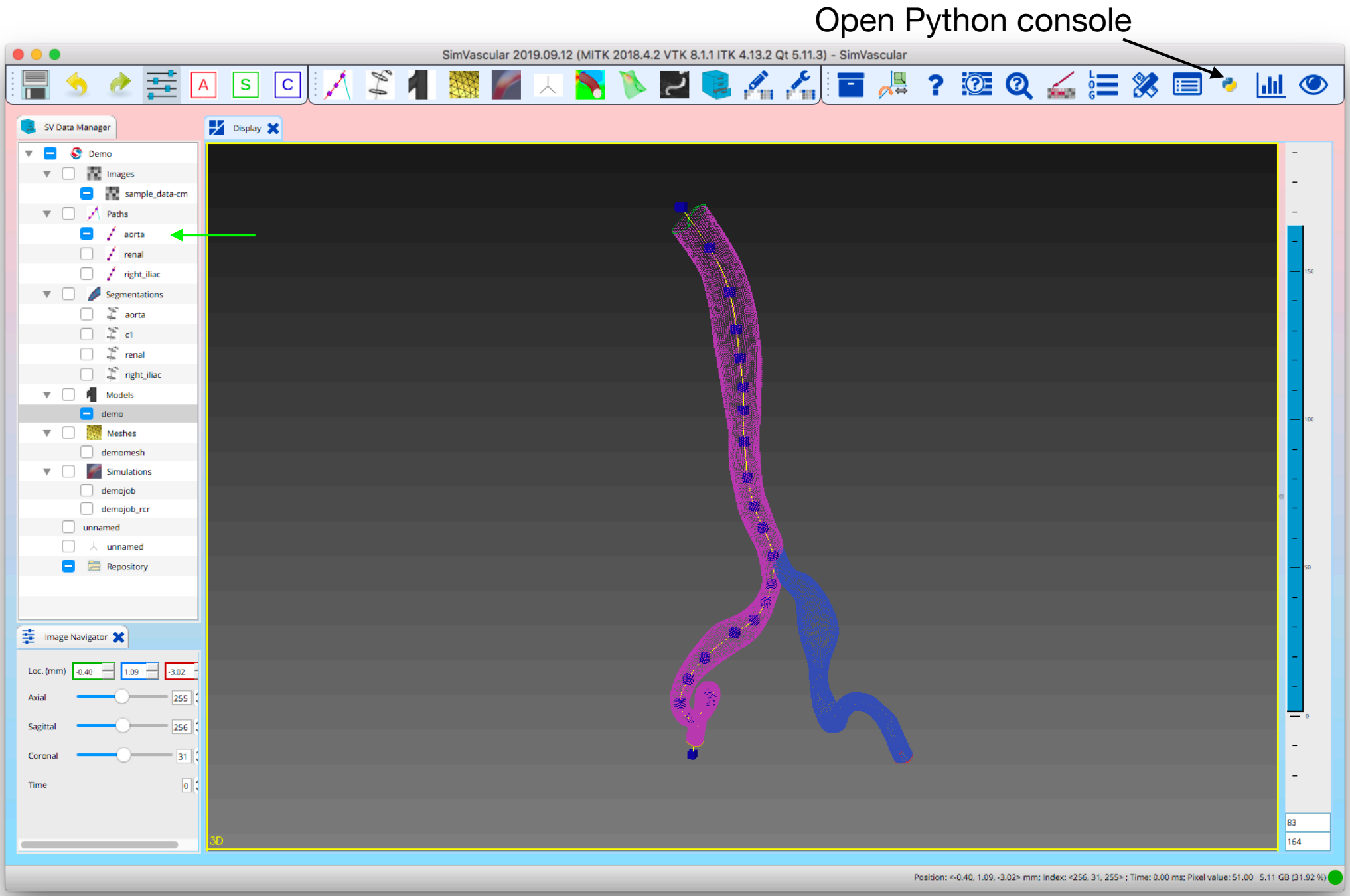
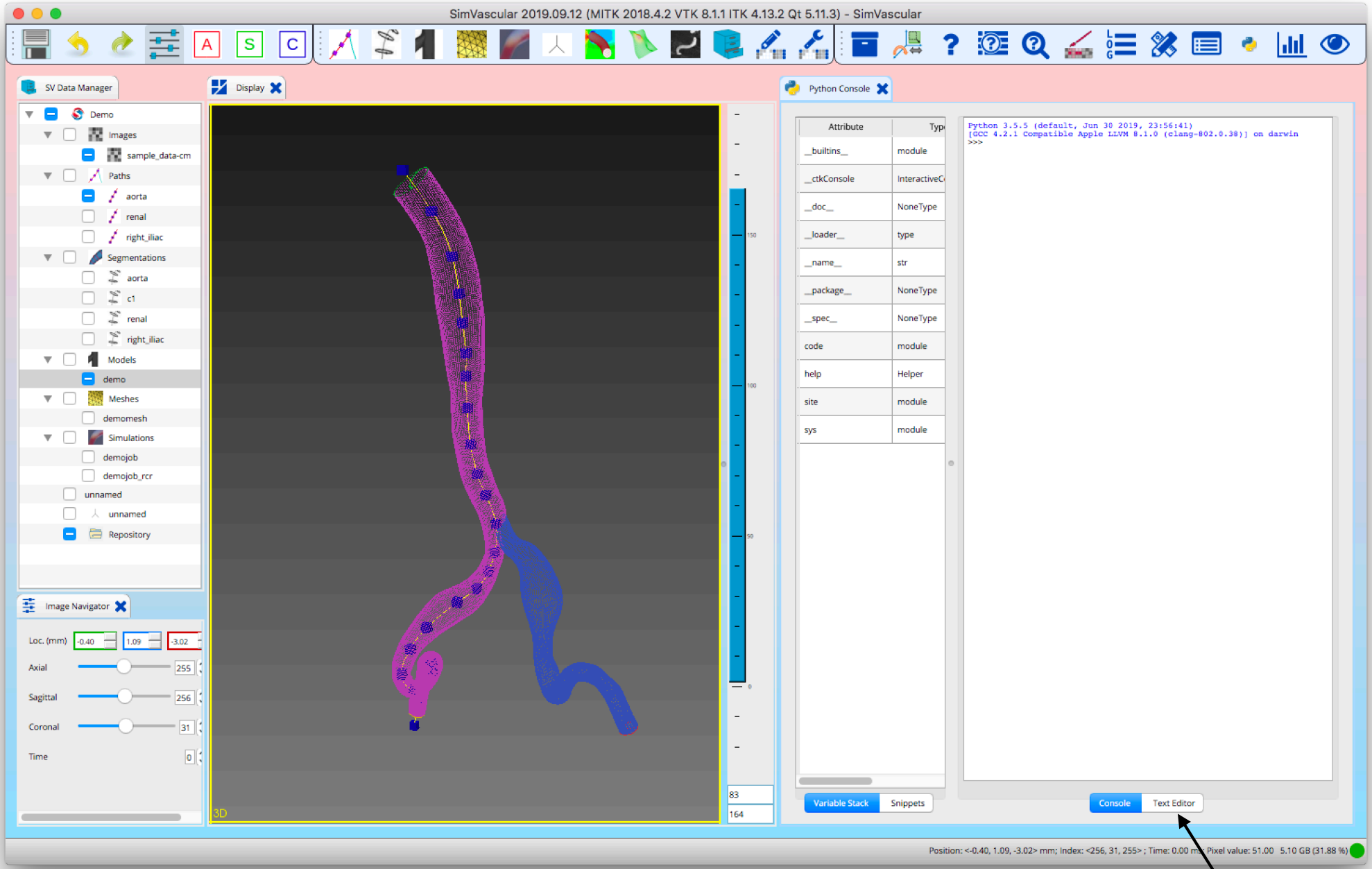
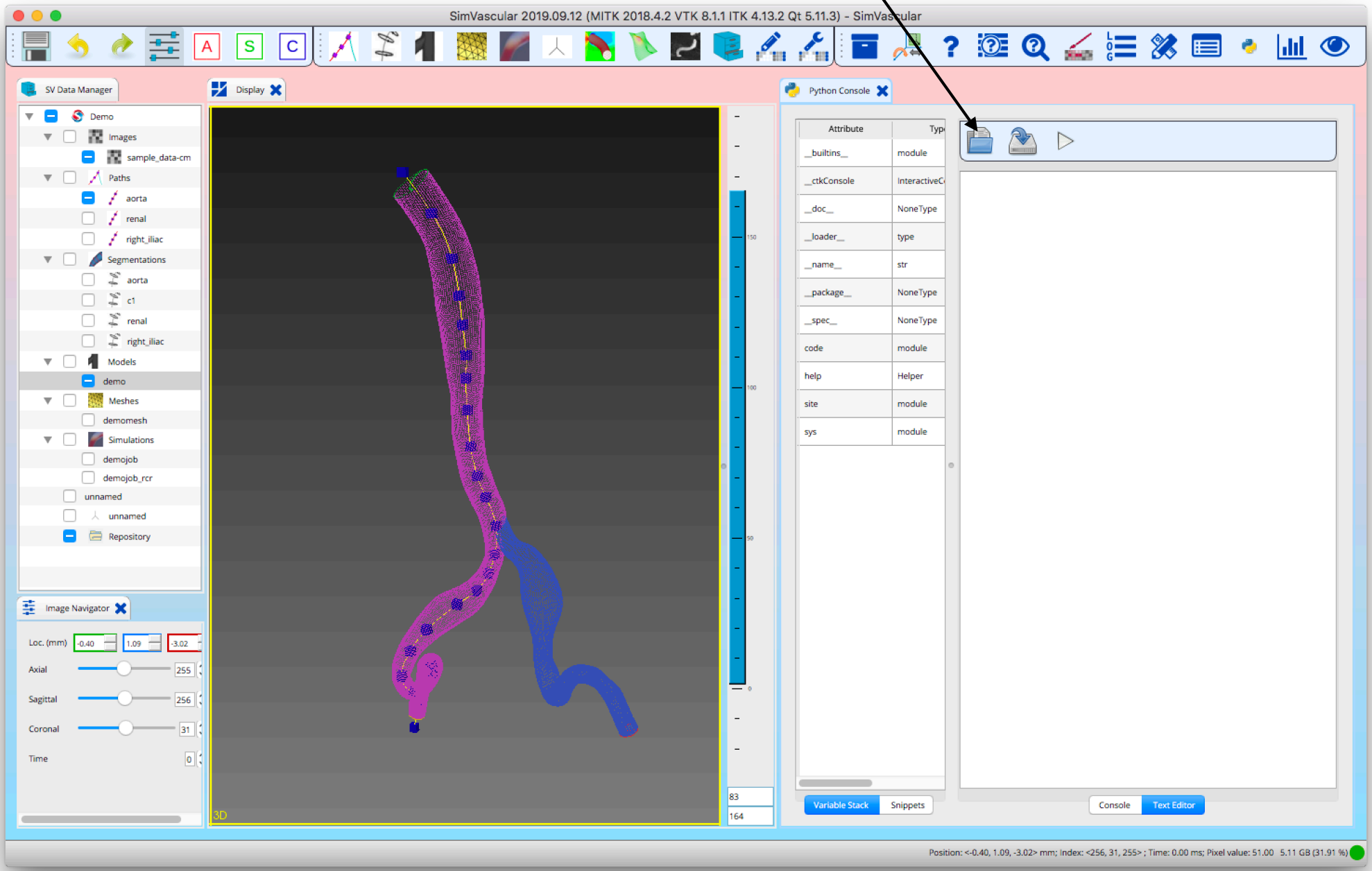
Python API

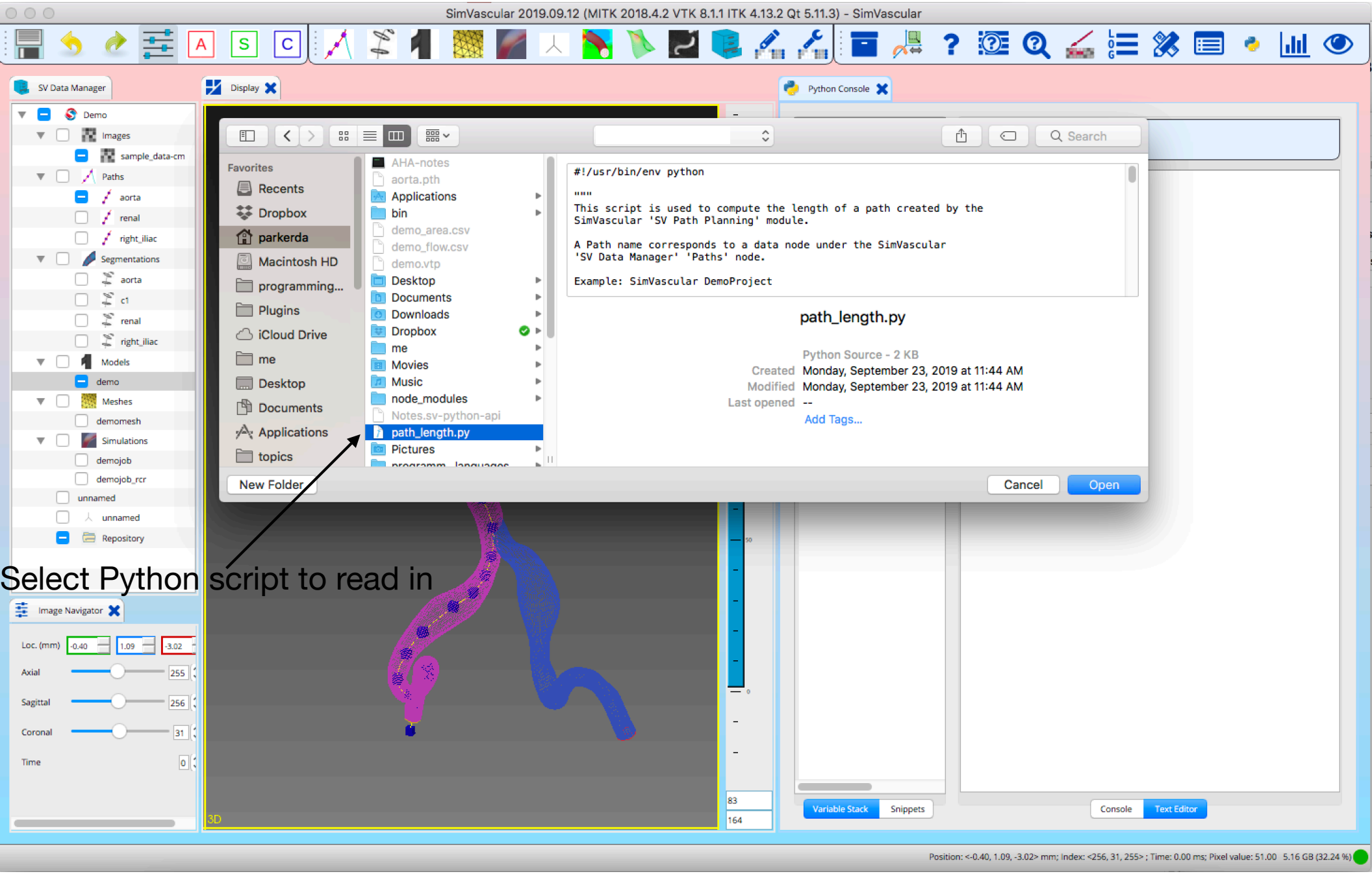

Open Python console
SimVascular 2019.09.12 (MITK 2018.4.2 VTK 8.1.1 ITK 4.13.2 Qt 5.11.3) - SimVascular
SV Data Manager
Display
Demo
Images
sample_data-cm
Paths
aorta
renal
right_iliac
Segmentations
aorta
c1
renal
right_iliac
Models
demo
Meshes
demomesh
Simulations
demojob
demojob_rcr
unnamed
unnamed
Repository
Image Navigator
Loc. (mm)
-0.40
1.09
-3.02
Axial
255
Sagittal
256
Coronal
31
Time
0
3D
83
164
Position: <-0.40, 1.09, -3.02> mm; Index: <256, 31, 255> ; Time: 0.00 ms; Pixel value: 51.00 5.11 GB (31.92 %)



Select **Text Editor**

Select to read in a Python script

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Favorites
Recents
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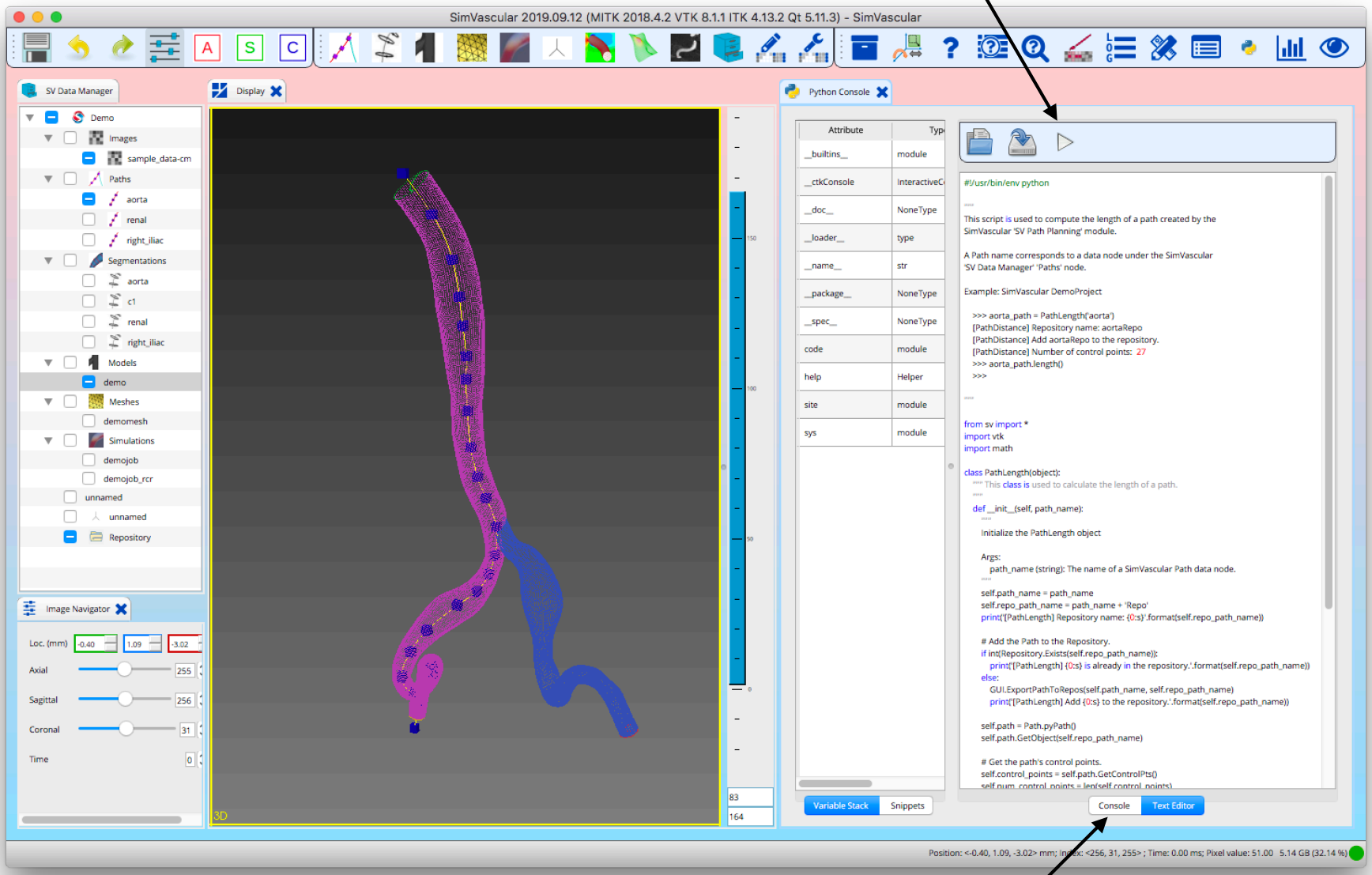
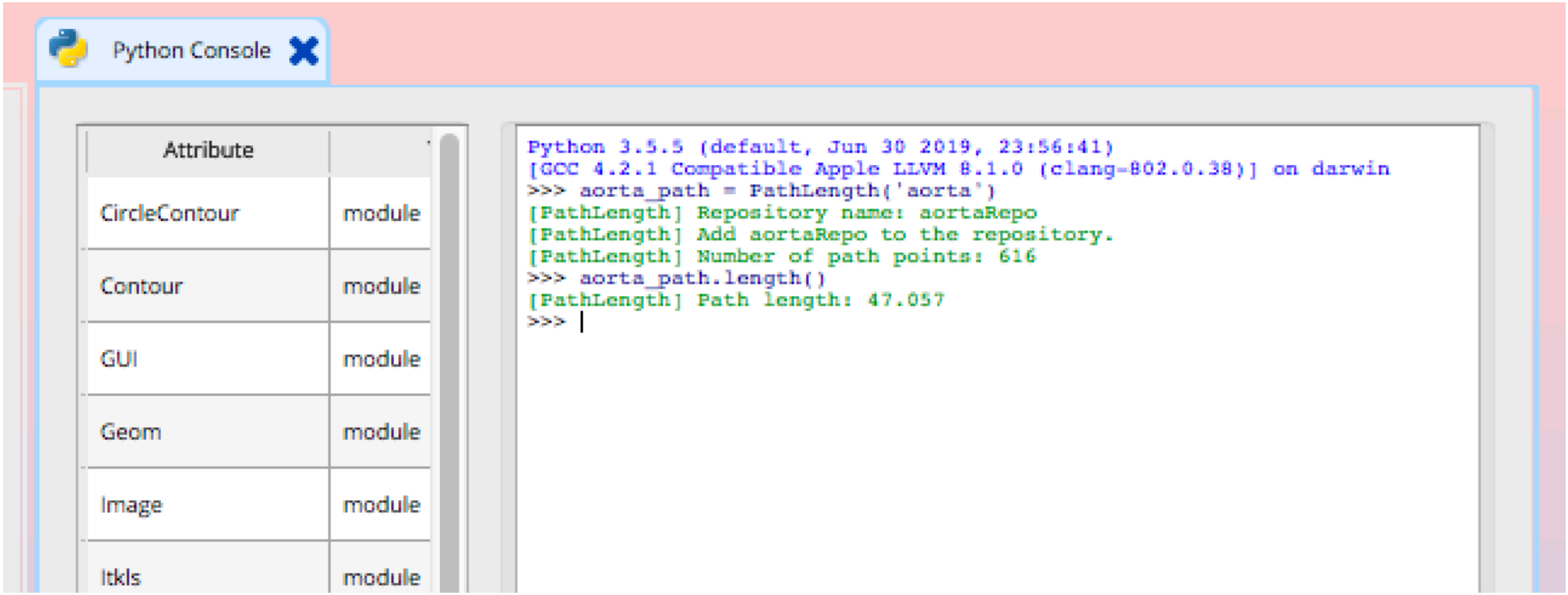
parkerda
Macintosh HD
programming...
Plugins
iCloud Drive
me
Desktop
Documents
Applications
topics
AHA-notes
aorta.pth
Applications
bin
demo_area.csv
demo_flow.csv
demo.vtp
Desktop
Documents
Downloads
Dropbox
me
Movies
Music
node_modules
Notes.sv-python-api
path_length.py
Pictures
#!/usr/bin/env python
"""
This script is used to compute the length of a path created by the
SimVascular 'SV Path Planning' module.
A Path name corresponds to a data node under the SimVascular
'SV Data Manager' 'Paths' node.
Example: SimVascular DemoProject
path_length.py
Python Source - 2 KB
Created Monday, September 23, 2019 at 11:44 AM
Modified Monday, September 23, 2019 at 11:44 AM
Last opened --
Add Tags...
Search
New Folder
Cancel
Open
Select Python script to read in
Image Navigator
Loc. (mm)
Axial
Sagittal
Coronal
Time
3D
Variable Stack
Snippets
Console
Text Editor
Position: <-0.40, 1.09, -3.02> mm; Index: <256, 31, 255> ; Time: 0.00 ms; Pixel value: 51.00 5.16 GB (32.24 %)

1. Select the play button to execute the script.



2. Select **Console** to go back to the Python console

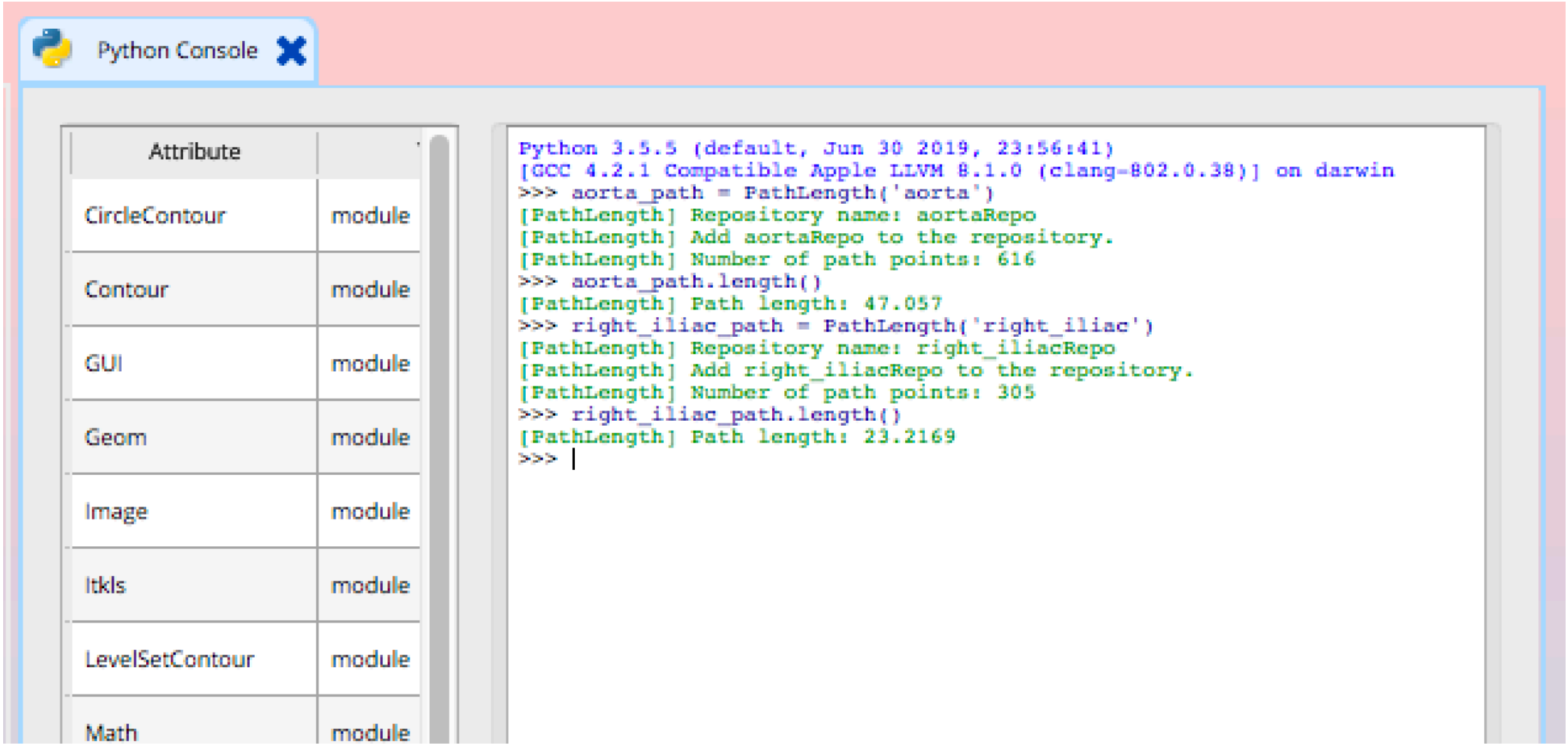


1.0 Create a PathLength object for the **aorta** path.

```
>>> aorta_path = PathLength('aorta')
```

2.0 Compute the length of the aorta path

```
>>> aorta_path.length()
[PathLength] Path length: 47.057
```



1.0 Create a PathLength object for the **right_iliac** path.

```
>>> right_iliac_path = PathLength('right_iliac')
```

2.0 Compute the length of the aorta path

```
>>> right_iliac_path.length()
[PathLength] Path length: 23.2169
```