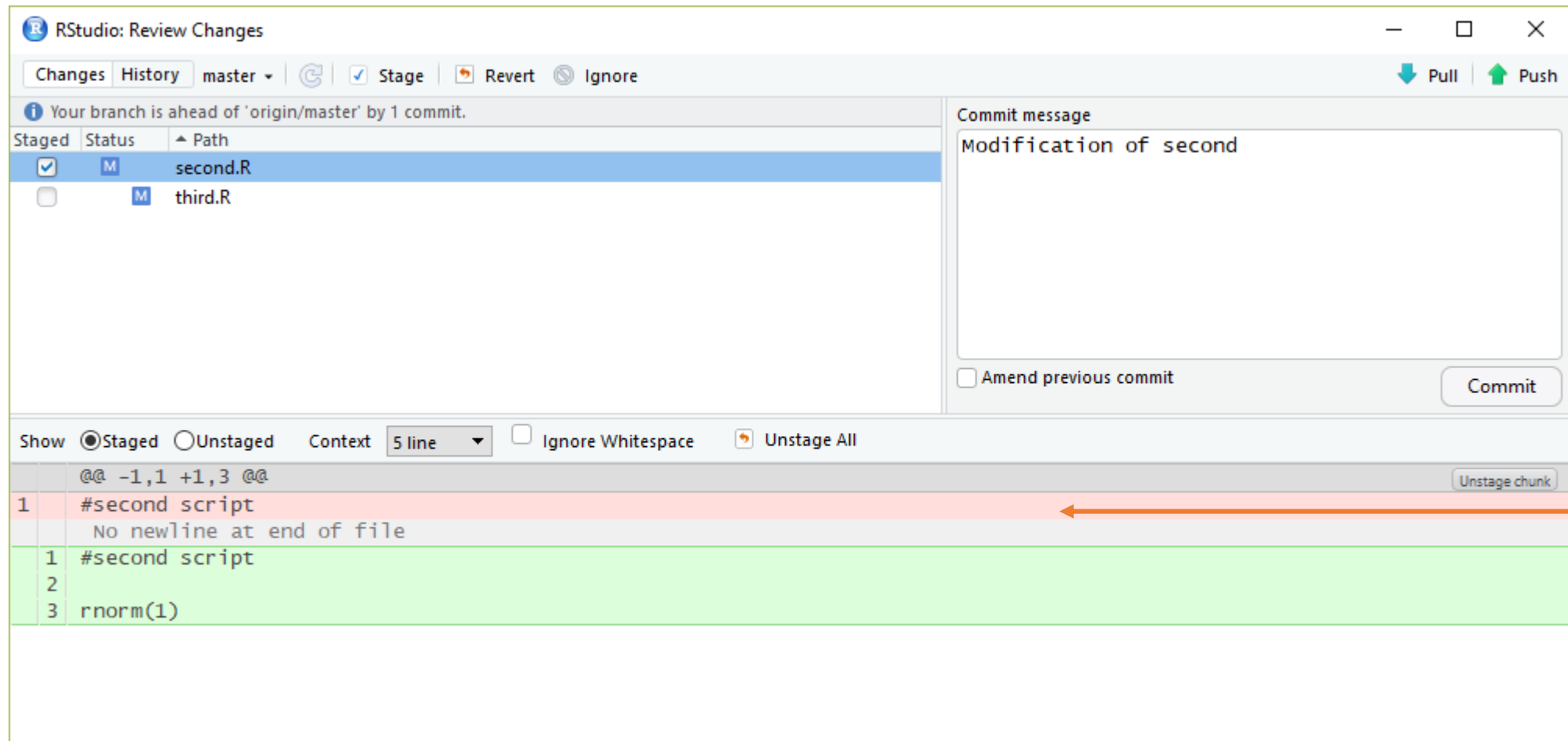
Commit
(save new
version of
project)

Push
(push new
version of project
on github)



Version control

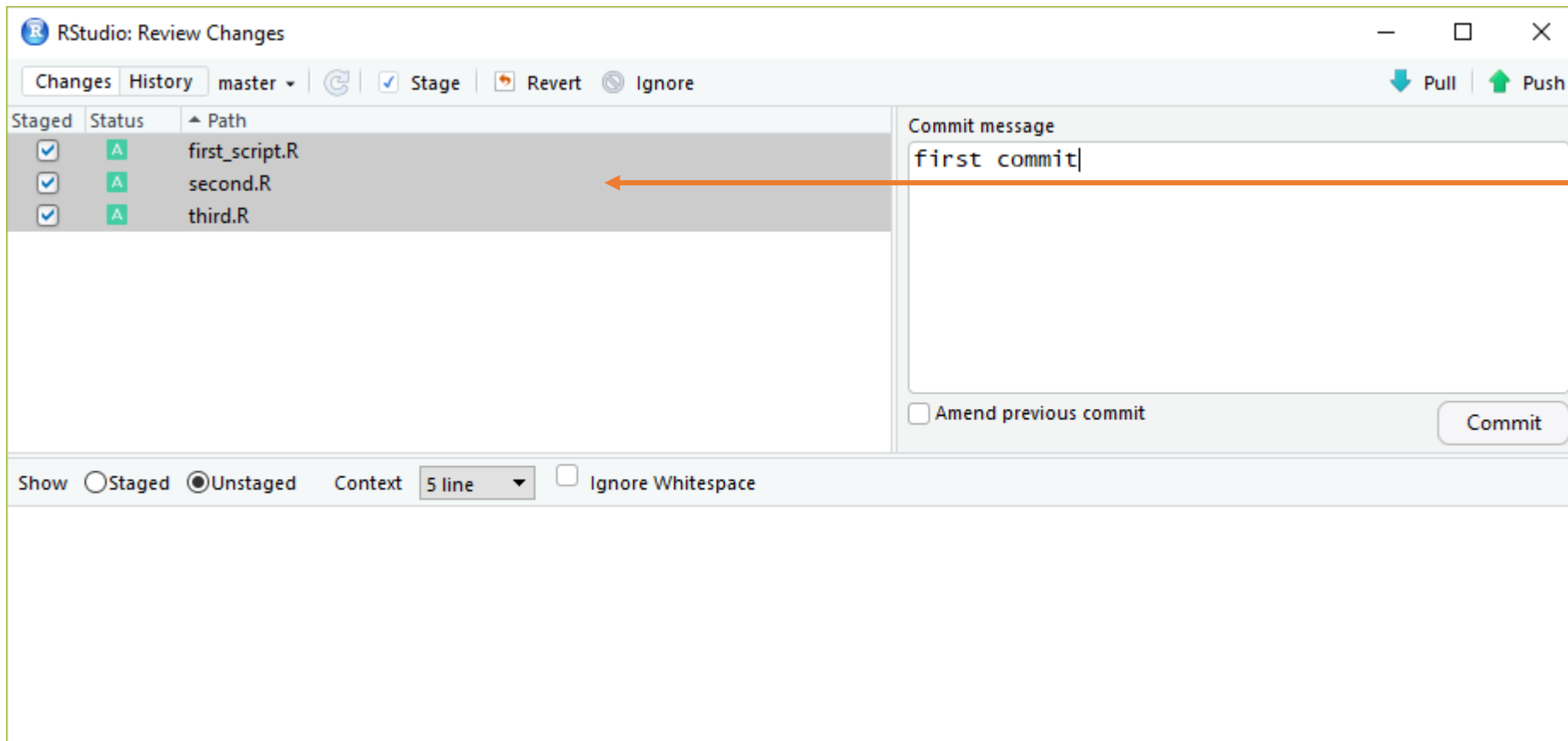
Tips:



See changes
before you
commit
them

Version control

Tips:



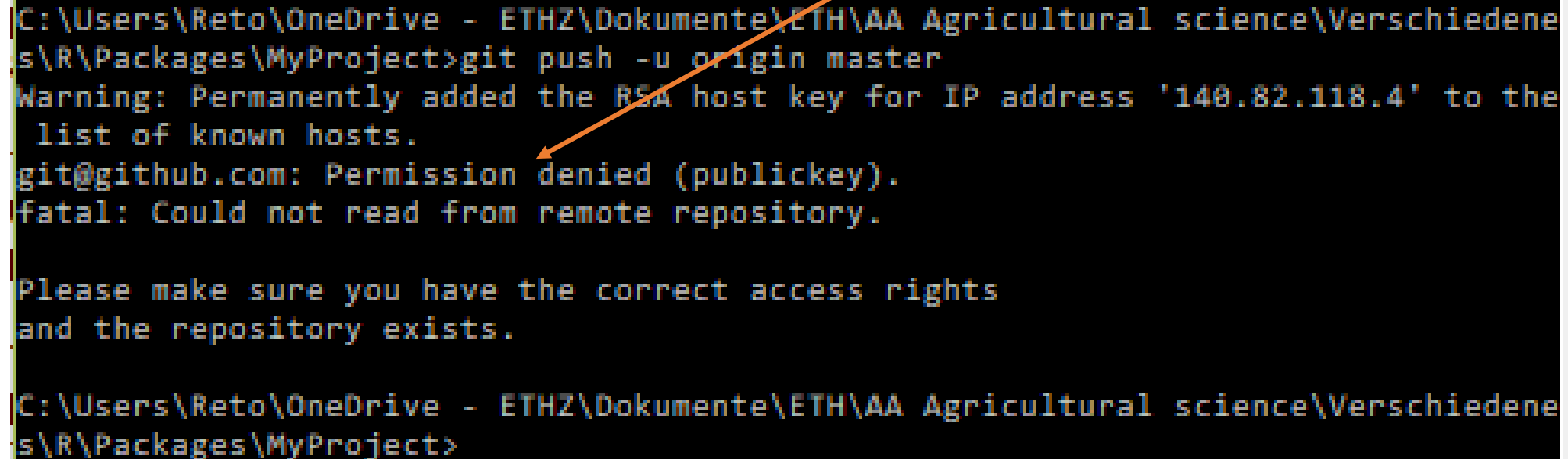
Tick (stage) all changes at once:

- 1) press Ctrl + a
- 2) press Enter

Version control

Password problem
with ssh

Common problem



```
C:\Users\Reto\OneDrive - ETHZ\Dokumente\ETH\AA Agricultural science\Verschiedene  
s\R\Packages\MyProject>git push -u origin master  
Warning: Permanently added the RSA host key for IP address '140.82.118.4' to the  
list of known hosts.  
git@github.com: Permission denied (publickey).  
fatal: Could not read from remote repository.  
  
Please make sure you have the correct access rights  
and the repository exists.  
  
C:\Users\Reto\OneDrive - ETHZ\Dokumente\ETH\AA Agricultural science\Verschiedene  
s\R\Packages\MyProject>
```

Version control

Common problem

Problem: variable
origin was already
defined earlier

Devine variable
origin (which
defines git remote
=> where the git
file is pushed to)

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.17134.590]
(c) 2018 Microsoft Corporation. Alle Rechte vorbehalten.

C:\Users\Reto\OneDrive - ETHZ\Documents\ETH\AA Agricultural science\Verschiedenes\R\Packages\NewProject>git remote add origin https://github.com/retodomax/NewProject.git
fatal: remote origin already exists.

C:\Users\Reto\OneDrive - ETHZ\Documents\ETH\AA Agricultural science\Verschiedenes\R\Packages\NewProject>git remote rm origin

C:\Users\Reto\OneDrive - ETHZ\Documents\ETH\AA Agricultural science\Verschiedenes\R\Packages\NewProject>git remote add origin https://github.com/retodomax/NewProject.git

C:\Users\Reto\OneDrive - ETHZ\Documents\ETH\AA Agricultural science\Verschiedenes\R\Packages\NewProject>
```

```
git remote rm origin
```

Solution: First
delete the path in
variable origin