

EasySegmentation v1.6

Tutorial

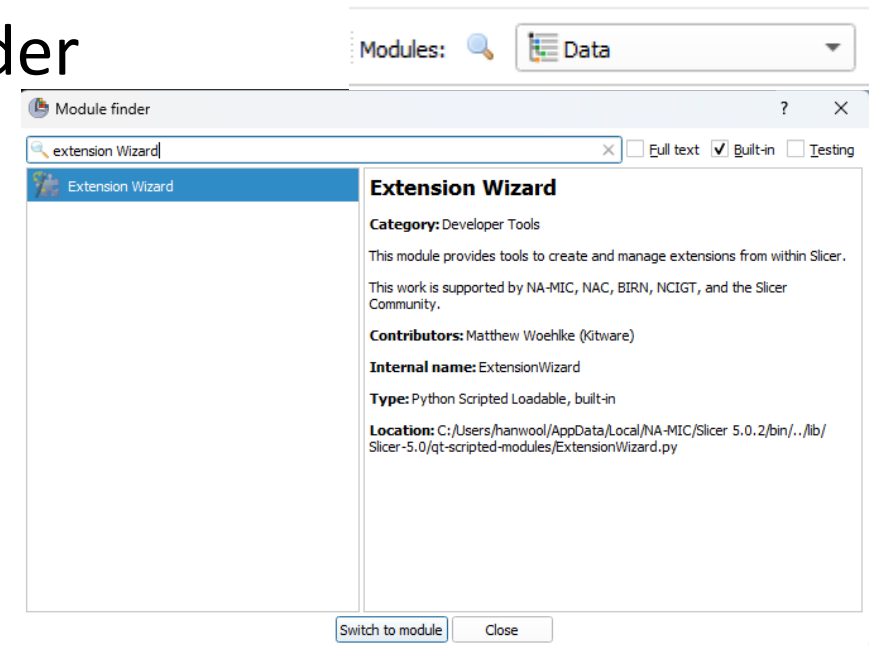
How to import EasySegmentation Module

1. Download MangoExtension folder

- Method 1 : git clone https://gitlab.com/mangomedical/extra/slicer_gui.git
- Method 2 : Download from [link](#). (You need to unzip this file)

2. Open Slicer

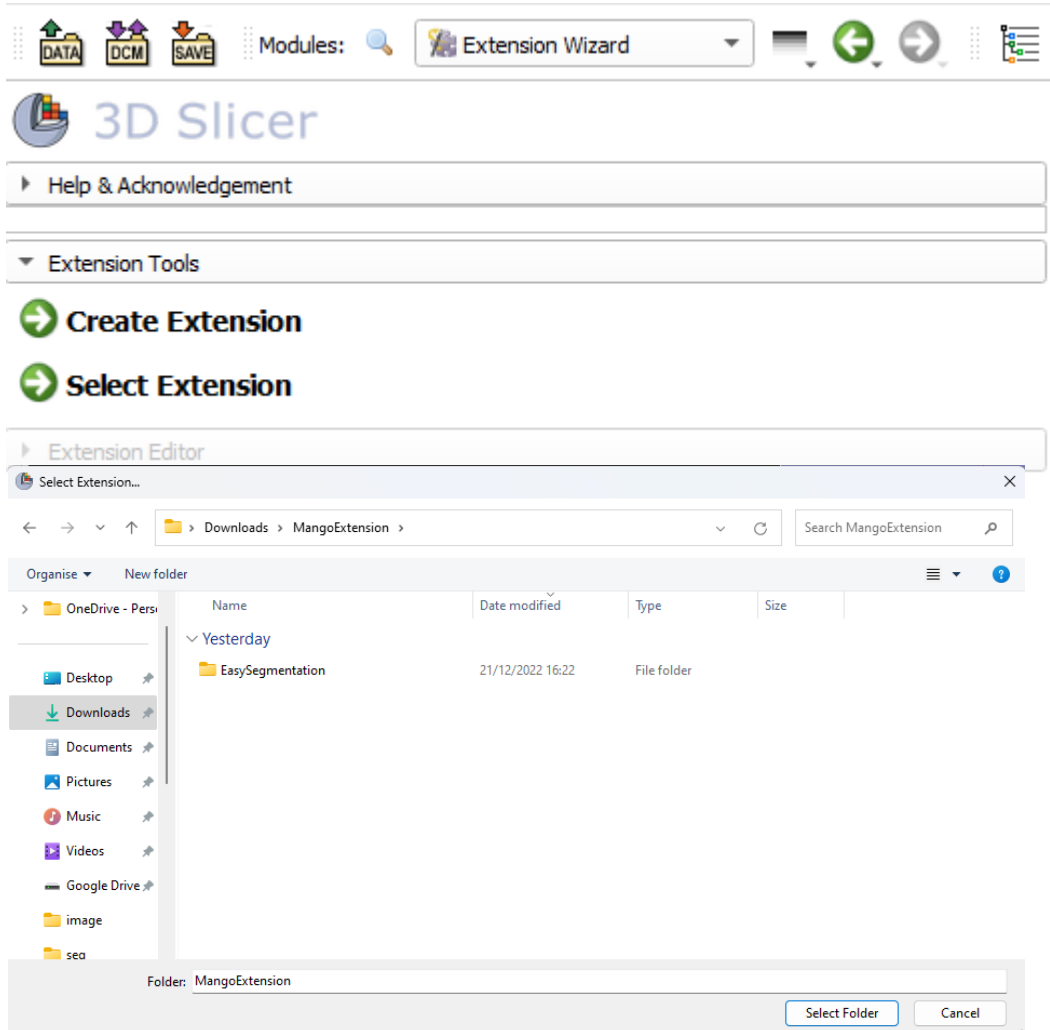
3. Find Extension Wizard Module in Module finder



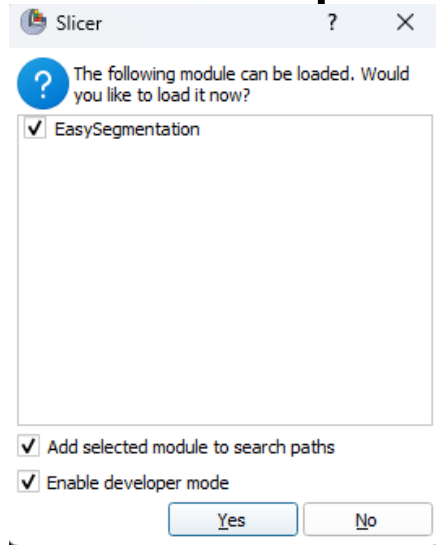
How to import EasySegmentation Module

4. Click “Select Extension” button

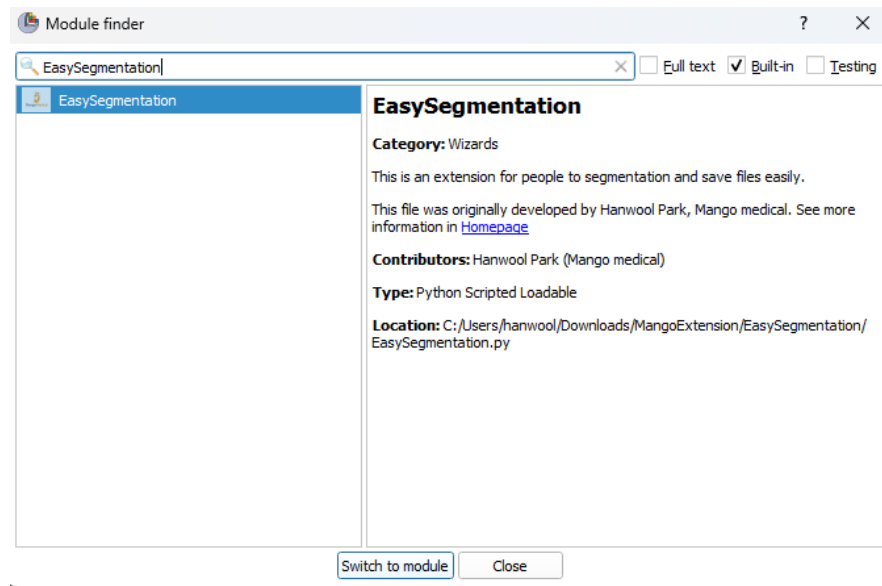
5. Select “MangoExtension” folder. (**Not EasySegmentation folder**)



How to import EasySegmentation Module

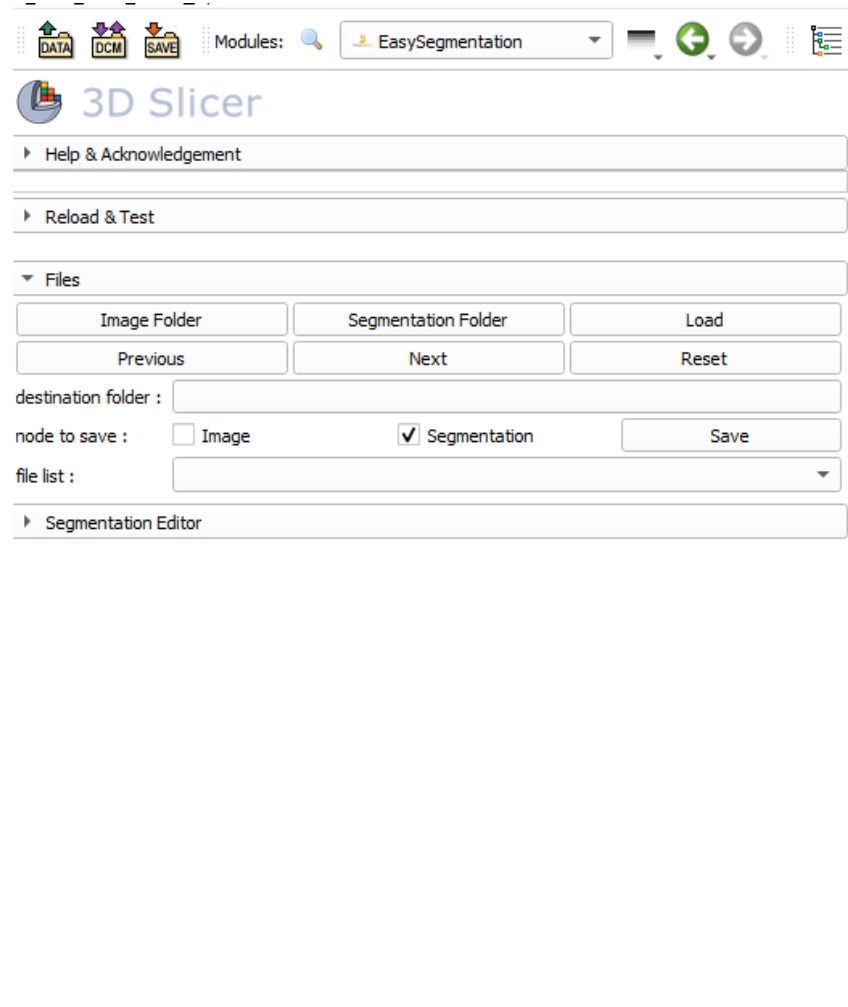


6. Click “Yes” button



7. Go to Module finder and search “EasySegmentation” module

How to import EasySegmentation Module



8. If you can see this module, you succeed to import this module

Files

Image Folder

Segmentation Folder

Load

Previous

Next

Reset

destination folder :

node to save :

☐ Image
☒ Segmentation

Save

suffix segmentation name :

_seg

Apply Suffix Naming

file list :

ANON_2022_7_6_17_26_36_115

Automatic Volume Rendering :
☐ On

Threshold
☐ On

Min: 0.1

Max: 100000

Apply

Volume Rendering

Preset:

CT-AAA

Shift:

Display Volume Rendering

Segmentation Editor

Segmentation:

ANON_2022_7_6_17_26_36_115_seg.nii.gz

Source volume:

ANON_2022_7_6_17_26_36_115

+

 Add

—

 Remove

3D

 Show 3D

→

Name

Segment_1

Segment_2

Segment_3

- **Image Folder :**

- choose the folder includes image volume files
- **Segmentation Folder :**
 - choose the folder includes segmentation files corresponding image volume files
 - need to include image file name. Ex) image : **test1.nii.gz** , segmentation : **test1_seg.nii.gz**
 - The file extensions can be .nii.gz, .nii or .nrrd
- **Load :**
 - after choose image and segmentation folder, we can load file in slicer
- **Previous :**
 - move previous file
- **Next :**
 - move next file
- **Reset :**
 - reset all setup this module
- **Destination folder :**
 - choose destination folder to save image or segmentation files
- **Node to save :**
 - you can choose to image or segmentation file to be saved
- **Save :**
 - save your file into destination folder
- **Suffix segmentation name :**
 - You can set the suffix name for segmentation file.
 - If you don't want to use suffix function, you can click "Apply Suffix Naming" button
- **File list :**
 - after you load files, you can see file list in combo box and you can click specific file.
- **Automatic Volume Rendering :**
 - You can check to load volume rendering view automatically
- **Threshold :**
 - When there is no segmentation data corresponding volume data, you can set up threshold values for new segmentation

Menu

Files

Image Folder

Segmentation Folder

Load

Previous

Next

Reset

destination folder :

node to save : ☐ Image ☒ Segmentation

Save

suffix segmentation name :

Apply Suffix Naming

file list :

ANON_2022_7_6_17_26_36_115

Automatic Volume Rendering : ☐ On

Threshold ☐ On Min: Max:

Apply

Volume Rendering

Preset:

CT-AAA

Shift:

Display Volume Rendering

Segmentation Editor

Segmentation:

ANON_2022_7_6_17_26_36_115_seg.nii.gz

Source volume:

ANON_2022_7_6_17_26_36_115

+ Add

Remove

Show 3D

Name

Segment_1

Segment_2

Segment_3

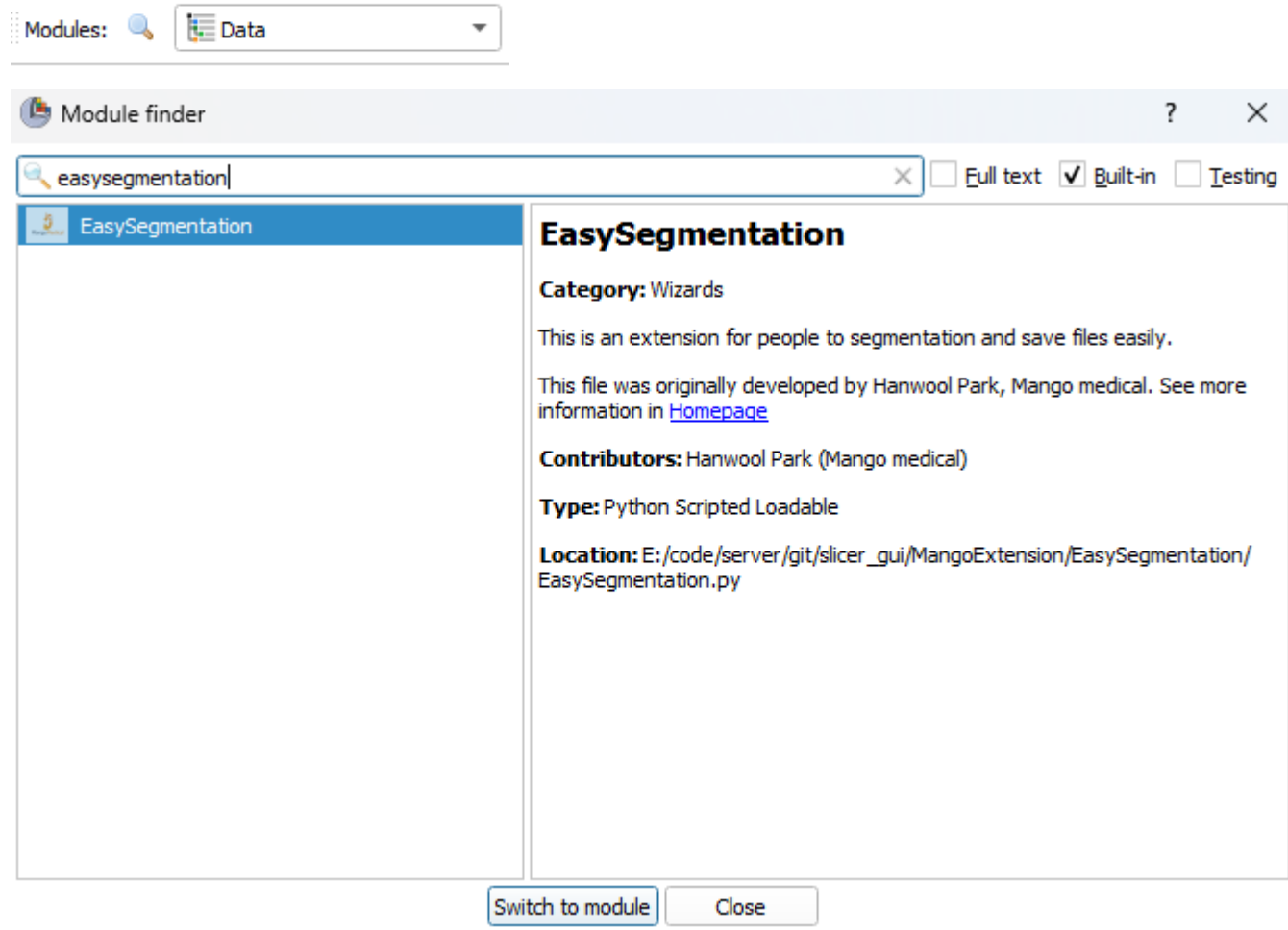
- **Volume Rendering:**

- This is volume Rendering module. You can check information [here](#).

- **Segmentation Editor:**

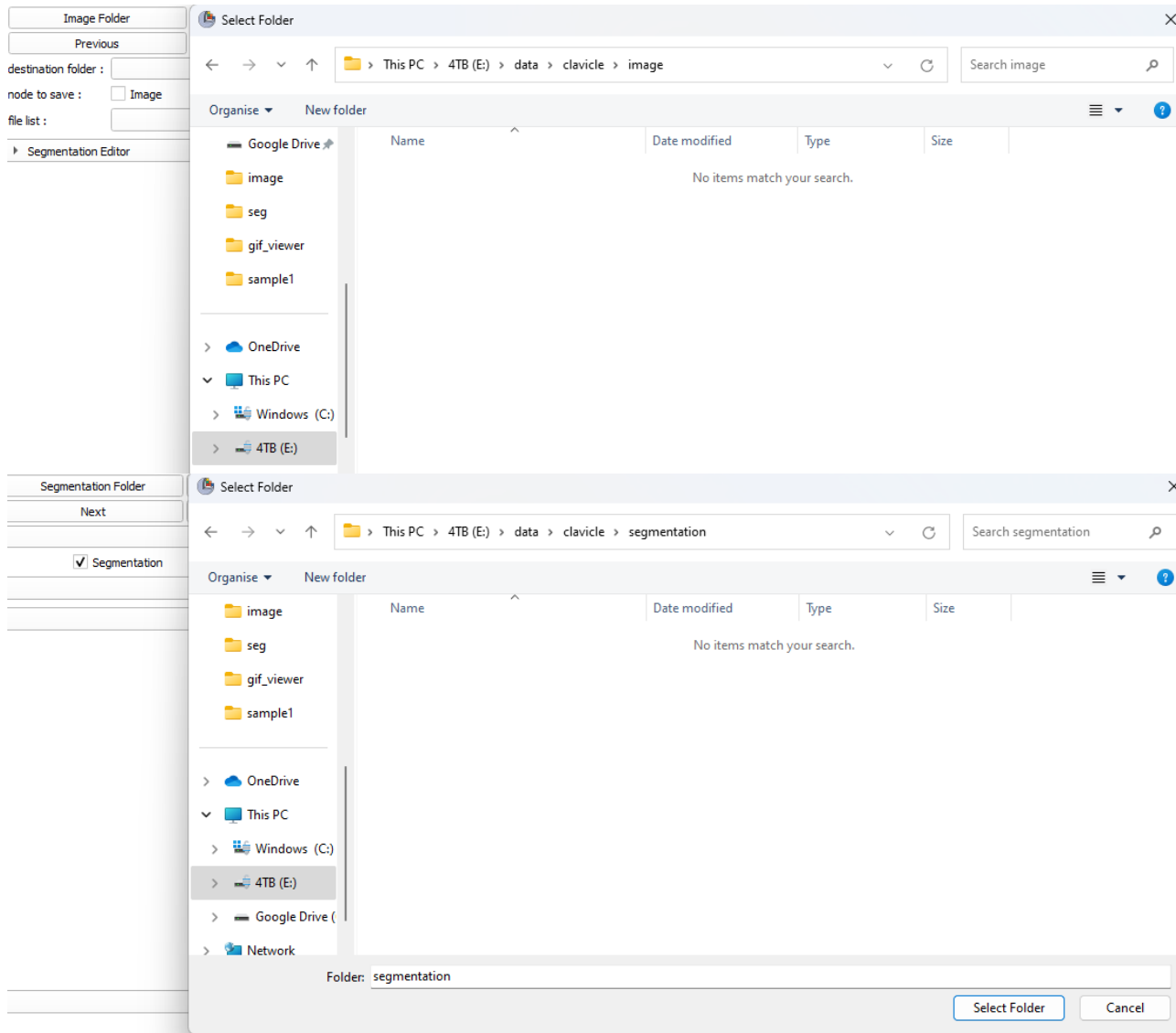
- This is Slicer Segmentation Editor module. You can check information [here](#).

How to use



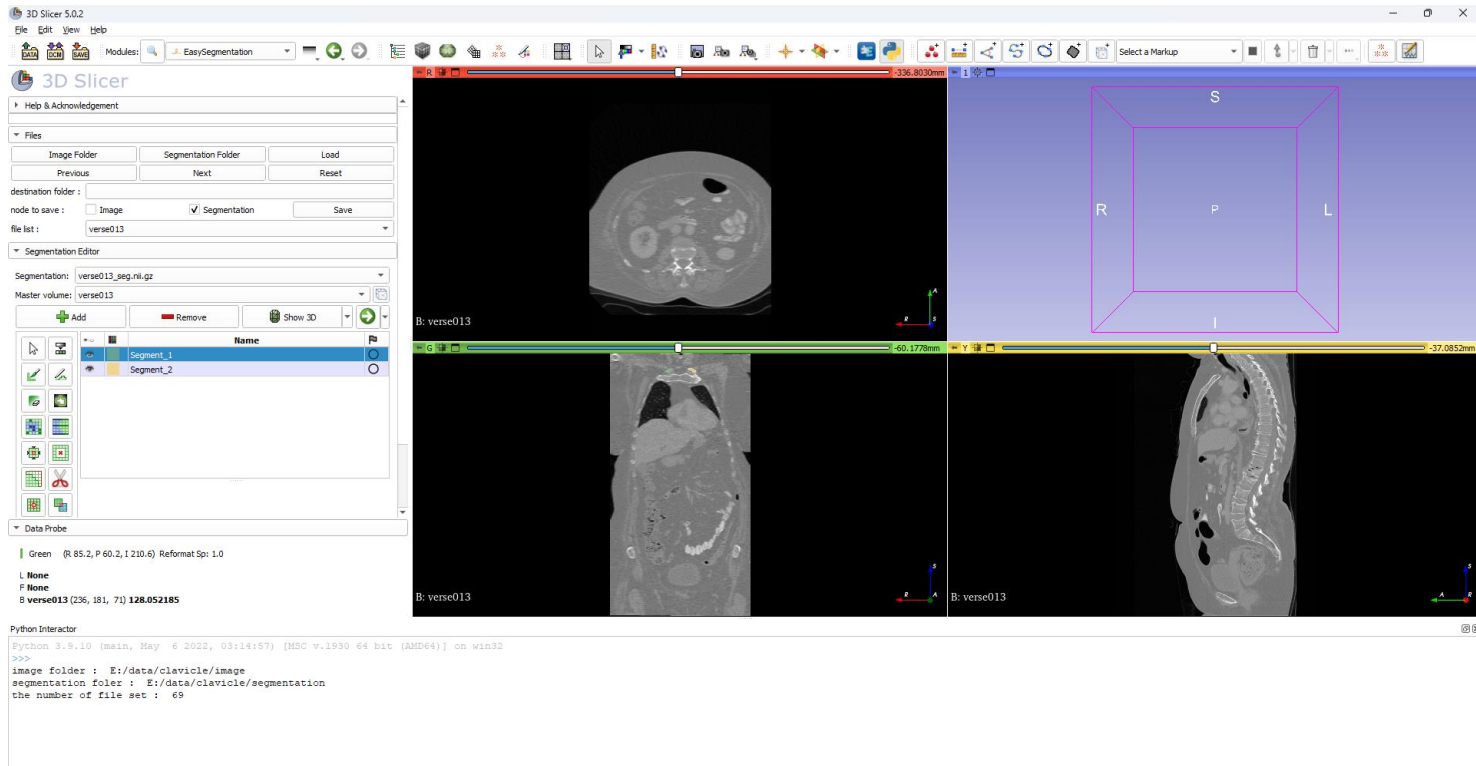
Click Module finder on Toolbar
and search Easysegmentation

How to use



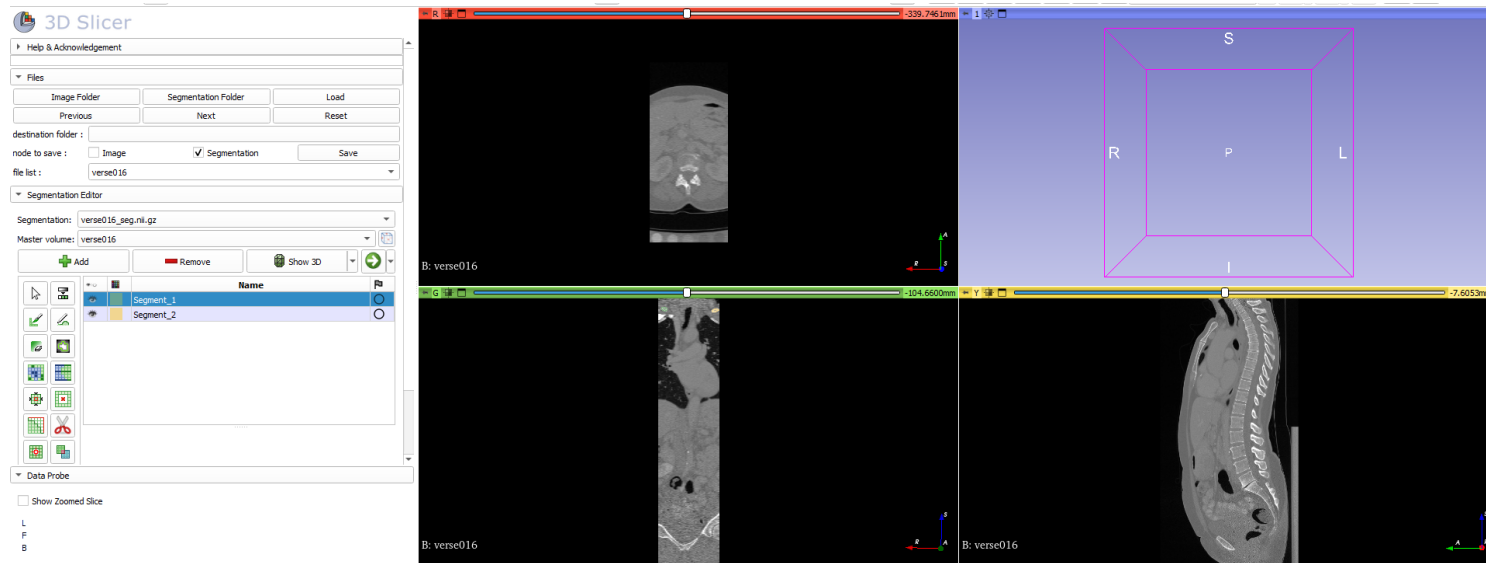
Choose image folder and
segmentation folder

How to use

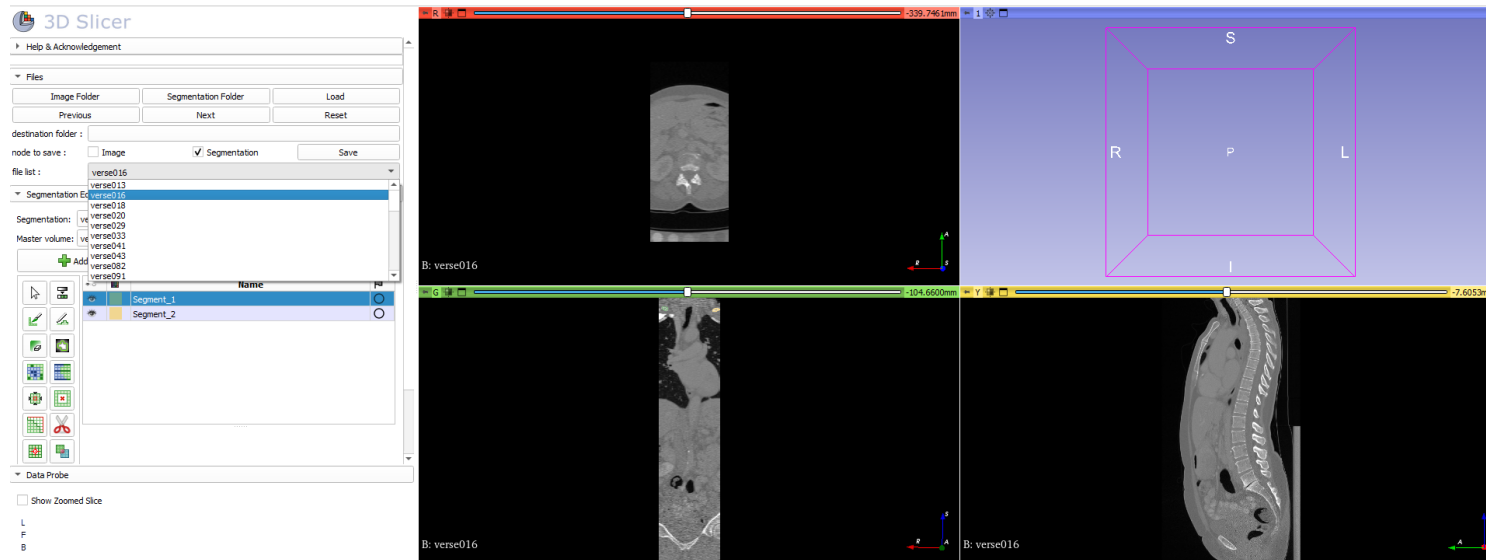


Click Load button. You can see how many files are found in Python Interactor.

How to use

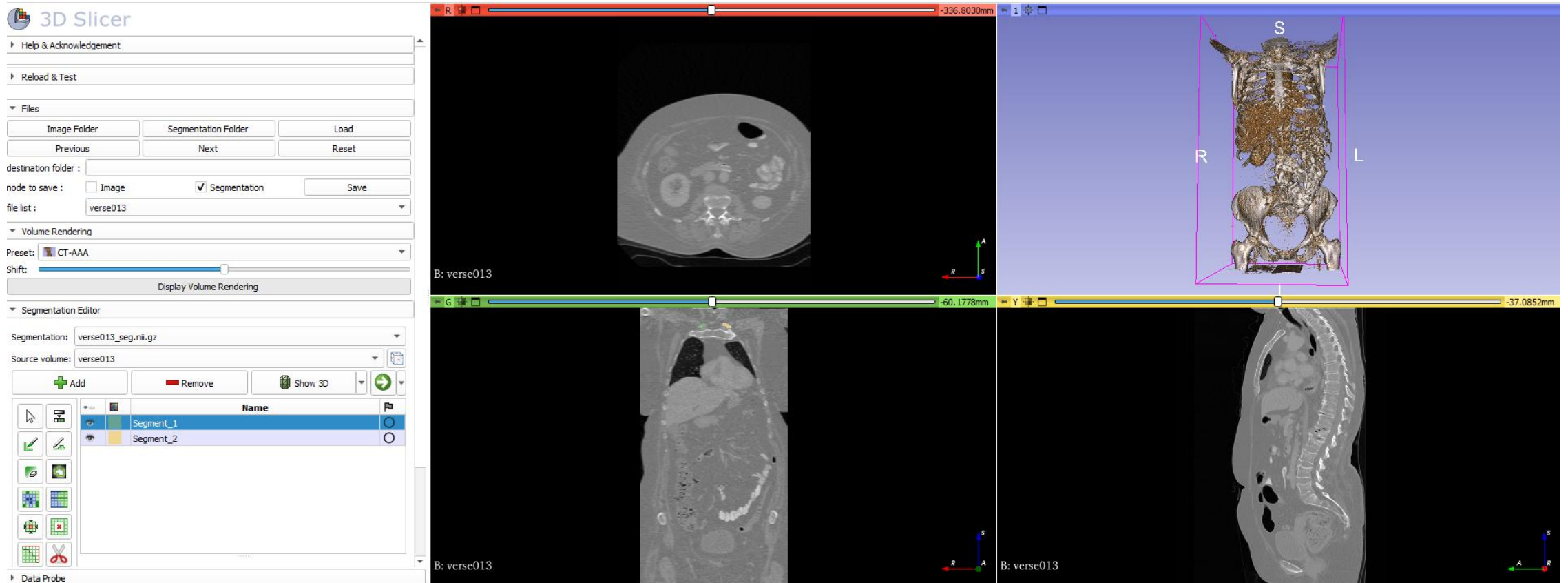


Click Next or Previous Button. You can move next or previous file.



You can also click file list and choose specific file.

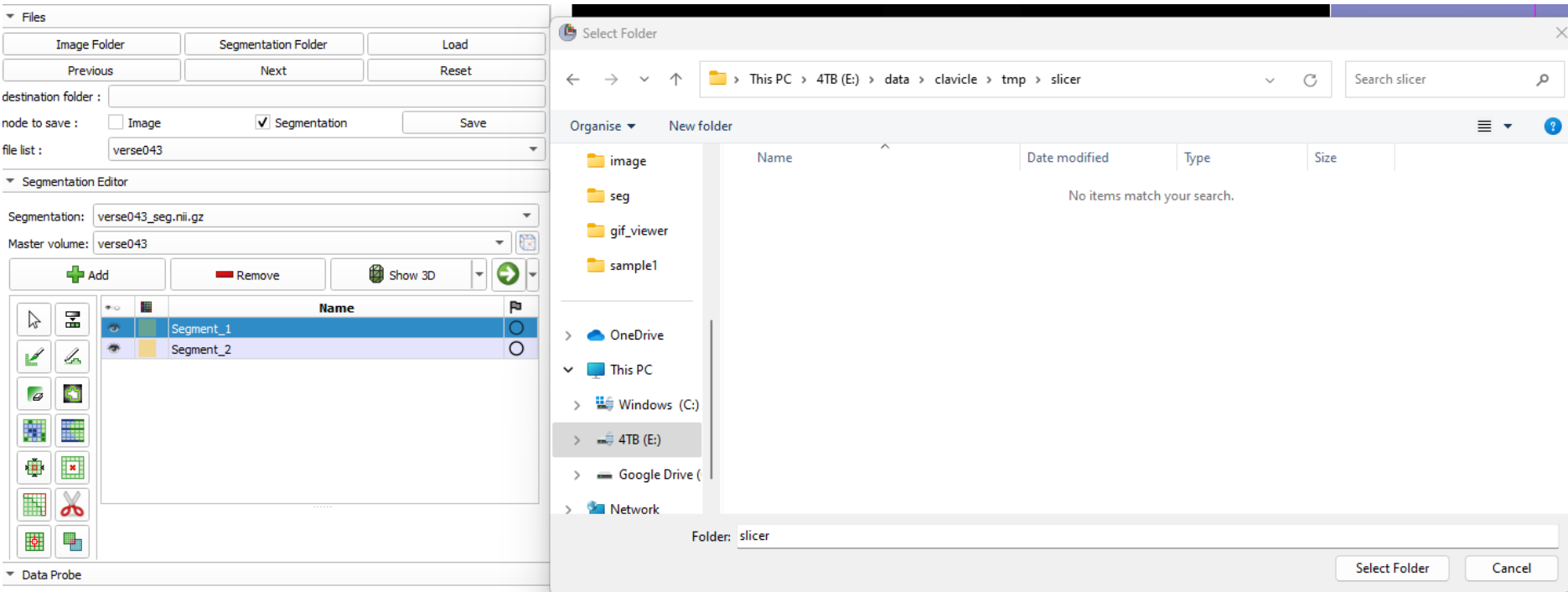
How to use



You can see volume rendering view to click “Display Volume Rendering” button

You can also check Preset to see different types of views

How to use



To save modified files, you need to choose destination folder.

How to use

▼ Files

Image Folder

Segmentation Folder

Load

Previous

Next

Reset

destination folder :

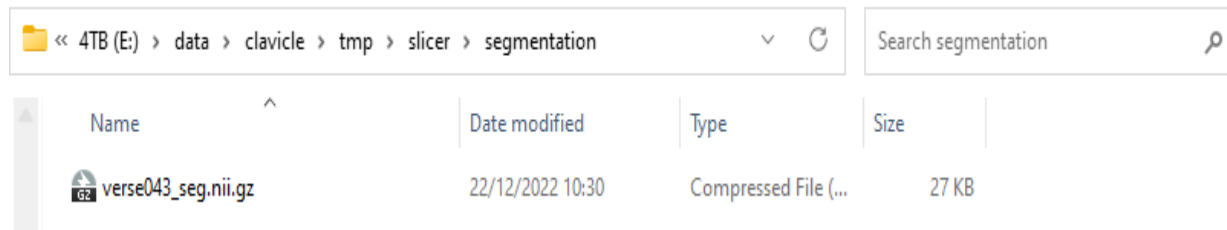
node to save : ☐ Image ☒ Segmentation

Save

file list :

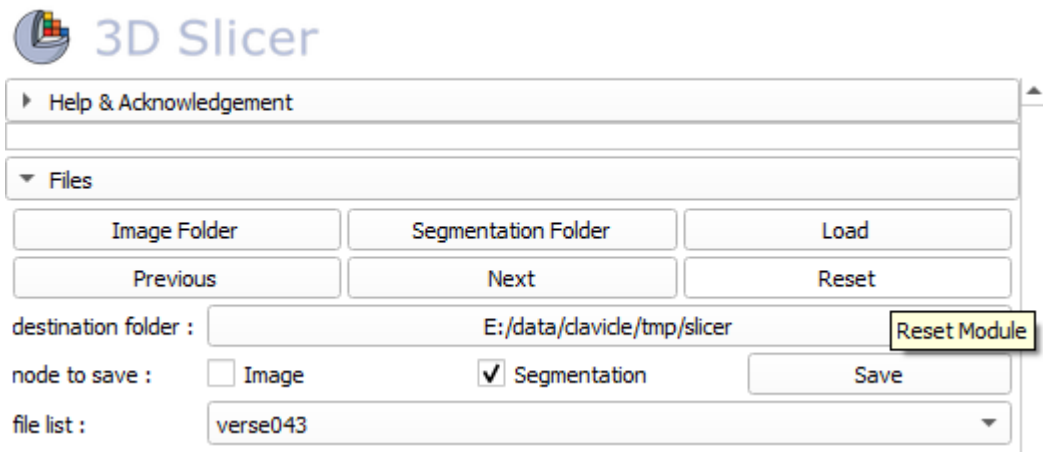
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You can choose Image or Segmentation to save.



You can check save result into destination folder

How to use



You can reset this module with Reset button.



Everything is reset. You can start module again

Version Notes

- **Version 1.1**
 - fixed warning issues regarding deprecated functions
 - Now, all image data can be loaded without corresponding segmentation file. You can create your own segmentation now.
- **Version 1.2**
 - add volume rendering feature
- **Version 1.3**
 - add file extensions (nii.gz, nii or nrrd)
- **Version 1.4**
 - add automatic rendering volume checkbox
 - center the 3D view on the scene
- **Version 1.5**
 - Add threshold feature to create segmentation data when there is no segmentation data corresponding volume data
- **Version 1.6**
 - add suffix naming feature to save segmentation file with specific name

Notes

- Build Slicer version : 5.2.1
- OS : Windows, Linux (I don't know it works in MacOS)
- If you have any problem, please write email to hanwool@mangomedical.io