

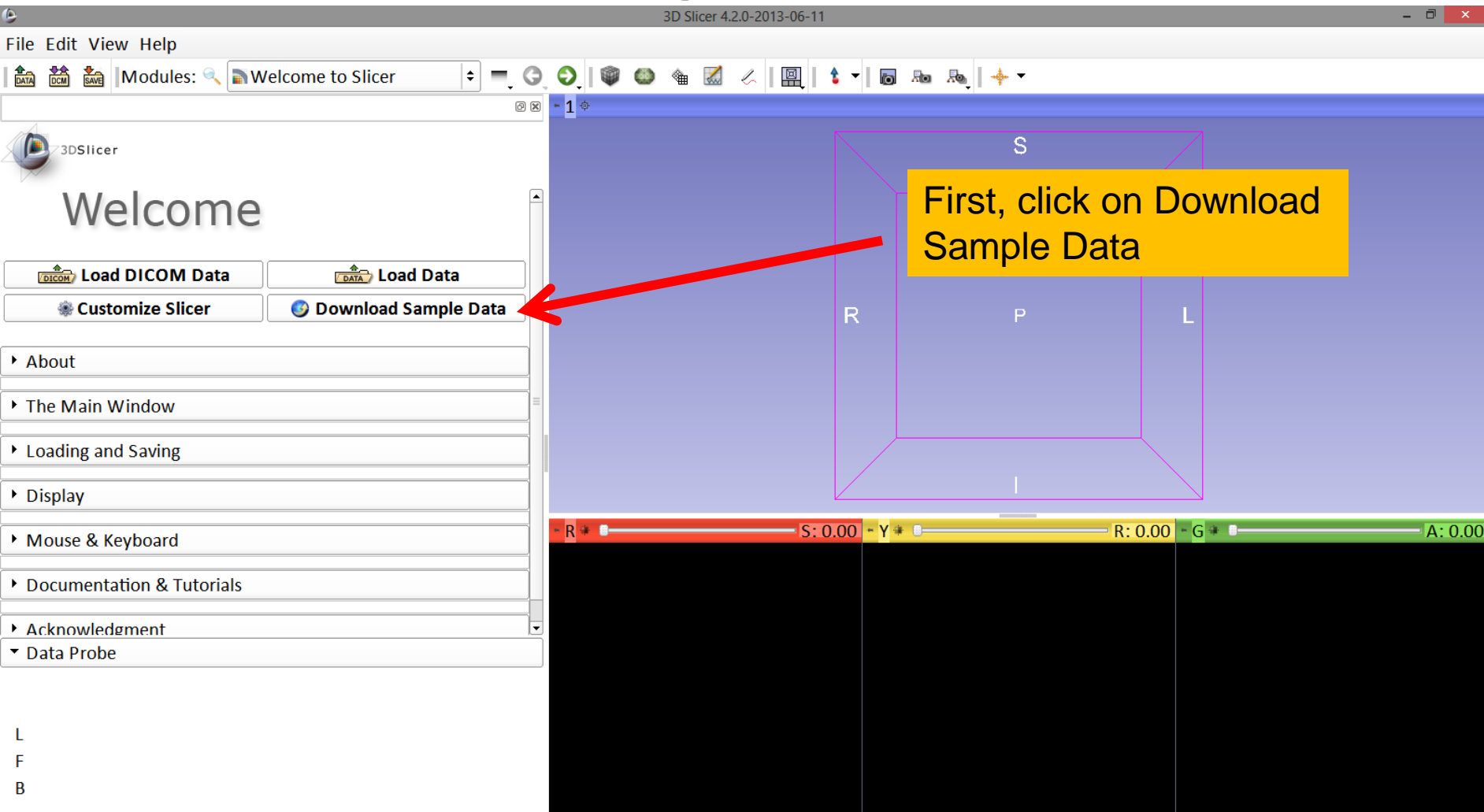


3D Data Loading and Visualization

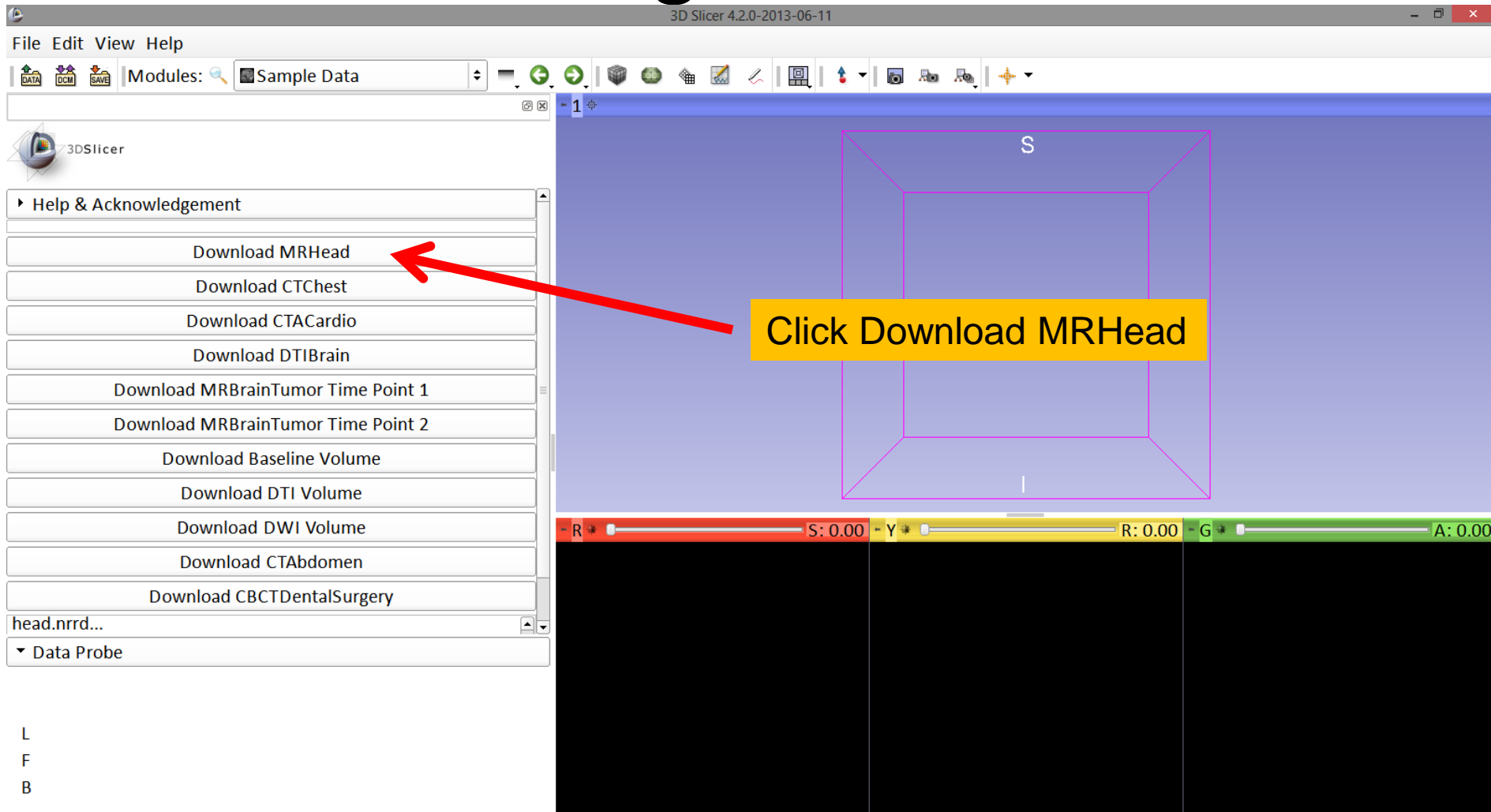
Sonia Pujol, Ph.D.

Surgical Planning Laboratory
Harvard University

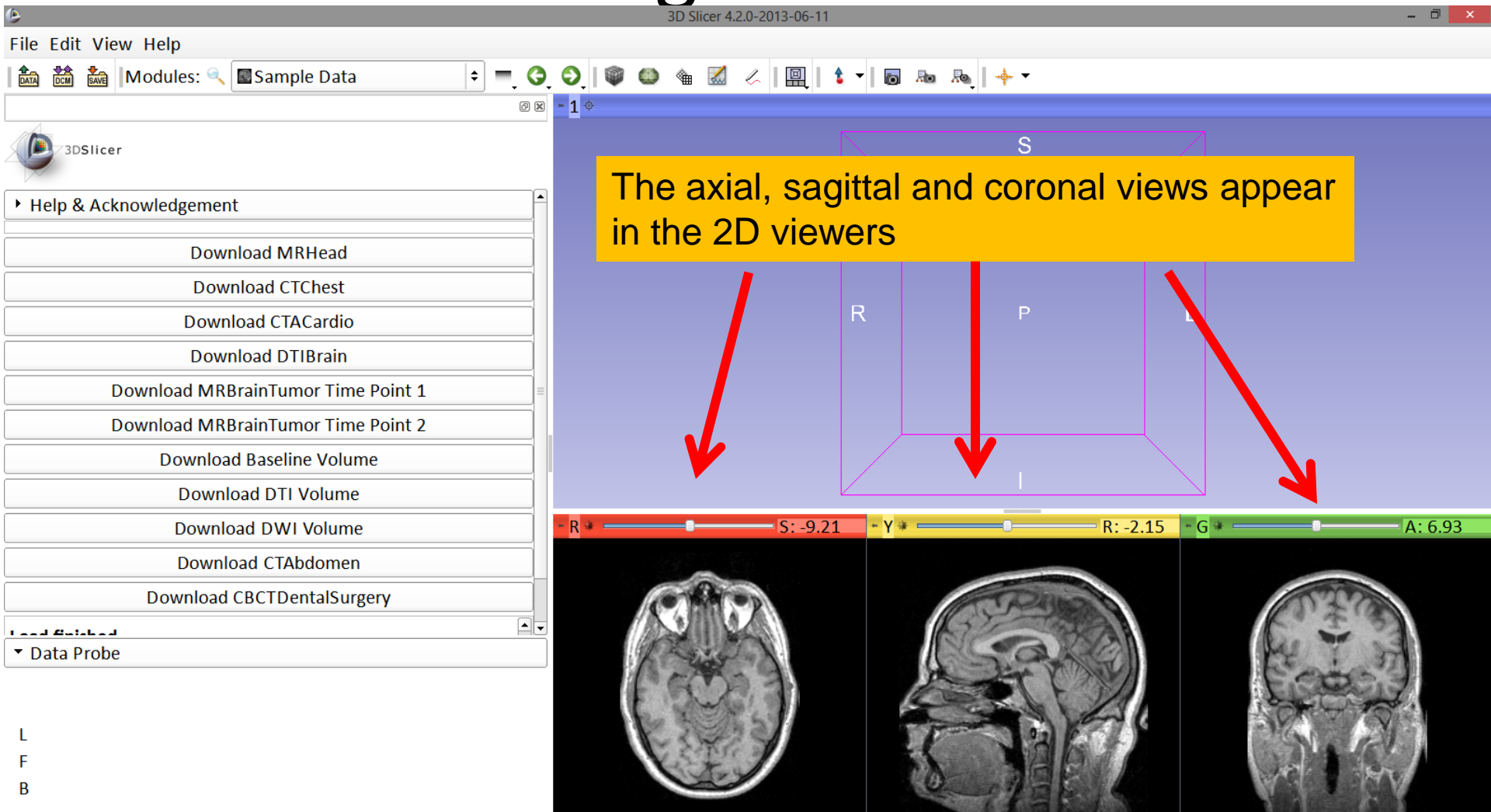
Loading a volume



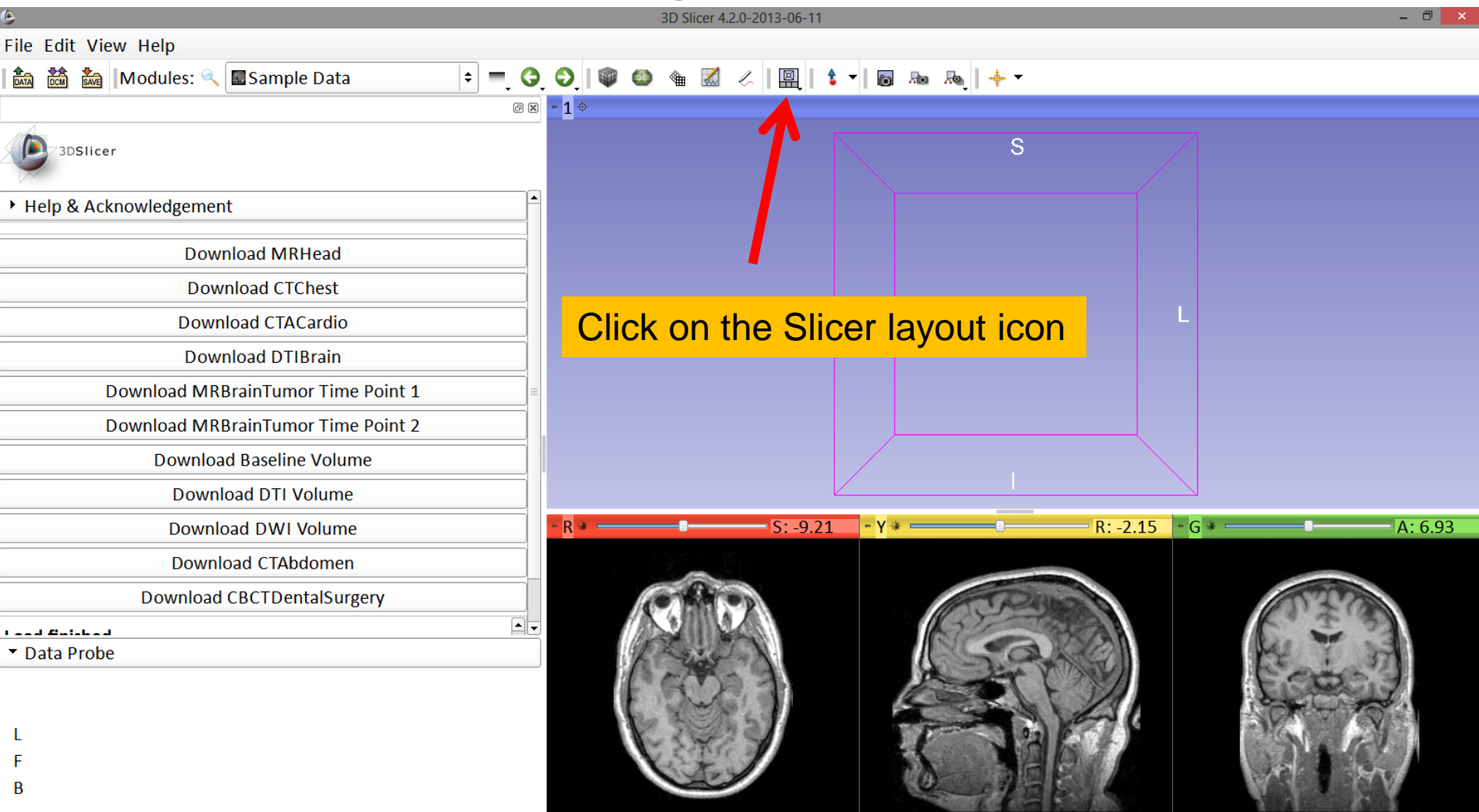
Loading a volume



Loading a volume



Loading a volume



Loading a volume

The screenshot shows the 3D Slicer interface. The top menu bar includes File, Edit, View, and Help. Below it is a toolbar with various icons. The 'View' menu is open, displaying a list of visualization options. The 'Red slice only' option is highlighted with a blue background. A red arrow points from a yellow callout box at the bottom left to this option. The callout box contains the text 'Click on the Red slice only option'. The main 3D view area shows a brain volume with a red slice selected. The left sidebar contains a 'Sample Data' module with a list of download options. The bottom status bar shows coordinates: R: -2.15, G: 6.93, A: 6.93.

File Edit View Help

3D Slicer 4.2.0-2013-06-11

Modules: Sample Data

- Conventional
- Conventional Widescreen
- Conventional Quantitative
- Four-Up
- Four-Up Quantitative
- Dual 3D
- Triple 3D
- 3D only
- One-Up Quantitative
- Red slice only**
- Yellow slice only
- Green slice only
- Tabbed 3D
- Tabbed slice
- Compare
- Compare Widescreen
- Compare Grid
- Three over three
- Three Over Three Quantitative
- Four over four
- Two over Two

Click on the Red slice only option

R: -2.15 G: 6.93 A: 6.93

Loading a volume

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Sample Data

3DSlicer

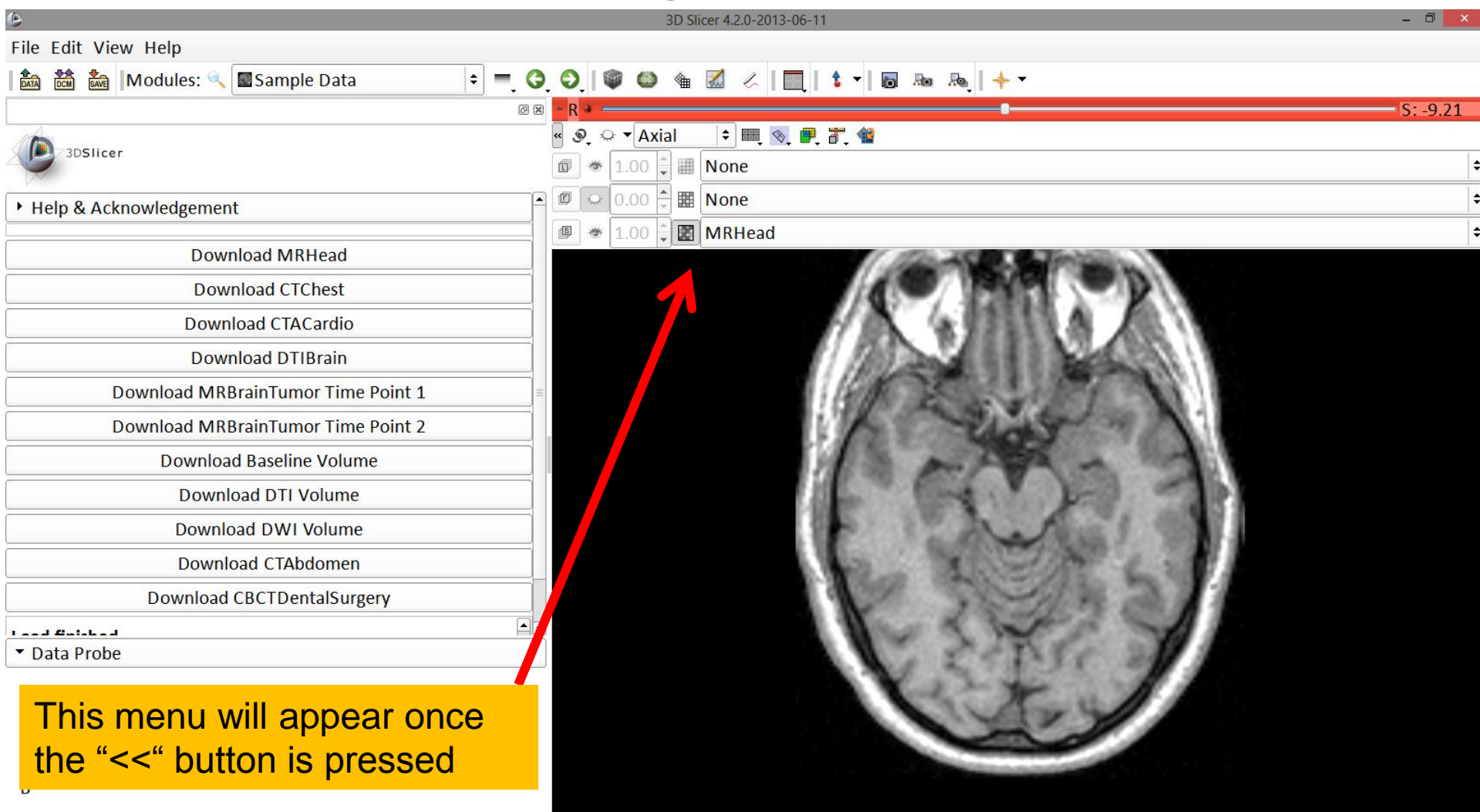
- Help & Acknowledgement
- Download MRHead
- Download CTchest
- Download CTACardio
- Download DTIBrain
- Download MRBrainTumor Time Point 1
- Download MRBrainTumor Time Point 2
- Download Baseline Volume
- Download DTI Volume
- Download DWI Volume
- Download CTAbdomen
- Download CBCTDentalSurgery

Load finished

Data Probe

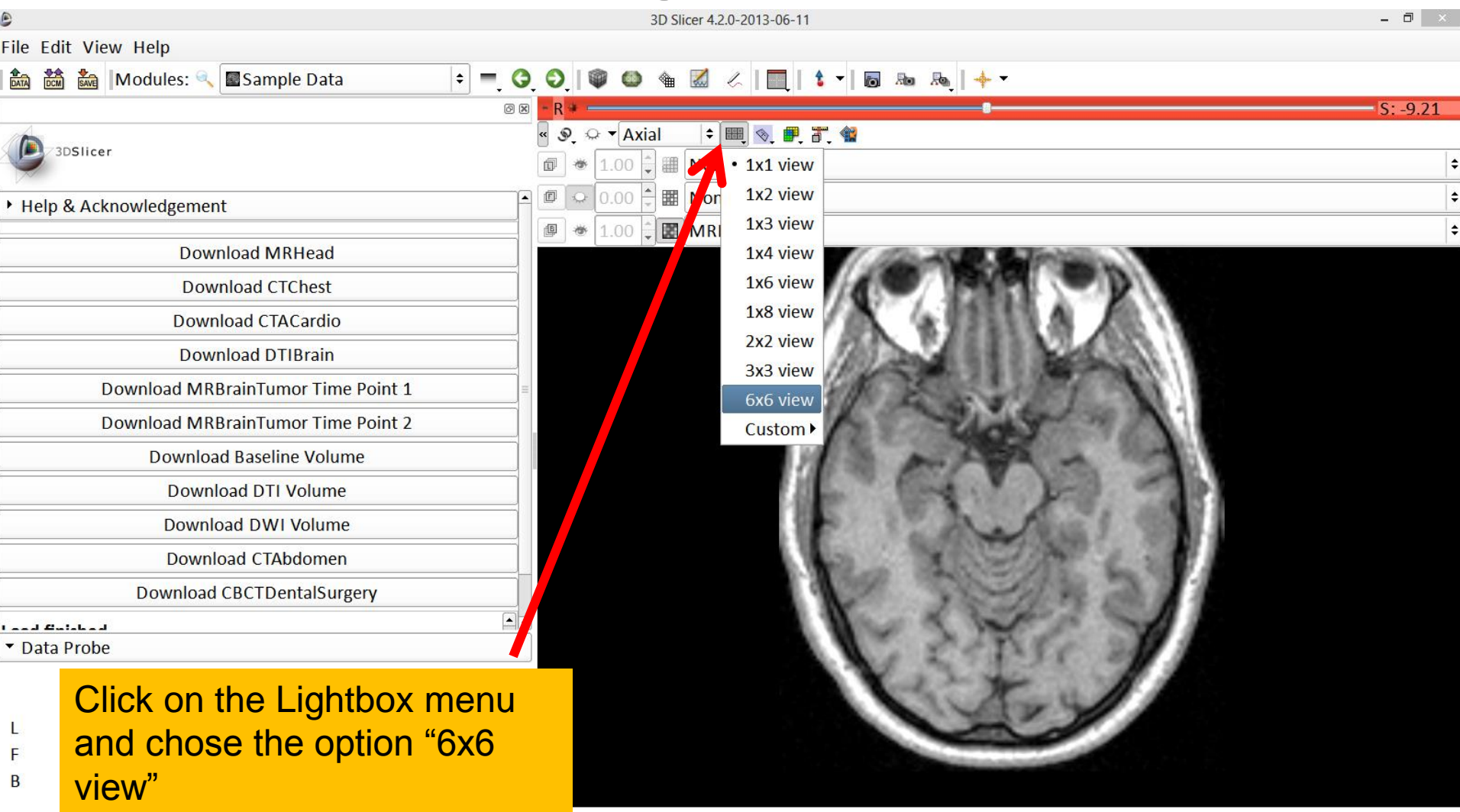
Position your mouse over the pin icon to display the slice viewer toolbar

Loading a volume



The screenshot displays the 3D Slicer software interface. The title bar reads "3D Slicer 4.2.0-2013-06-11". The menu bar includes "File", "Edit", "View", and "Help". The "Modules" dropdown is set to "Sample Data". The left sidebar contains a "Help & Acknowledgement" section with a list of download options: "Download MRHead", "Download CTchest", "Download CTACardio", "Download DTIBrain", "Download MRBrainTumor Time Point 1", "Download MRBrainTumor Time Point 2", "Download Baseline Volume", "Download DTI Volume", "Download DWI Volume", "Download CTAbdomen", and "Download CBCTDentalSurgery". Below this is a "Load finished" section with a "Data Probe" dropdown. The main view shows an axial MRI brain scan. A red arrow points from the "Data Probe" dropdown to the "MRHead" volume in the "Layers" panel. A yellow callout box at the bottom left contains the text: "This menu will appear once the '<<' button is pressed".

Loading a volume



The screenshot shows the 3D Slicer 4.2.0 interface. The main window displays an axial MRI slice of a brain. A red arrow points to the Lightbox menu, which is open and shows the '6x6 view' option selected. The interface includes a menu bar (File, Edit, View, Help), a toolbar, and a sidebar with various download options.

Click on the Lightbox menu and chose the option "6x6 view"

Loading a volume

3D Slicer 4.2.0-2013-06-11

File Edit View Help

DATA DCM SAVE Modules: Sample Data

3DSlicer

Help & Acknowledgement

Download MRHead

Download CTchest

Slicer displays 36 consecutive images of the dicom volume. Use the red slice slider to browse through the data

Download CTAbdomen

Download CBCTDentalSurgery

Load finished

Data Probe

Red RAS: (22.4, -86.3, -1.2) Axial Sp: 1.0

L None ()

F None ()

B MRHead (220, 118, 84) 66

R S: -9.21

Loading a volume

The screenshot shows the 3D Slicer interface with the Slicer layout menu open. The menu is located in the top right corner of the main window and lists various layout options. A red arrow points to the 'Conventional' option at the top of the menu. The background shows a grid of axial brain slices in the R (Right) and S (Superior) planes. The Slicer layout icon in the top toolbar is highlighted with a red box.

File Edit View Help
Modules: Sample Data
3DSlicer
Help & Acknowledgement
Download MRHead
Download CTchest
Download CTACardio
Download DTIBrain
Download MRBrainTumor Time Point 1
Download MRBrainTumor Time Point 2
Download Baseline Volume
Download DTI Volume
Download DWI Volume
Download CTAbdomen
Download CBCTDentalSurgery
Load finished
Data Probe

Conventional
Conventional Widescreen
Conventional Quantitative
Four-Up
Four-Up Quantitative
Dual 3D
Triple 3D
3D only
One-Up Quantitative
Red slice only
Yellow slice only
Green slice only
Tabbed 3D
Tabbed slice
Compare
Compare Widescreen
Compare Grid
Three over three
Three Over Three Quantitative
Four over four
Two over Two

S: -9.21

Click on the Slicer layout icon and select Conventional

Loading a volume

File Edit View Help

Modules: Sample Data

3DSlicer

Help & Acknowledgement

- Download MRHead
- Download CTchest
- Download CTACardio
- Download DTIBrain
- Download MRBrainTumor Time Point 1
- Download CBCTDentalSurgery

Load finished

Data Probe

L
F
B

1x1 view
1x2 view
1x3 view
1x4 view
1x6 view
1x8 view
2x2 view
3x3 view
• 6x6 view
Custom ▶

1 - R - Y - G - A: 6.93

MRHead

Loading a volume

File Edit View Help

Modules: Sample Data

3DSlicer

Help & Acknowledgement

Position your arrow again on the pin icon of the red viewer and click on the links icon to link all three viewers

Download MRBrainTumor Time Point 2

Download Baseline Volume

Download DTI Volume

Download DWI Volume

Download CTAbdomen

Download CBCTDentalSurgery

Data Probe

S: -18.71 - Y R: -2.15 - G A: 6.93

Axial 1.00 None 0.00 None 1.00 MRHead

L F B

Loading a volume

Icon	Opacity	Visibility
	1.00	None
	0.00	None
	1.00	MRHead

Once the icons are linked, click on the eye icon to display all 3 anatomical slices in the 3D viewer

Loading a volume

File Edit View Help

Modules: Sample Data

3DSlicer

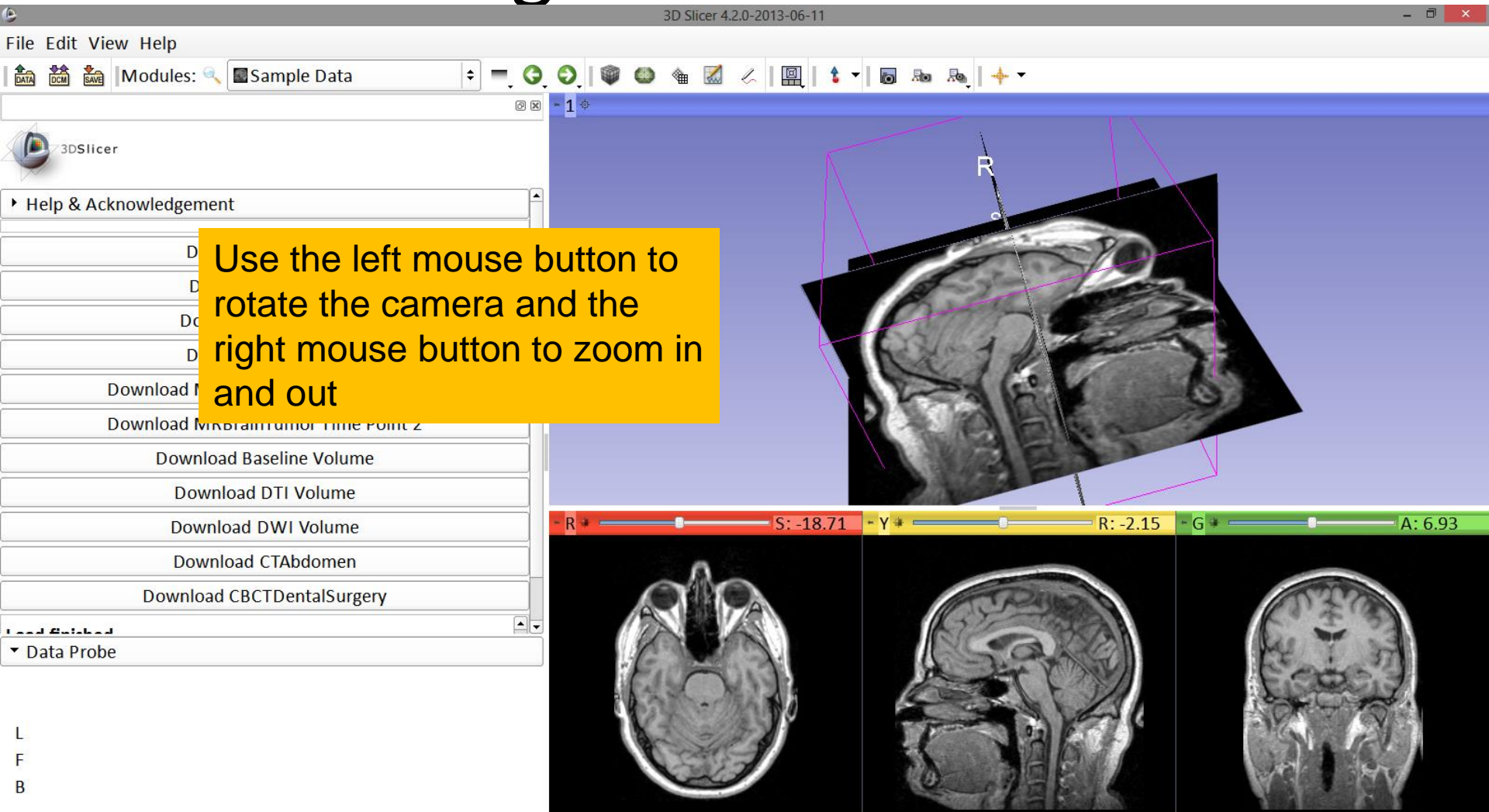
- Help & Acknowledgement
 - Download MRHead
 - Download CTchest
 - Download CTACardio
 - Download DTIBrain
 - Download MRBrainTumor Time Point 1
 - Download MRBrainTumor Time Point 2
 - Download Baseline Volume
 - Download DTI Volume
 - Download DWI Volume
 - Download CTAbdomen
 - Download CBCTDentalSurgery
- Data Probe

R L

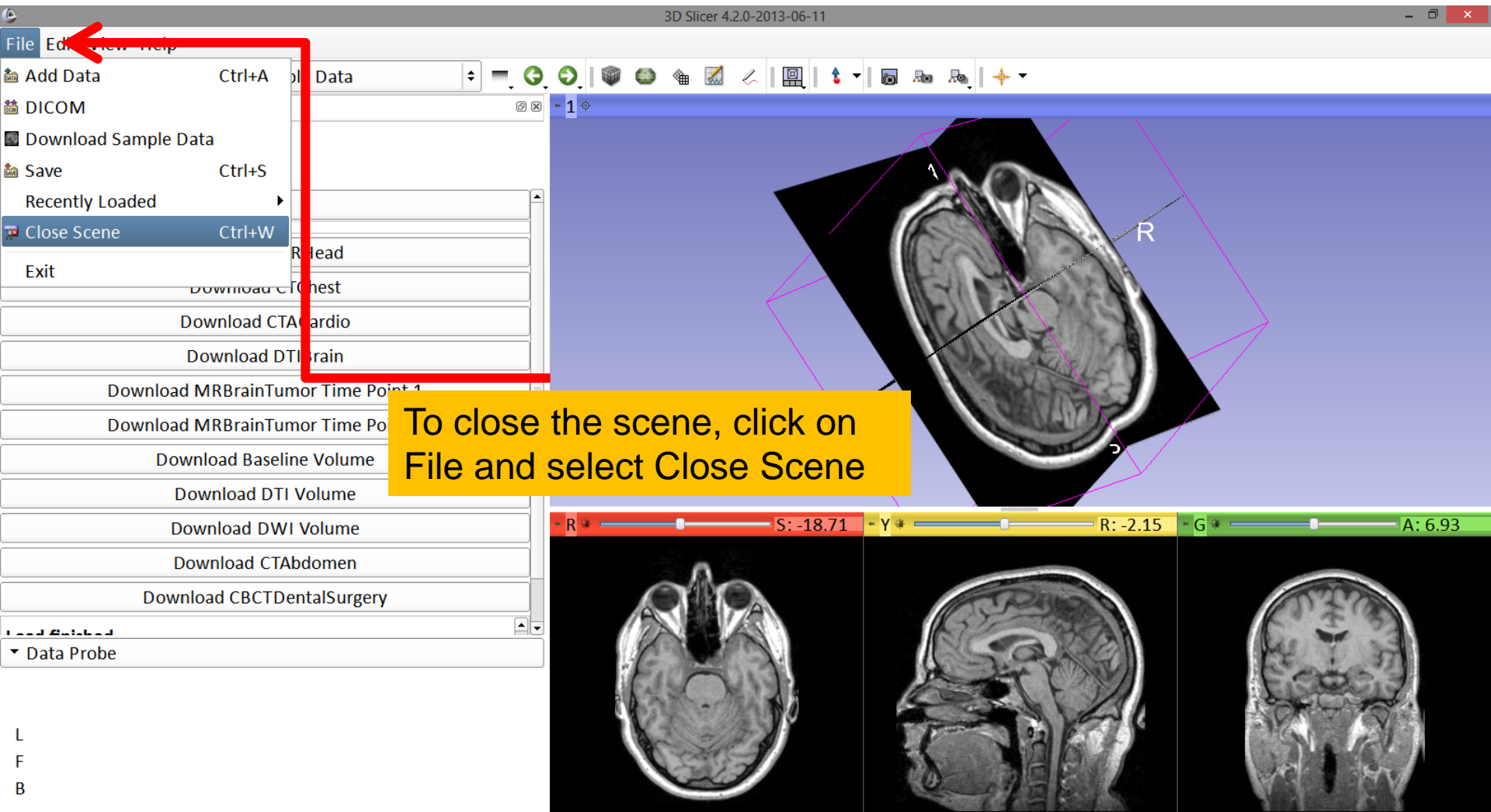
X: -18.71 Y: -2.15 Z: 6.93

All three anatomical slices are shown in the 3D viewer

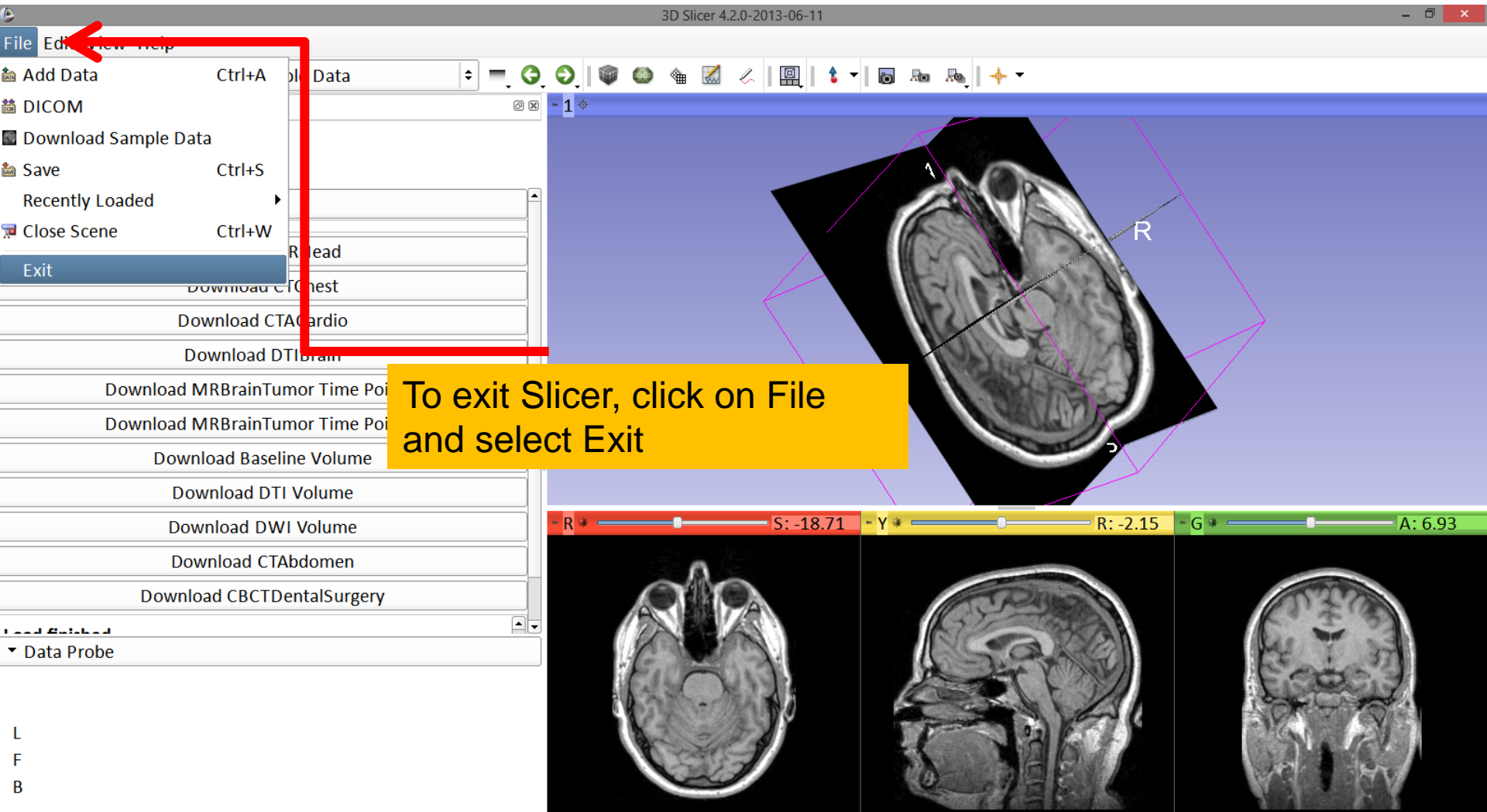
Loading a DICOM volume

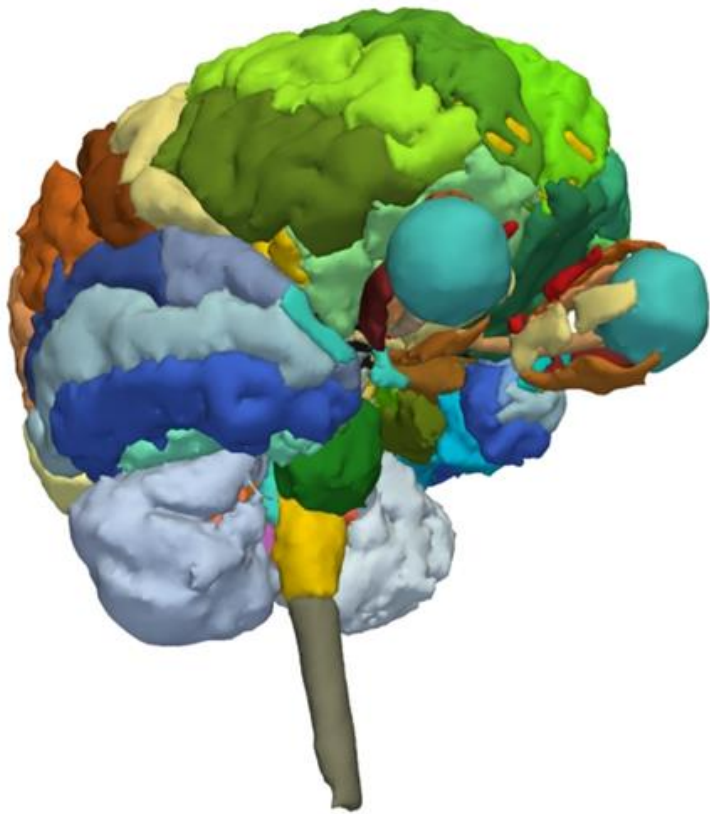


Close the scene



Exit Slicer

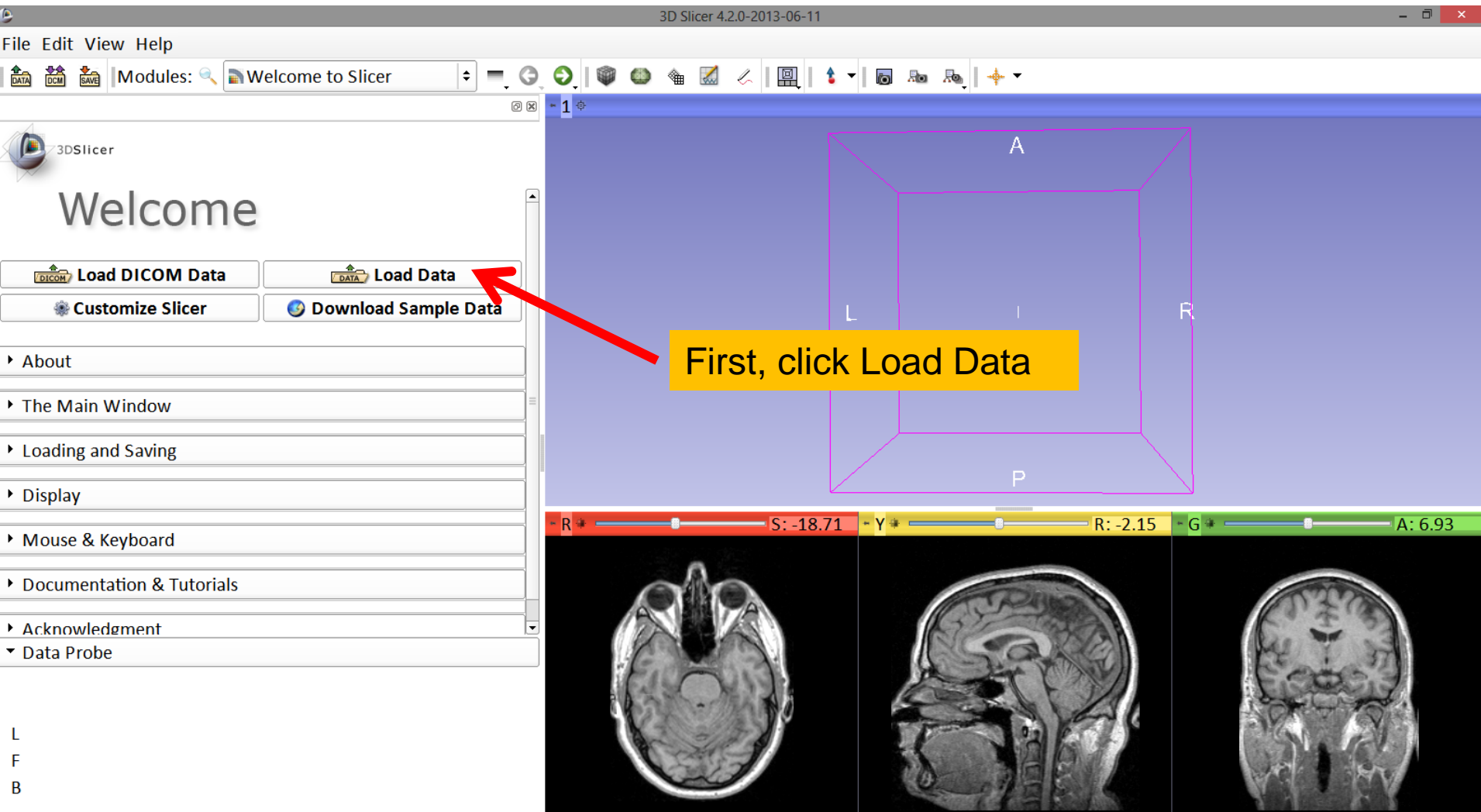




Part 2:

3D visualization of surface models of the brain

Loading a Scene



Loading a Scene

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Welcome to Slicer

3DSlicer

Welcome

Load DICOM Data Customize Slicer Download

About The Main Window Loading and Saving Display Mouse & Keyboard Documentation & Tutorials Acknowledgment Data Probe

Add data into the scene

Choose Directory to Add Choose File(s) to Add Show Options

<input checked="" type="checkbox"/>	File	Description
-------------------------------------	------	-------------

Reset OK Cancel

R: -2.15 -G A: 6.93

L F B

Then click Choose File(s) to Add

Loading a Scene

File Edit View Help

3D Slicer 4.2.0-2013-06-11

Modules: Welcome to Slicer

3DSlicer

Welcome

Load DICOM Data

Documentation & Tutorials

Acknowledgment

Data Probe

L
F
B

Open

Look in: C:\Users\flynnr\3DHeadData

flynnr

- .3DHeadScene.mrml.swp
- .DS_Store
- 3DHeadScene.mrml
- grayscale.nrrd
- hemispheric_white_matter.vtk
- left_eyeball.vtk
- Master Scene View.png
- mynewscene.mrml
- optic_chiasm.vtk
- optic_nerve_L.vtk
- optic_nerve_R.vtk
- optic_tract_L.vtk
- optic_tract_R.vtk
- right_eyeball.vtk
- Skin.vtk
- skull_bone.vtk

File name: 3DHeadScene.mrml

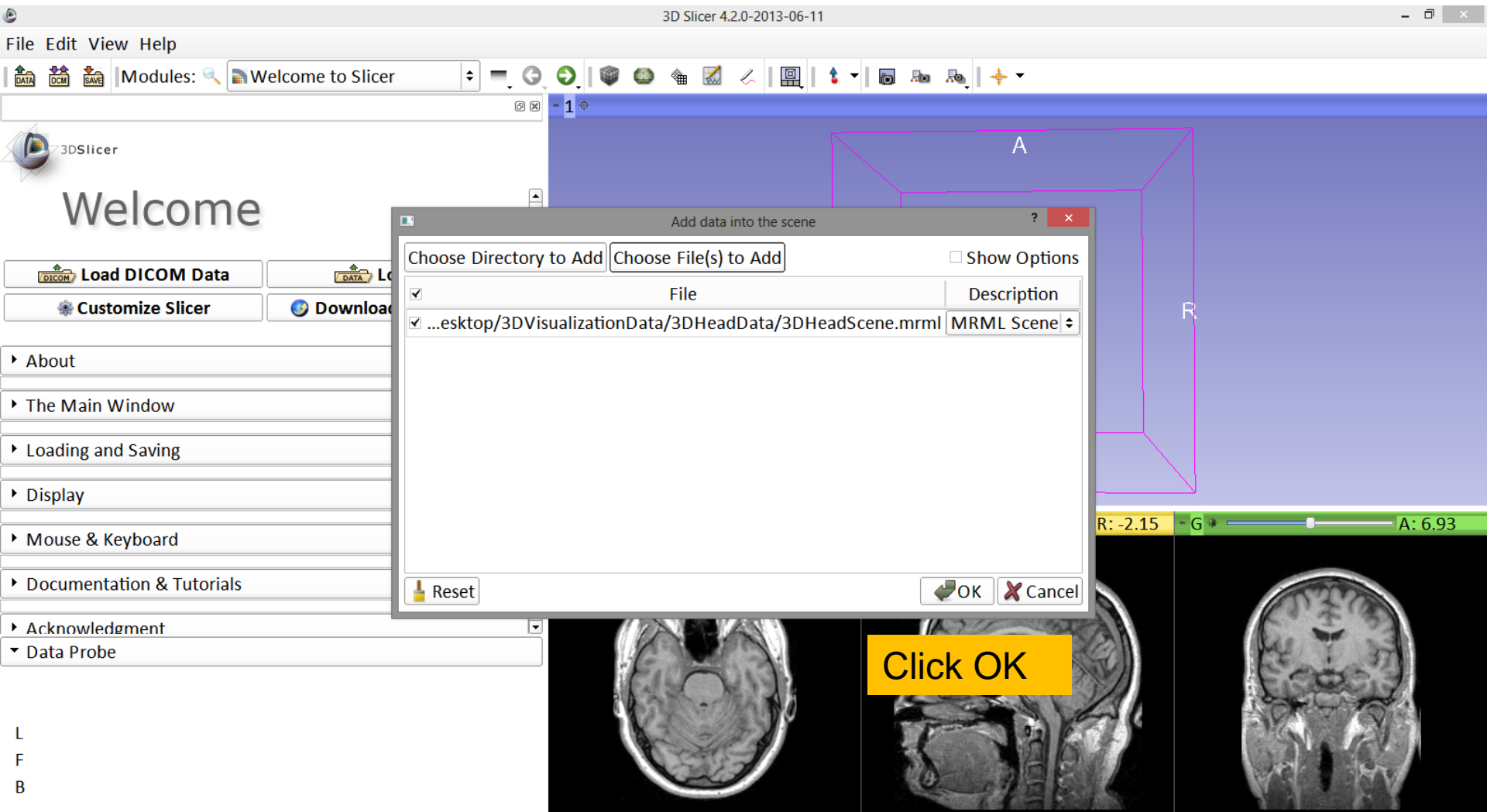
Files of type: All Files (*.*)

Open

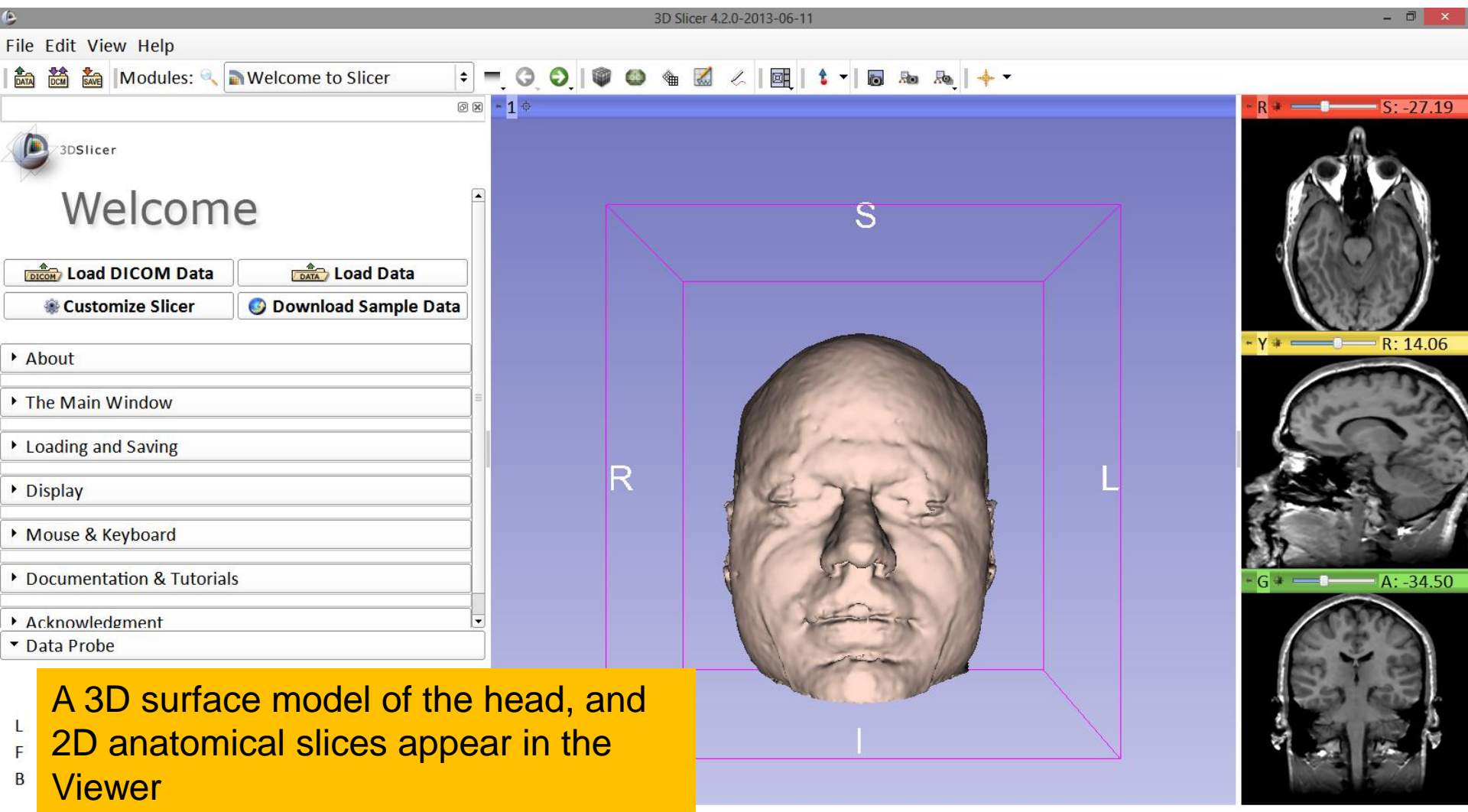
Cancel

R: -2.15 -G A: 6.93

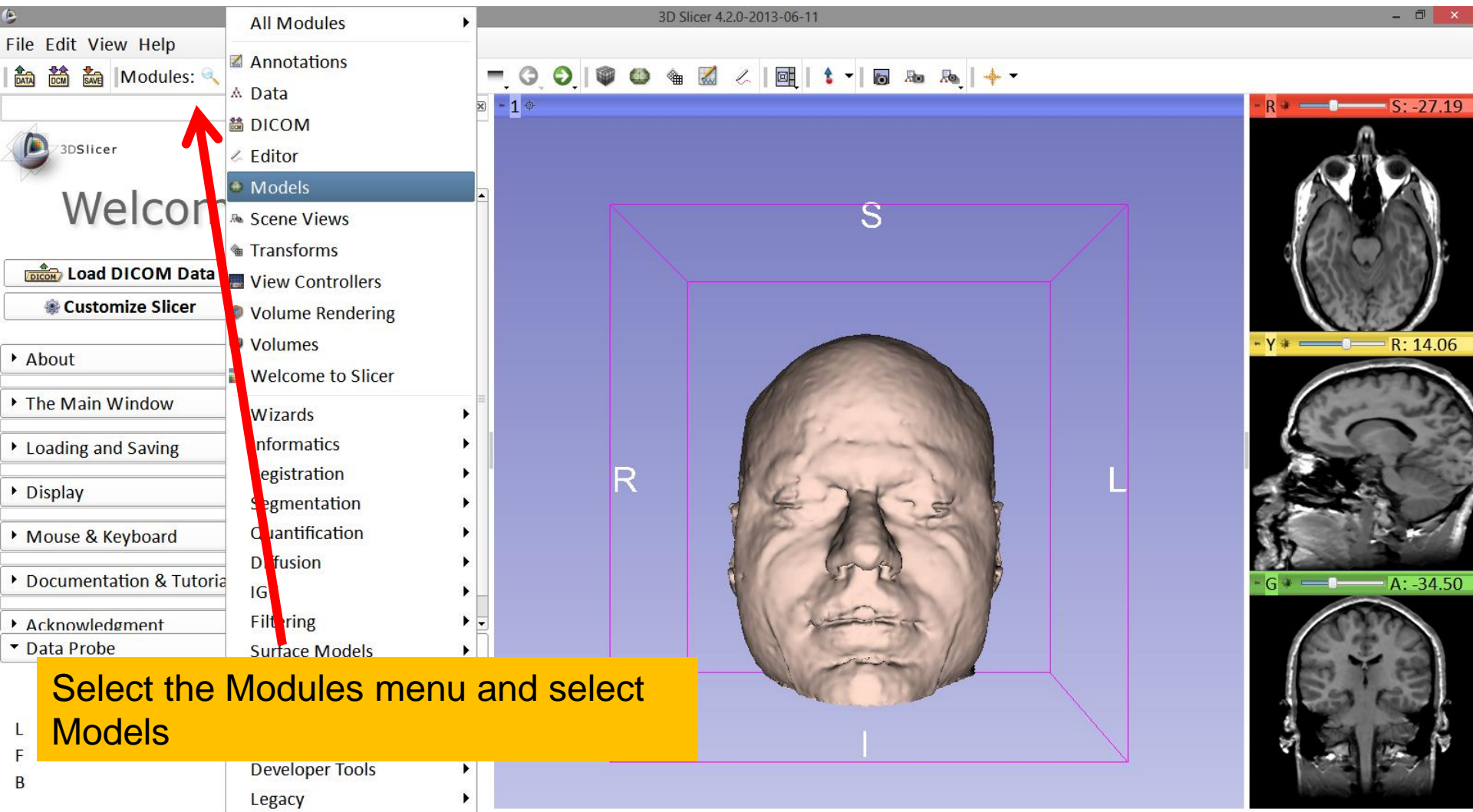
Loading a Scene



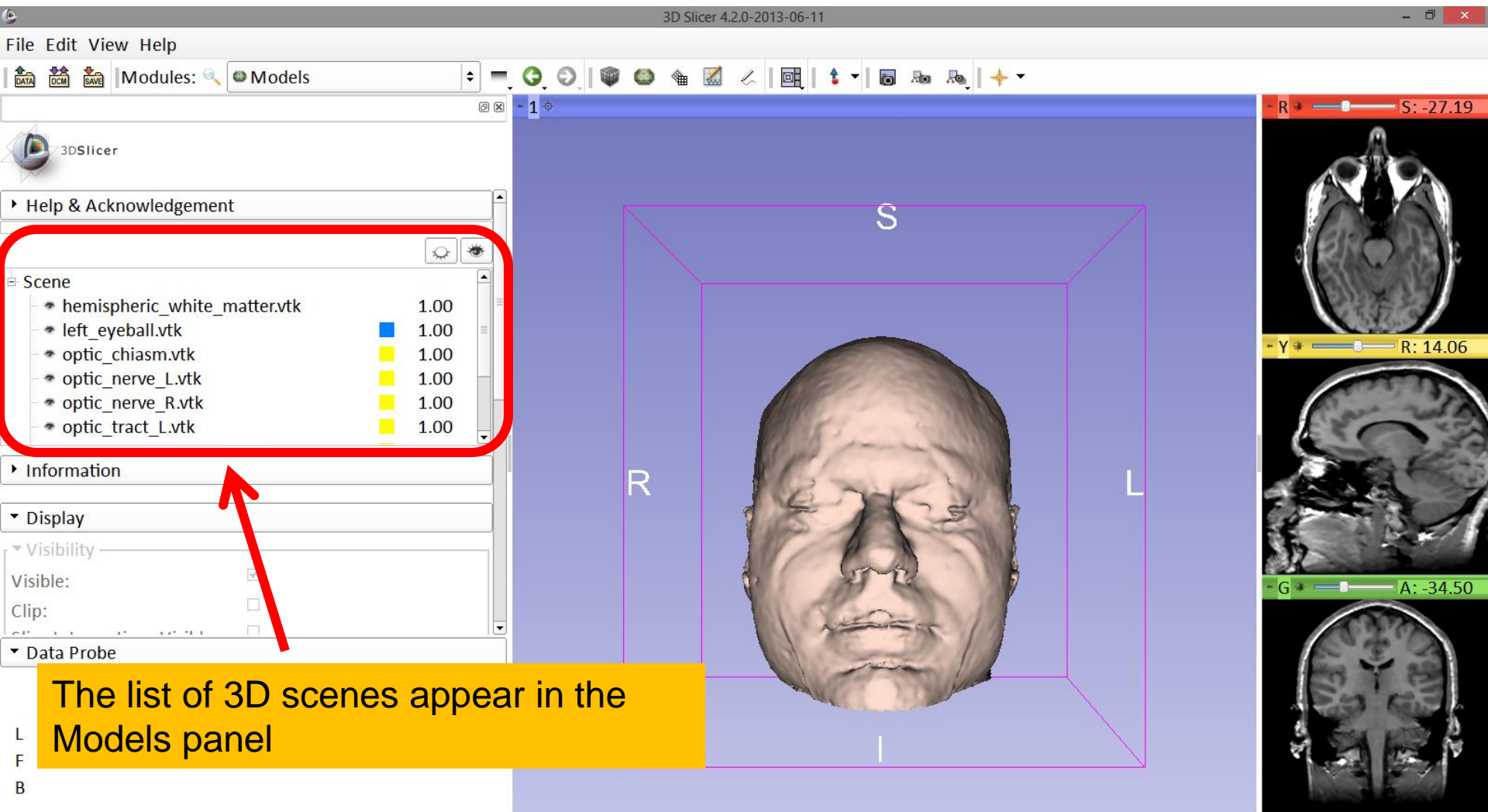
Loading the Slicer Scene



Loading the Slicer Scene



Models Module



3D Visualization

The screenshot shows the 3D Slicer interface. The main window displays a 3D model of a human head with a purple wireframe bounding box. The bounding box is labeled with 'S' at the top, 'R' on the left, and 'L' on the right. A yellow callout box with black text is overlaid on the left side of the main window, with a red arrow pointing from it to the slice menu in the top right corner. The slice menu is currently set to 'Axial' and shows three slice views: an axial slice at the top, a sagittal slice in the middle, and a coronal slice at the bottom. The axial slice is labeled 'R' and 'S: -27.19'. The sagittal slice is labeled 'Y' and 'R: 14.06'. The coronal slice is labeled 'G' and 'A: -34.50'. The left sidebar contains a 'Scene' panel with a list of models and their visibility, an 'Information' panel, a 'Display' panel with 'Visibility' and 'Data Probe' sections, and a 'Help' panel. The top menu bar includes 'File', 'Edit', 'View', and 'Help'. The top toolbar contains various icons for file operations, navigation, and visualization.

Position the cursor over the pin icon to reveal the slice menu and click on the eye icon to reveal the axial slice

Scene

- hemispheric_white_matter.vtk 1.00
- left_eyeball.vtk 1.00
- optic_chiasm.vtk 1.00
- optic_nerve_L.vtk 1.00
- optic_nerve_R.vtk 1.00
- optic_tract_L.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Data Probe

L

F

B

3D Visualization

The screenshot shows the 3D Slicer interface. The main 3D viewer displays a 3D model of a human head with a black axial slice. A red arrow points from a yellow text box to the slice. The left sidebar contains a list of 3D scenes, with 'Skin.vtk' highlighted. A red arrow points from a yellow text box to 'Skin.vtk'. The right sidebar shows three orthogonal views: axial, sagittal, and coronal. A yellow text box at the top center says 'Notice the axial slice through the 3D model of the head'. A yellow text box at the bottom left says 'Once the axial slice is displayed in the 3D viewer, click on Skin.vtk in the list of 3D scenes'. The top of the window shows the title bar '3D Slicer 4.2.0-2013-06-11' and the menu bar 'File Edit View Help'. The toolbar contains various icons for file operations and viewing. The left sidebar has a 'Modules' dropdown set to 'Models'. The 'Information' panel is expanded, showing 'Display' and 'Visibility' sections. The 'Visibility' section has 'Visible' checked, 'Clip' unchecked, 'Slice Intersections Visible' unchecked, and 'Slice Intersections Thickness' set to '1 px'. The 'Data Probe' section is collapsed. The right sidebar has a 'Y' slider set to 'R: 14.06' and a 'G' slider set to 'A: -34.50'. The top right corner of the 3D viewer shows 'R' and 'L' labels and a red arrow pointing to the slice.

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Models

3DSlicer

optic_nerve_L.vtk 1.00
optic_nerve_R.vtk 1.00
optic_tract_L.vtk 1.00
optic_tract_R.vtk 1.00
right_eyeball.vtk 1.00
Skin.vtk 1.00
skull_bone.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Slice Intersections Visible:

Slice Intersections Thickness: 1 px

Data Probe

Notice the axial slice through the 3D model of the head

Once the axial slice is displayed in the 3D viewer, click on Skin.vtk in the list of 3D scenes

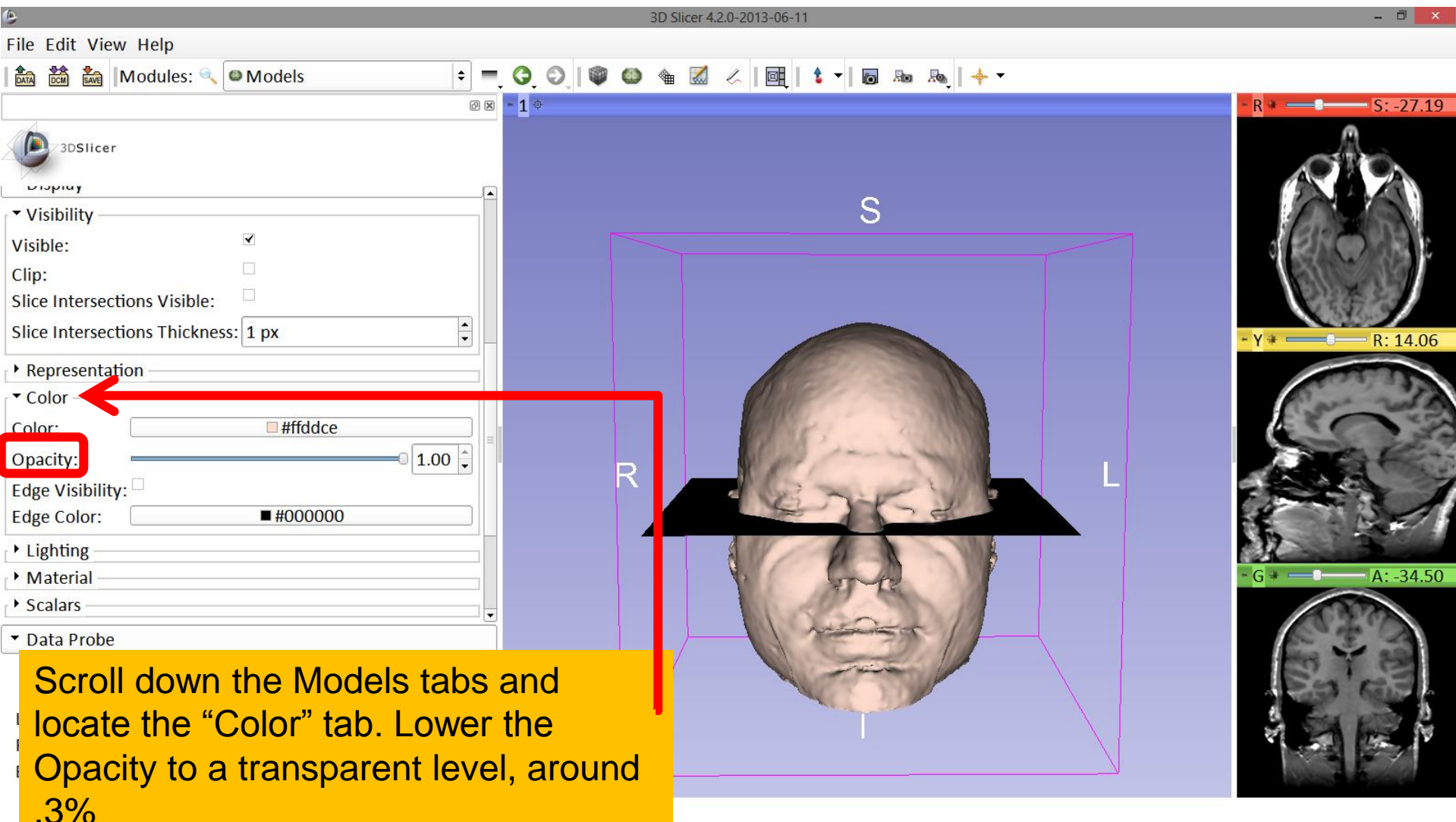
R L

- R + S: -27.19

- Y + R: 14.06

- G + A: -34.50

3D Visualization



The screenshot displays the 3D Slicer interface. The main window shows a 3D model of a human head within a purple wireframe bounding box, with axes labeled S (Superior), R (Right), and L (Left). A red arrow points from the 'Color' tab in the 'Models' panel to the 'Opacity' slider, which is currently set to 1.00. A yellow callout box contains the following text:

Scroll down the Models tabs and locate the “Color” tab. Lower the Opacity to a transparent level, around .3%

3D Visualization

The screenshot displays the 3D Slicer 4.2.0-2013-06-11 interface. The main window shows a 3D model of a skull with a semi-transparent skin layer. The model is centered in a 3D view with axes labeled S (Superior), R (Right), and L (Left). A yellow callout box highlights the skull model with the text: "Notice the skin has become almost fully transparent".

The left sidebar shows the 'Display' panel with the following settings:

- Visibility: Visible; Clip; Slice Intersections Visible; Slice Intersections Thickness: 1 px
- Representation: (empty)
- Color: Color: #ffddce; Opacity: 0.30; Edge Visibility: ; Edge Color: #000000
- Lighting: (empty)
- Material: (empty)
- Scalars: (empty)
- Data Probe: (empty)

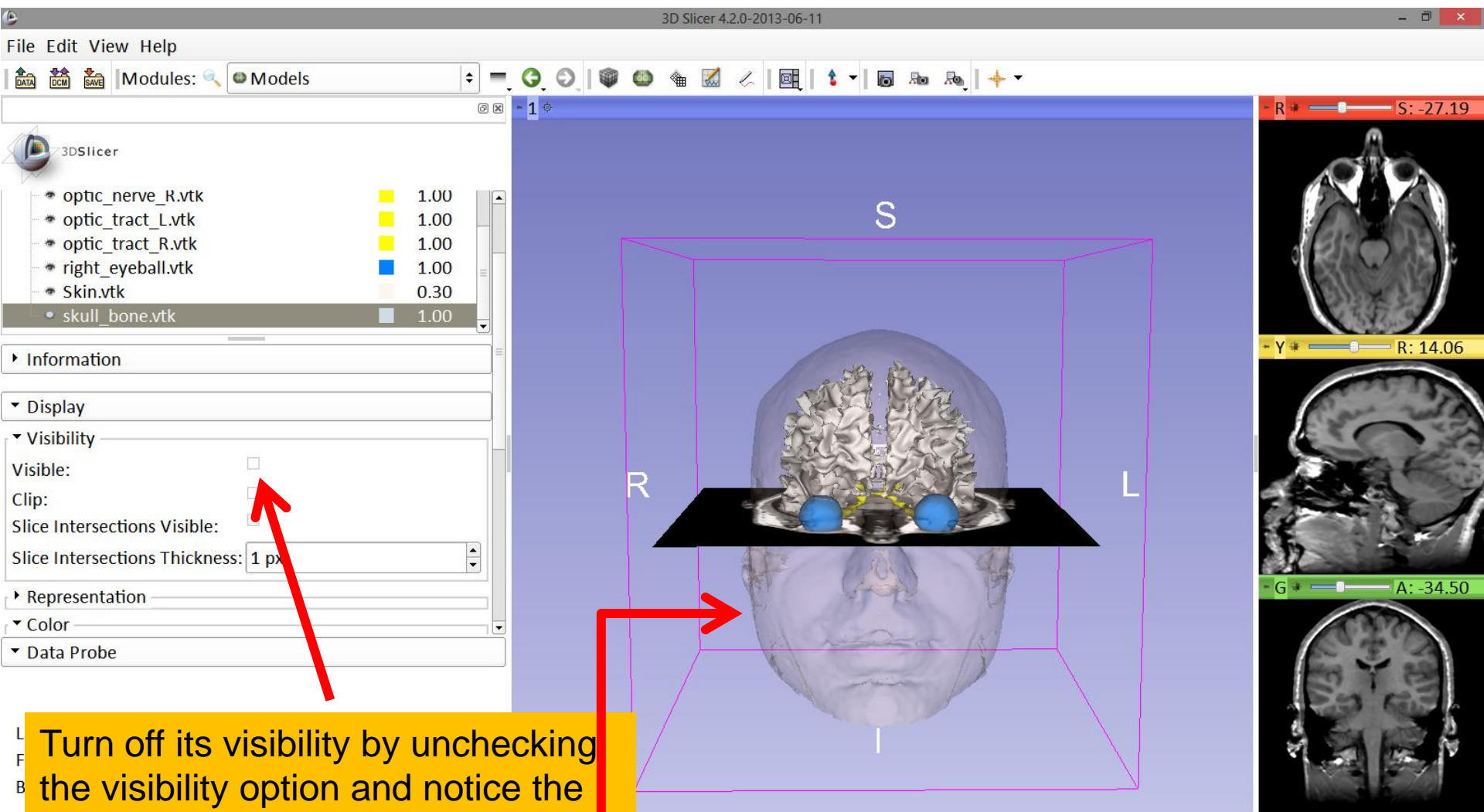
The right sidebar shows three axial MRI slices with the following coordinates:

- Top slice: R: 14.06, S: -27.19
- Middle slice: R: 14.06, A: -34.50
- Bottom slice: A: -34.50

3D Visualization

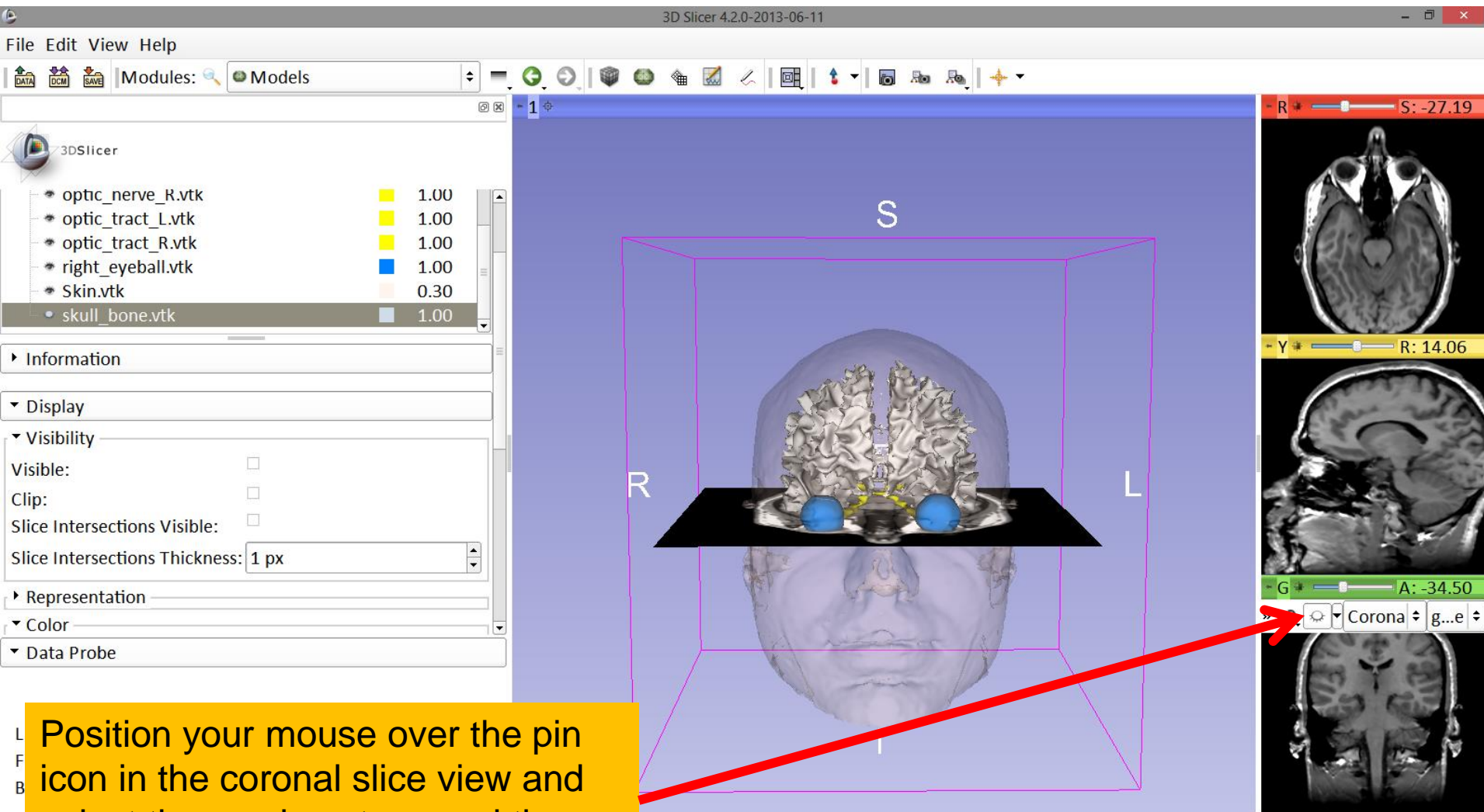
The screenshot shows the 3D Slicer interface. The main window displays a 3D model of a skull with a horizontal slice through the eye sockets. The model is centered within a purple wireframe bounding box. The axes are labeled: 'S' for Superior, 'R' for Right, and 'L' for Left. To the right of the main view are three axial MRI slices. The top slice is labeled 'R' and 'S: -27.19'. The middle slice is labeled 'R: 14.06'. The bottom slice is labeled 'A: -34.50'. On the left side, the 'Models' panel lists several files: optic_nerve_R.vtk (1.00), optic_tract_L.vtk (1.00), optic_tract_R.vtk (1.00), right_eyeball.vtk (1.00), Skin.vtk (0.30), and skull_bone.vtk (1.00). A red arrow points from the 'skull_bone.vtk' entry to the 3D view. Below the arrow is a yellow box with the text: 'Scroll back up to the 3D scenes menu and select skull_bone.vtk'. The top of the window shows the menu bar (File, Edit, View, Help) and the title bar (3D Slicer 4.2.0-2013-06-11).

3D Visualization



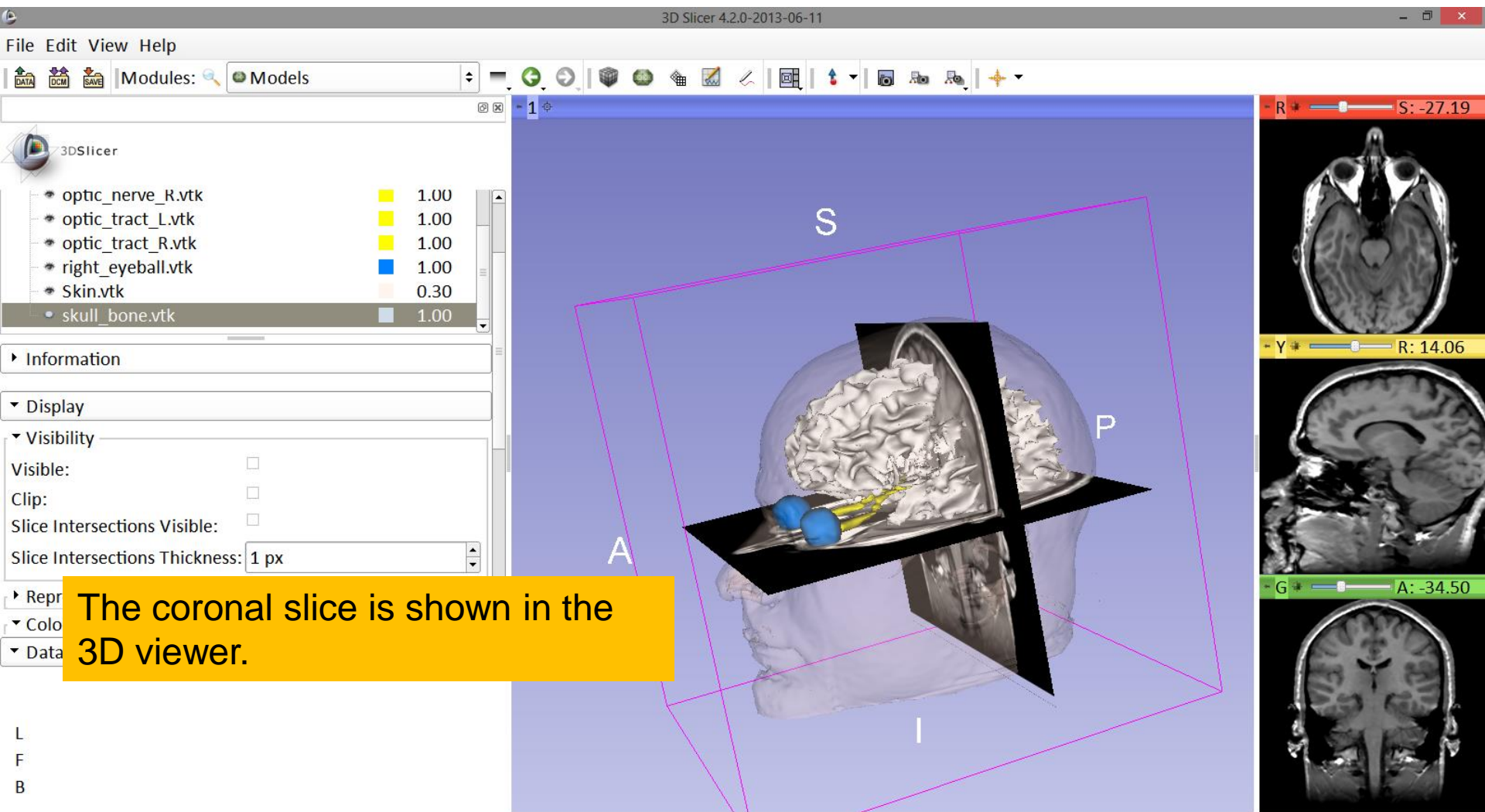
Turn off its visibility by unchecking the visibility option and notice the bone disappearing from the 3D view of the head

3D Visualization



Position your mouse over the pin icon in the coronal slice view and select the eye icon to reveal the coronal slice in the 3D view

3D Visualization



3D Visualization

The screenshot shows the 3D Slicer interface. The main window displays a 3D model of a brain with a white matter volume and blue optic nerves. A yellow text box with black text reads: "Scroll up and select the 3D scene hemispheric_white_matter.vtk, then check off the option for Clip under the Visibility tab". Two red arrows point from the text box to the 'hemispheric_white_matter.vtk' model in the Scene panel and the 'Clip' checkbox in the Visibility tab. The Scene panel lists several models with their visibility and opacity settings. The Visibility tab shows the 'Clip' checkbox checked. The main window also shows a 3D view of the brain with a black plane and a red box highlighting the white matter volume. The right side of the interface shows three axial, sagittal, and coronal MRI slices with coordinate axes (R, L, A, S) and values.

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Models

Scene

- hemispheric_white_matter.vtk 1.00
- left_eyeball.vtk 1.00
- optic_chiasm.vtk 1.00
- optic_nerve_L.vtk 1.00
- optic_nerve_R.vtk 1.00
- optic_tract_L.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Slice Intersections Visible:

Slice Intersections Thickness: 1 px

Data Probe

L
F
B

R
S: -27.19

Y
R: 14.06

G
A: -34.50

3D Visualization

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Models

3DSlicer

Representation

Color

Color: #ffffff

Opacity: 1.00

Edge Visibility:

Edge Color: #000000

Lighting

Material

Scalars

Clipping

Clipping Type: Union Intersection

Red Slice Clipping: Positive Negative

Yellow Slice Clipping: Positive Negative

Green Slice Clipping: Positive Negative

Data Probe

S

A

R

P

R: -27.19

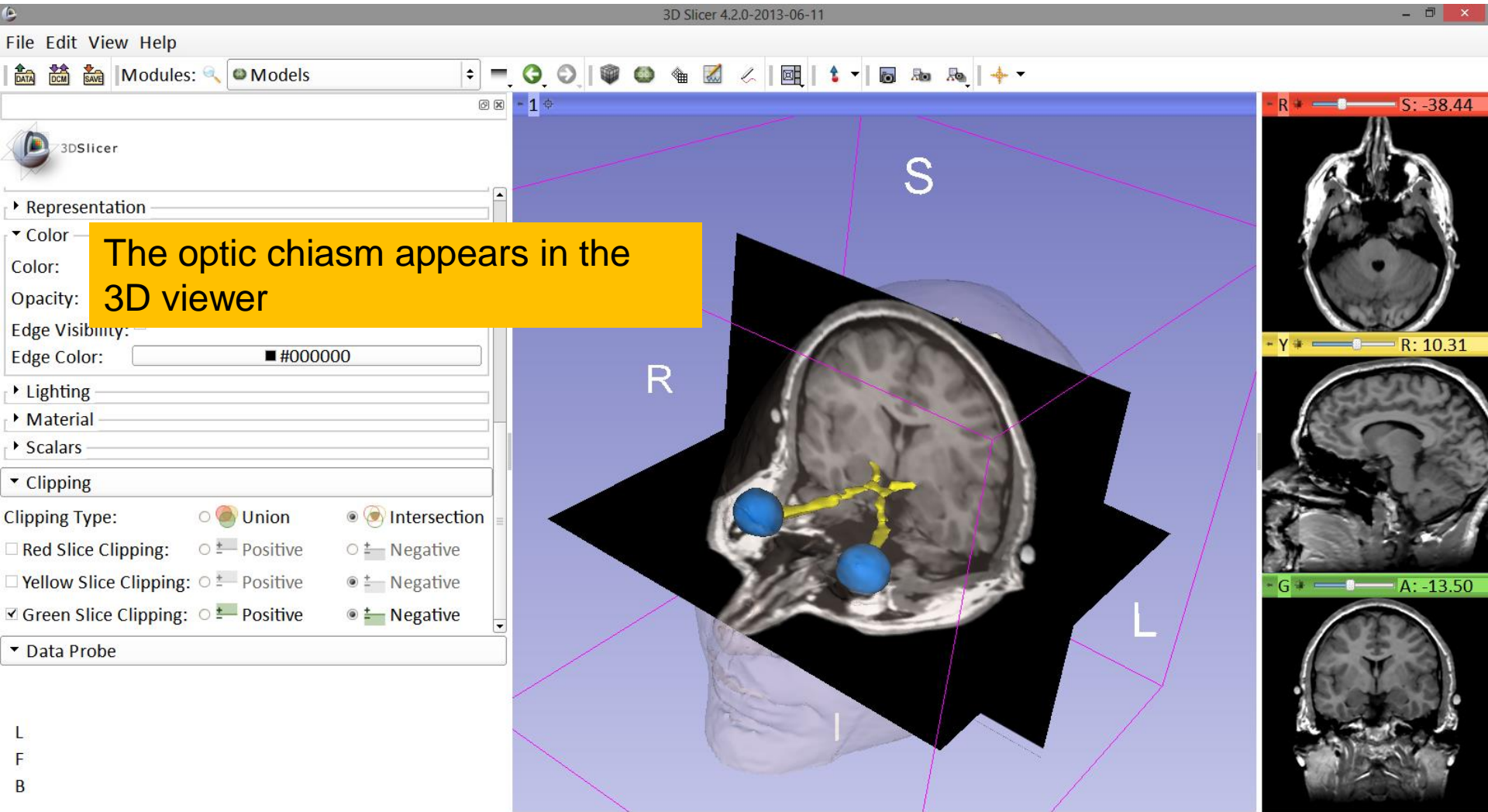
S: -27.19

G: -13.50

A: -13.50

Scroll down and find the tab Clipping, and check off the options for Green Slice Clipping and Negative Space

3D Visualization



3D Visualization

File Edit View Help

3D Slicer 4.2.0-2013-06-11

Modules: Models

3DSlicer

Information

Display

Visibility

Visible:

Clip:

Slice Intersections Visible:

Slice Intersections Thickness: 1 px

Representation

Color

Color:

Opacity: 0.30

Edge Visibility:

Edge Color:

Lighting

Data Probe

S

R

L

I

R: -38.44

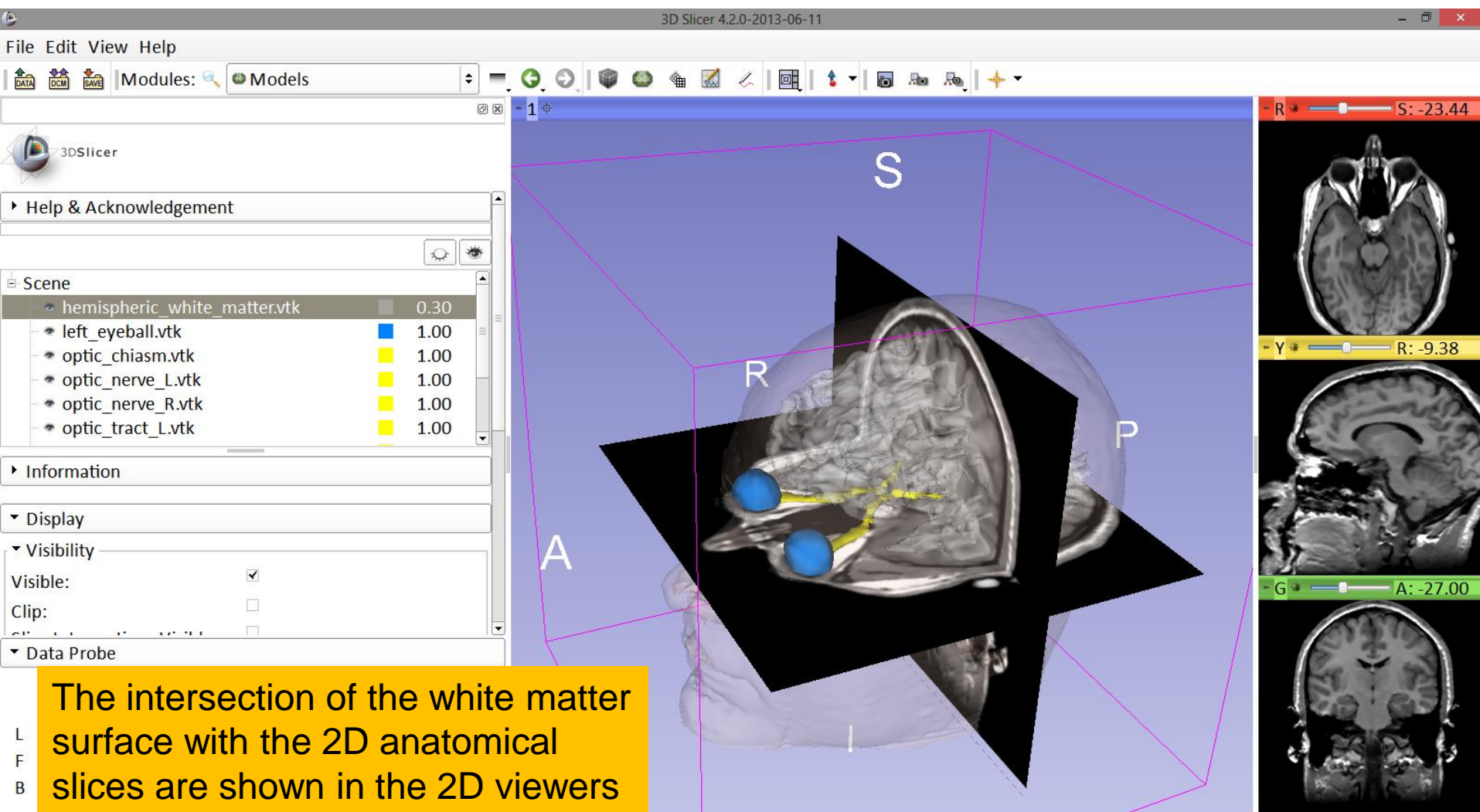
Y R: 10.31

G A: -13.50

Scroll up and uncheck the option for Clip and lower the opacity of the hemispheric surface

L
F
B

3D Visualization



3D Visualization

The screenshot displays the 3D Slicer interface. The main window shows a 3D model of a brain with a semi-transparent white matter volume and several colored structures (blue and yellow). Anatomical planes are labeled: S (Superior), R (Right), P (Posterior), and A (Anterior). On the right, three slice views are visible: an axial view at the top, a sagittal view in the middle, and a coronal view at the bottom. The coronal view is currently selected and shows a slice through the brain. A red arrow points from a yellow text box to the pin icon in the coronal slice view's toolbar.

File Edit View Help

3D Slicer 4.2.0-2013-06-11

Modules: Models

3DSlicer

Help & Acknowledgement

Scene

- hemispheric_white_matter.vtk 0.30
- left_eyeball.vtk 1.00
- optic_chiasm.vtk 1.00
- optic_nerve_L.vtk 1.00
- optic_nerve_R.vtk 1.00
- optic_tract_L.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Data Probe

- R * S: -23.44

- Y * R: -9.38

- G * A: -27.00

Corona g...e

Position your cursor over the pin icon in the corona slice view and unselect the eye icon

3D Visualization

The screenshot shows the 3D Slicer interface. The main window displays a 3D model of a brain with a blue sphere and a red arrow pointing to the layer manager icon. A dropdown menu is open, showing various visualization options. The left sidebar contains the Scene panel with a list of models and their visibility settings. The right sidebar shows three orthogonal views (axial, sagittal, and coronal) of the brain model.

File Edit View Help

DATA DCM SAVE Modules: Models

3DSlicer

Help & Acknowledgement

Scene

- hemispheric_white_matter.vtk 0.30
- left_eyeball.vtk 1.00
- optic_chiasm.vtk 1.00
- optic_nerve_L.vtk 1.00
- optic_nerve_R.vtk 1.00
- optic_tract_L.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Data Probe

Conventional

- Conventional Widescreen
- Conventional Quantitative
- Four-Up
- Four-Up Quantitative
- Dual 3D
- Triple 3D
- 3D only
- One-Up Quantitative
- Red slice only
- Yellow slice only
- Green slice only
- Tabbed 3D
- Tabbed slice
- Compare
- Compare Widescreen
- Compare Grid
- Three over three
- Three Over Three Quantitative
- Four over four
- Two over Two

A R P

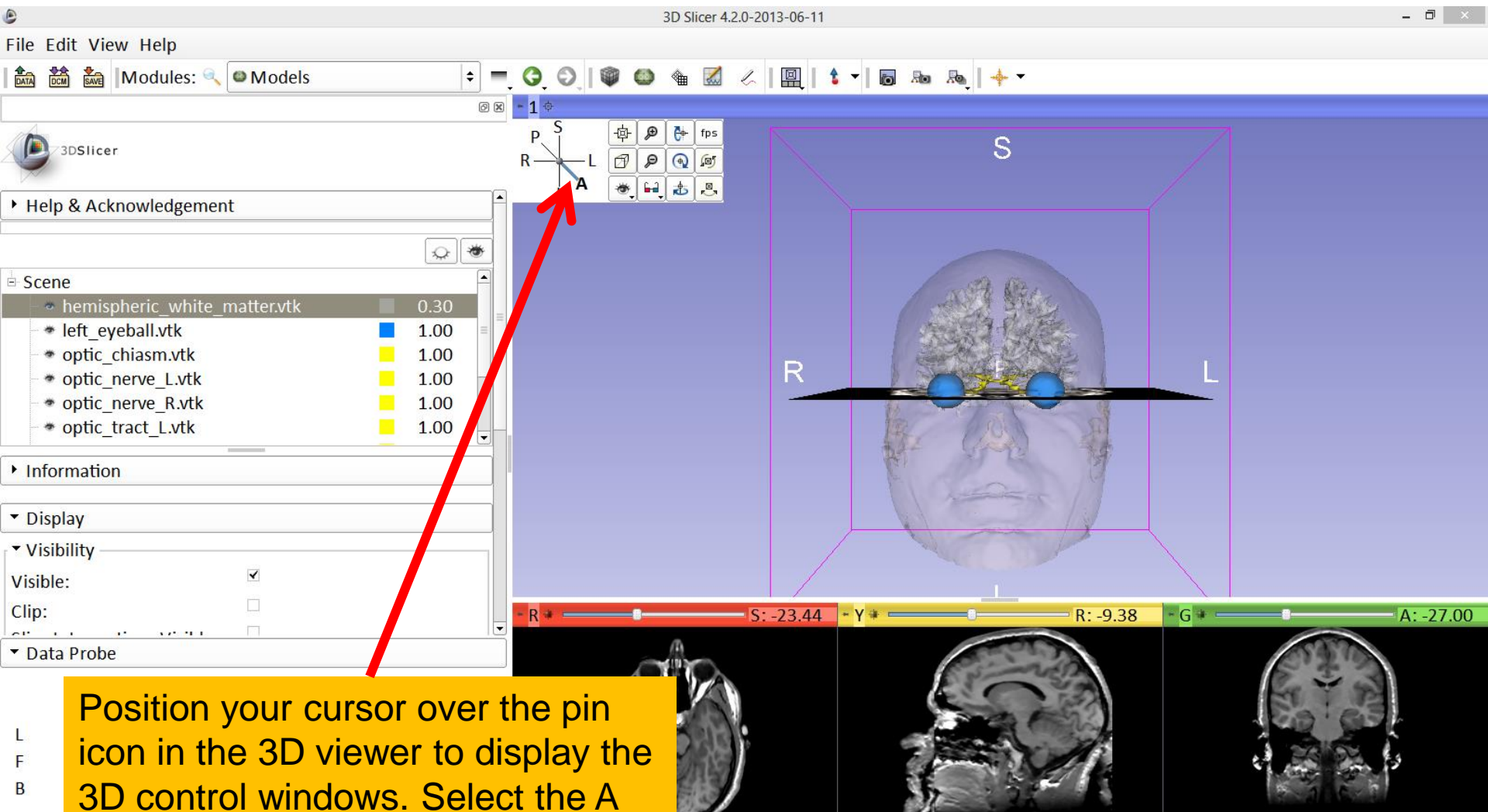
- R * S: -23.44

- Y * R: -9.38


- G * A: -27.00

Click on the layer manager icon and select Conventional

3D Visualization



Position your cursor over the pin icon in the 3D viewer to display the 3D control windows. Select the A (Anterior) view of the 3D models



```
hemispheric_white_matter.vtk  
left_eyeball.vtk  
optic_chiasm.vtk  
optic_nerve_L.vtk  
optic_nerve_R.vtk  
optic_tract_L.vtk  
optic_tract_R.vtk  
right_eyeball.vtk  
Skin.vtk  
skull_bone.vtk  
grayscale  
SceneViewToplevelHierarchyNode1  
Default Scene Camera1  
Default Scene Camera2  
Default Scene Camera3  
Default Scene Camera4  
Default Scene Camera5  
Default Scene Camera6  
Axial  
Sagittal  
Coronal  
Master Scene View  
Default Scene Camera7  
Default Scene Camera
```

Part 3:

Saving a scene

Saving a Scene

3D Slicer 4.2.0-2013-06-11

File Edit View Help

- Add Data Ctrl+A
- DICOM
- Download Sample Data
- Save Ctrl+S**
- Recently Loaded
- Close Scene Ctrl+W
- Exit

hemispheric_white_matter.vtk 0.30

- left_eyeball.vtk 1.00
- optic_chiasm.vtk 1.00
- optic_nerve_L.vtk 1.00
- optic_nerve_R.vtk 1.00
- optic_tract_L.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Data Probe

S

R L

R S: -23.44 Y R: -9.38 G A: -27.00

Click on File and select Save

Saving a Scene

The Save Scene and Unsaved Data window lists all the elements of the slicer scene.

File Name	File Format	Directory
<input checked="" type="checkbox"/> 3DHeadScene.mrml	MRML Scene (.mrml)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat
<input type="checkbox"/> MRHead.nrrd	NRRD (.nrrd)	C:/Users/flynnm3/AppData/Local/Temp/Slicer/RemoteIO
<input type="checkbox"/> hemispheric_white_matter.vtk.vtk	Poly Data (.vtk)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat
<input type="checkbox"/> left_eyeball.vtk.vtk	Poly Data (.vtk)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat
<input type="checkbox"/> optic_chiasm.vtk.vtk	Poly Data (.vtk)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat

Change directory for selected files [Save] [Cancel]

Scene

- hemispheric_wl
- left_eyeball.vtk
- optic_chiasm.vt
- optic_nerve_L.v
- optic_nerve_R.v
- optic_tract_L.vt

Information

Display

Visibility

Visible:

Clip:

Data Probe

L

F

B

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Models

3DSlicer

Help & Acknowledgement

Save Scene and Unsaved Data

Show options

R: -9.38 S: -23.44 Y: -27.00 A: -27.00

3D visualization of brain slices in axial, sagittal, and coronal views.

Saving a Scene

3D Slicer 4.2.0-2013-06-11

File Edit View Help

Modules: Models

3DSlicer

Help & Acknowledgement

Scene

- hemispheric_wl
- left_eyeball.vtk
- optic_chiasm.vtk
- optic_nerve_1.vtk
- optic_nerve_2.vtk
- optic_tract_L.vtk

Information

Display

Visibility

Visible:

Clip: S: -23.44 -Y R: -9.38 -G A: -27.00

3D visualization of a brain scan with a purple wireframe box and a 'S' label.

Save Scene and Unsaved Data

Show options

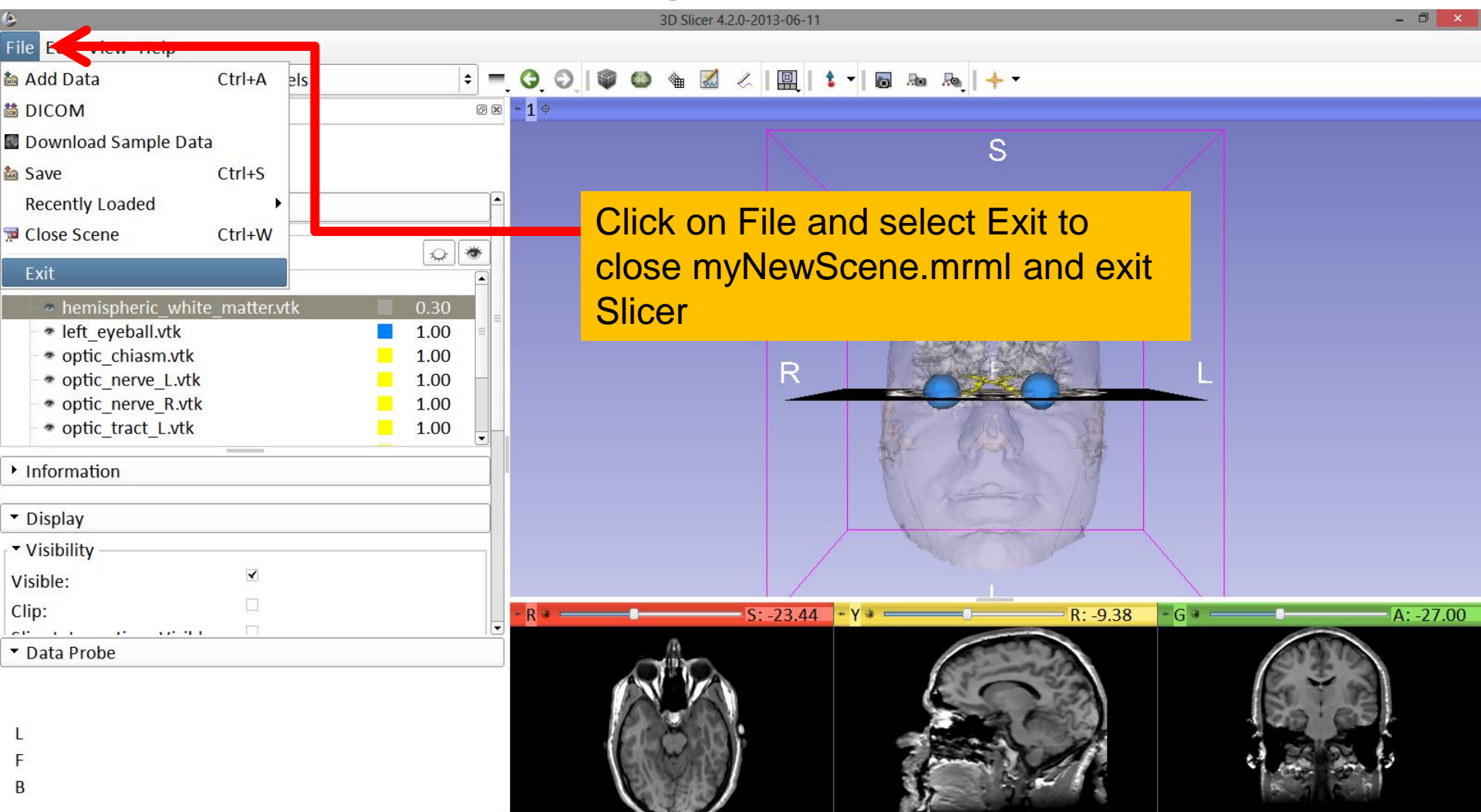
File Name	File Format	Directory
<input checked="" type="checkbox"/> myNewScene.mrml	MRML Scene (.mrml)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat
<input type="checkbox"/> MRHead.nrrd	NRRD (.nrrd)	C:/Users/flynnm3/AppData/Local/Temp/Slicer/RemoteIO
<input type="checkbox"/> hemispheric_white_matter.vtk.vtk	Poly Data (.vtk)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat
<input type="checkbox"/> left_eyeball.vtk.vtk	Poly Data (.vtk)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat
<input type="checkbox"/> optic_chiasm.vtk.vtk	Poly Data (.vtk)	C:/Users/flynnm3/Desktop/3DVisualizationData/3DHeadDat

Change directory for selected files

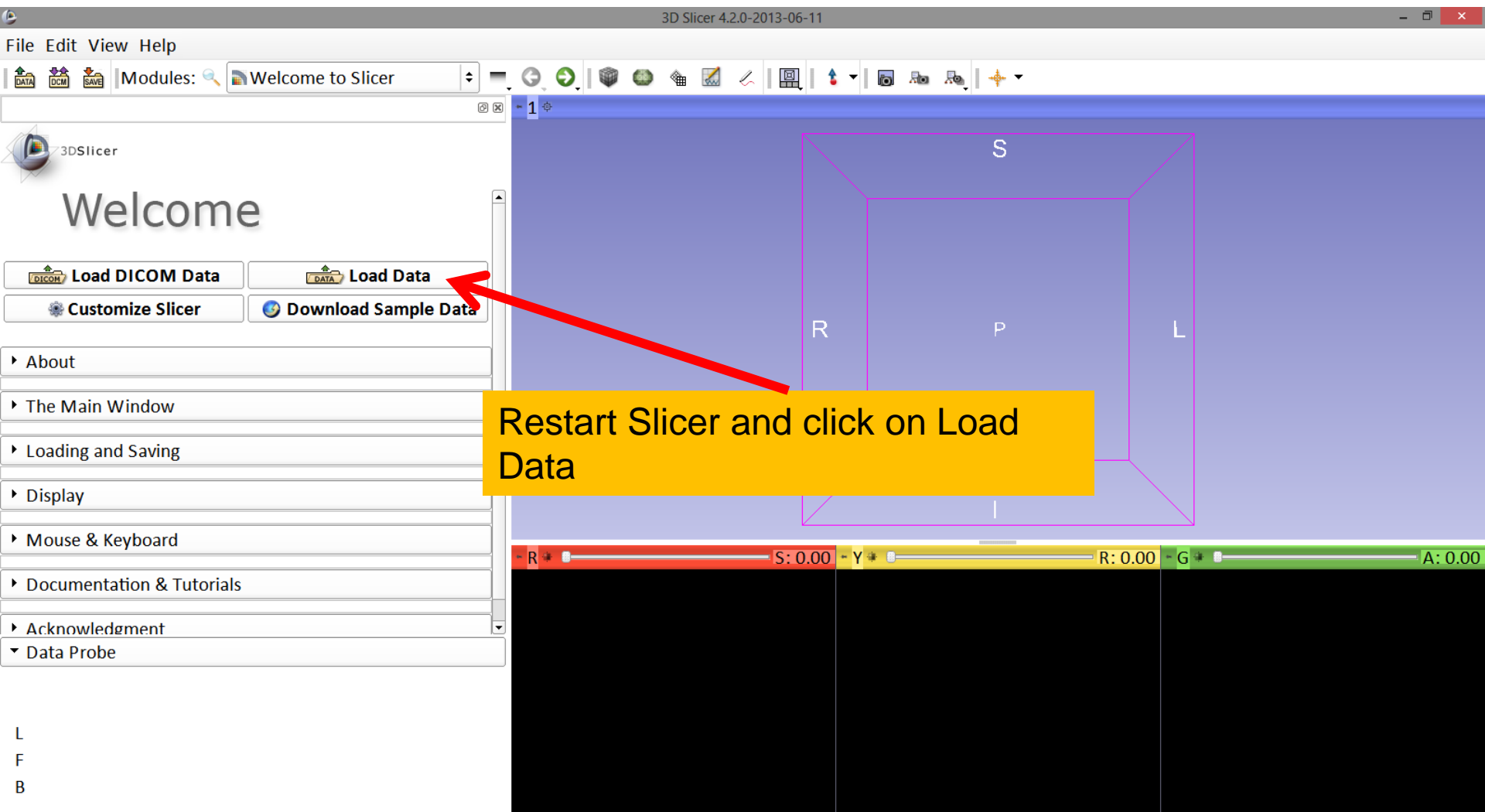
Save Cancel

Check off the box next to the scene named 3DHeadScene.mrml and double click on it to rename it myNewScene.mrml and select Save

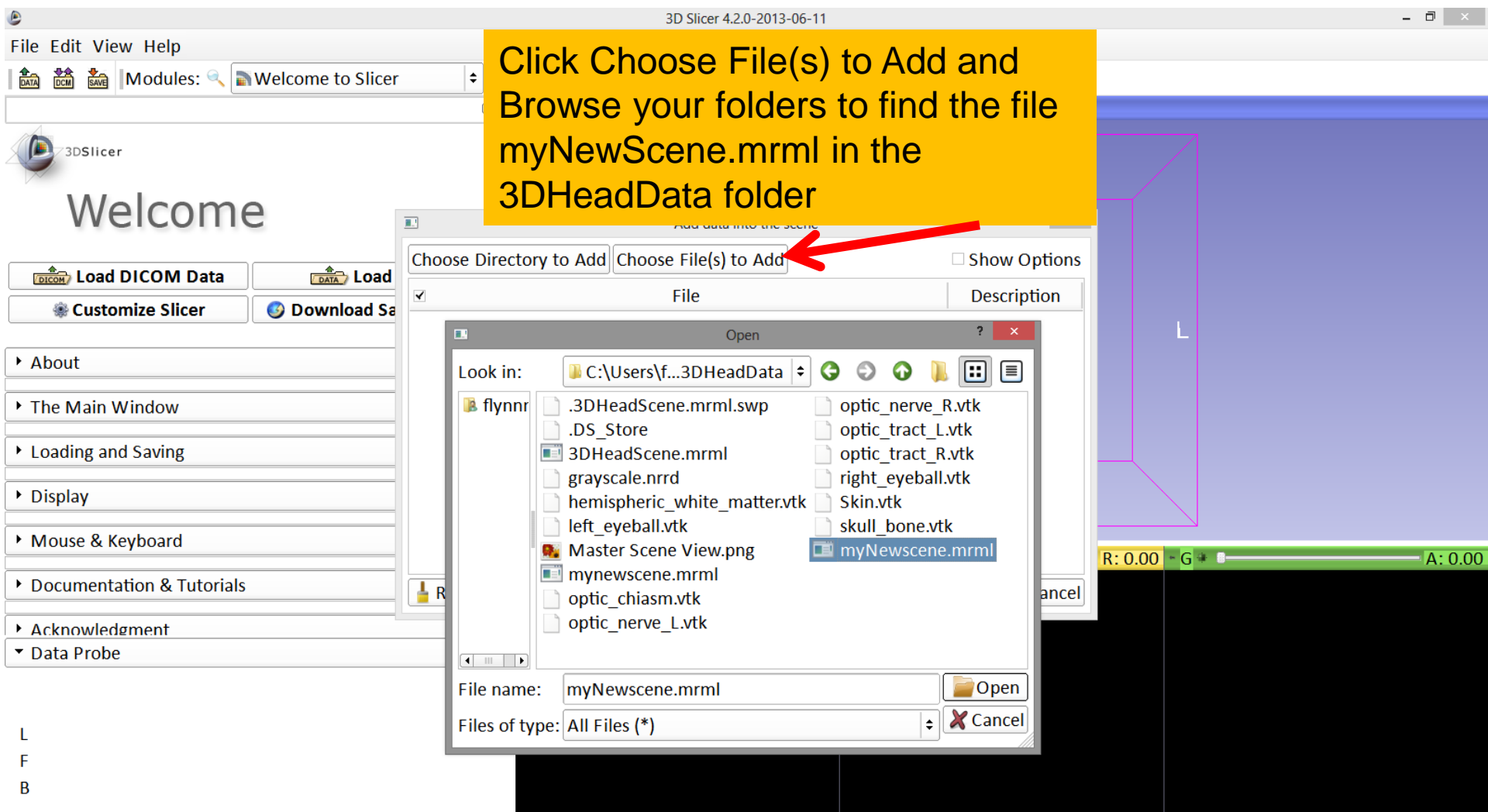
Saving a Scene



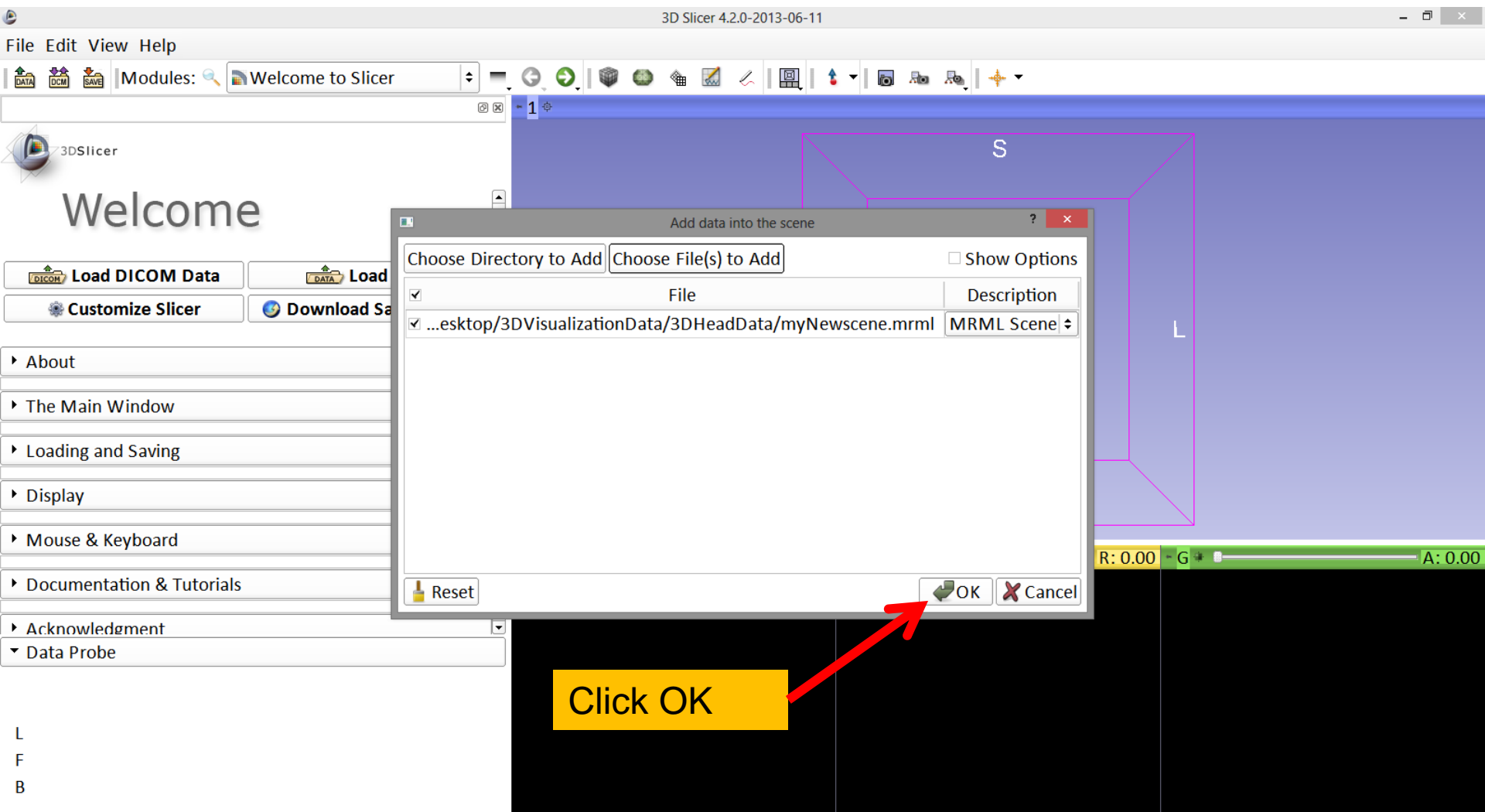
Scene Restore



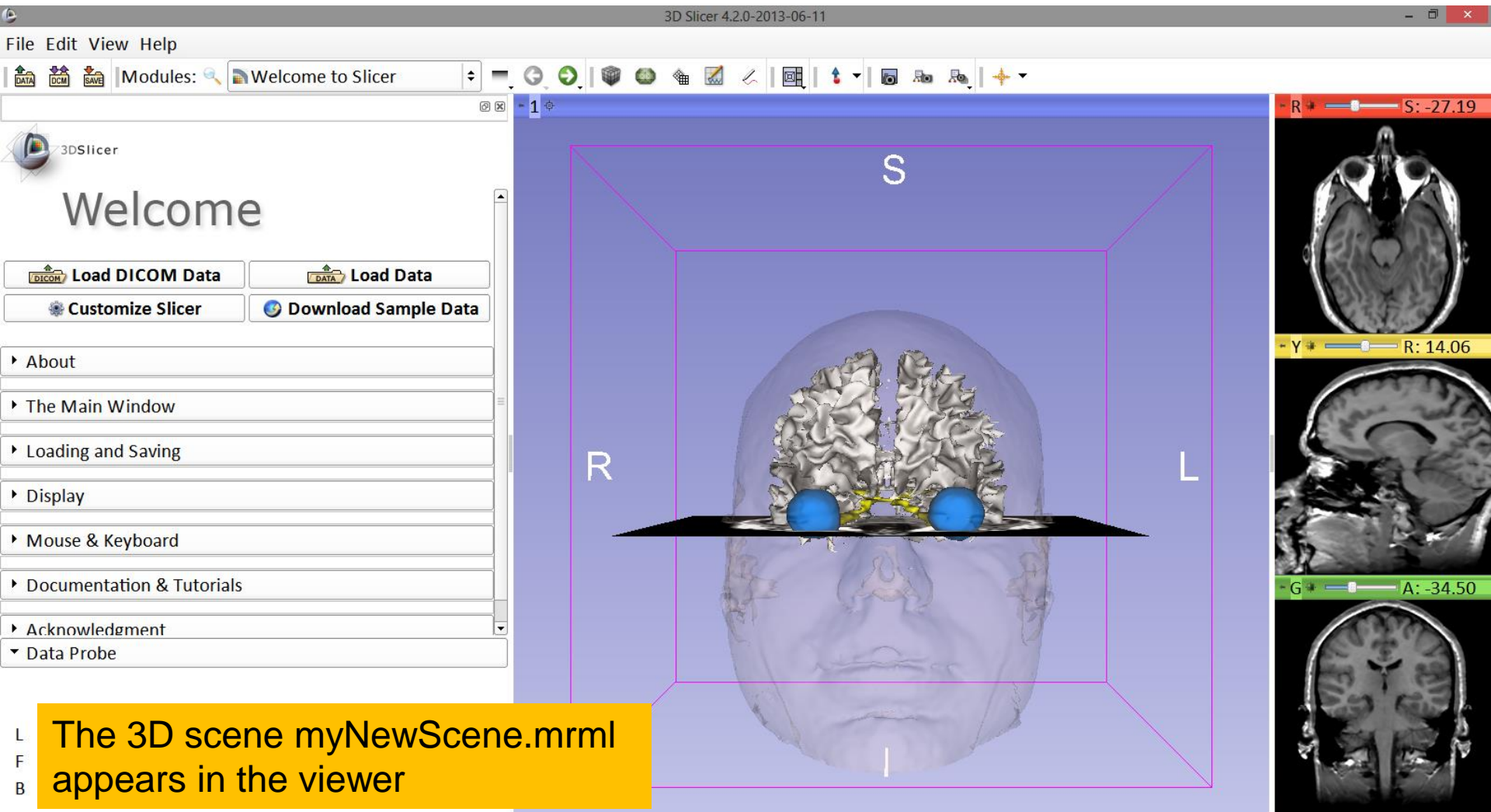
Scene Restore



Scene Restore



Slicer4



Acknowledgments



- National Alliance for Medical Image Computing (NA-MIC)
NIH U54EB005149



- Neuroimage Analysis Center (NAC)
NIH P41RR013218

Parth Amin WIT '16

Matthew Flynn WIT '16

