

 3d slicer logo

3D Slicer

Data Loading and Visualization Tutorial

Tutorial Dataset

**Please download the following
datasets:**

https://github.com/PerkLab/PerkLabBootcamp/raw/master/Data/VisualizationTutorial_HeadScene.mrb

Main user interface

Load Sample MRI Data

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**The axial, sagittal, and
coronal views automatically
show the loaded volume**

Adjust window/level

**Switch to window/level
mouse mode**

Adjust window/level

**Adjust window/level
(brightness/contrast)
using the left mouse
button on a slice view**

Switch back to view/transform mode

Maximize view

Slice view options

**Position your mouse
cursor over the pin icon
to display the slice view
toolbar**

Slice view options

**Once the slice viewer
toolbar is shown, click
on the ">>"**

Show ruler

Rotate to volume plane

Often, MRI volumes are not axis-aligned. To show the true axial view, click the 'Rotate to volume plane' button.

Note: This image will not be affected, but many DICOM MR images need to be aligned.

Switch to conventional layout

Link views

After linking views, if any setting is changed in a 2D view, all others follow.

Show slices in 3D

Now the slice views are linked. If you click the **'Toggle slice visibility in 3D view'** button, then all slices will show up.

Show slices in 3D

All three anatomical
slices are shown in the
3D view

Navigating the 3D view

Use the left mouse
button to **rotate**, and
the right mouse button
to **zoom** in and out

Close the scene

Part 2: 3D visualization of surface models of the brain

Load tutorial scene

Drag and drop the file
VisualizationTutorial_HeadScene.mrb into
Slicer, then click **OK**

Center view

Click on the small box
icon to center the
view, in 3D or in 2D

Explore loaded data

You can use the
module list, or the
favorite module
toolbar to switch to
the **Data module**

Explore loaded data

The Data module shows all the data in the scene.

The data items (“nodes”) can be shown/hidden, renamed, deleted, cloned, etc.

Hide the ‘skin’ model by clicking the eye icon.