

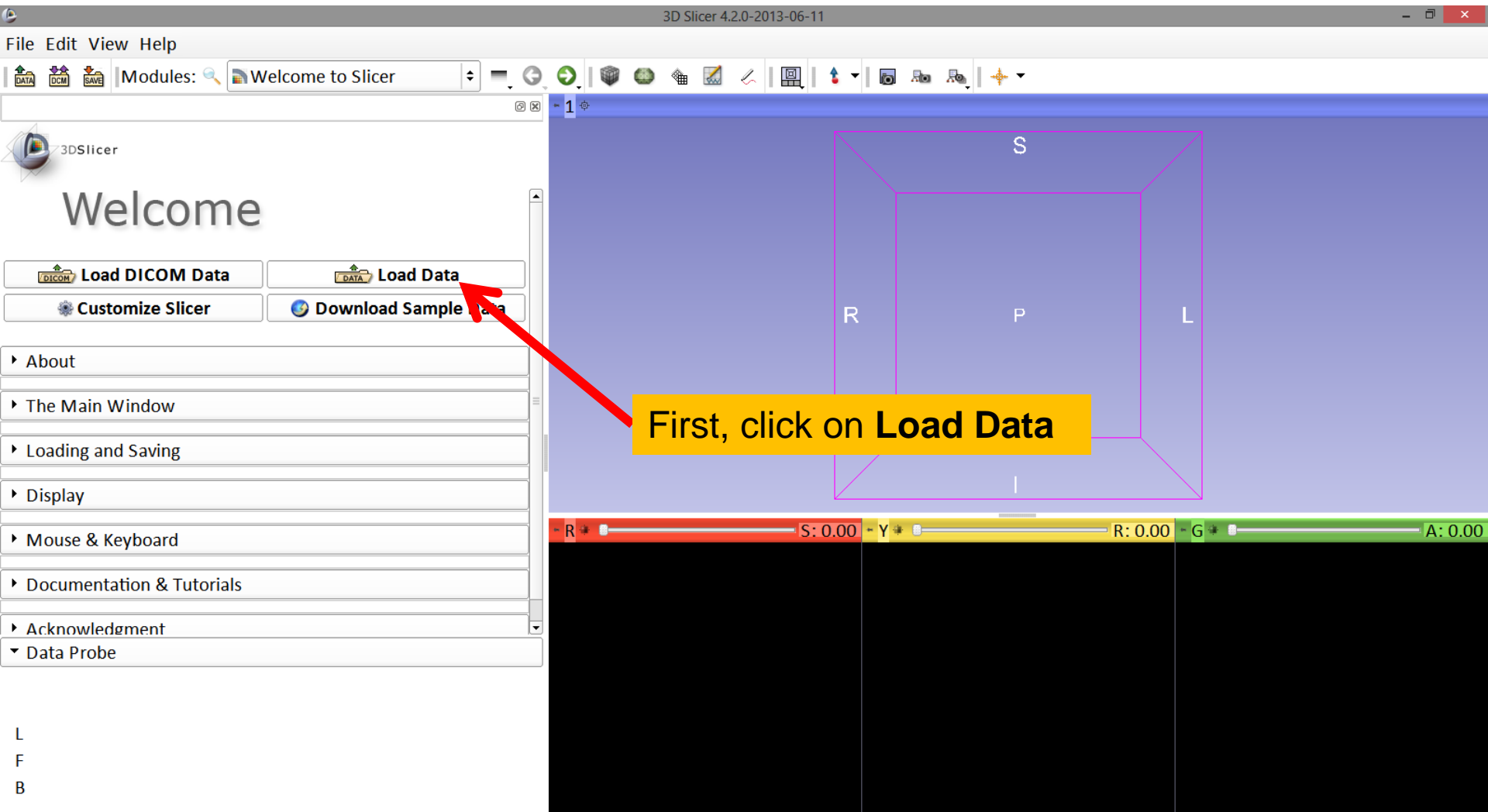


Slicer4Minute Tutorial

Sonia Pujol, Ph.D.

Surgical Planning Laboratory
Harvard University

Slicer4Minute Tutorial



Slicer4Minute Tutorial

3D Slicer 4.2.0-2013-07-08

File Edit View Help

Modules: Welcome to Slicer

3DSlicer

Welcome

Load DICOM Data Load Data

Customize Slicer Download Slicer

- 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

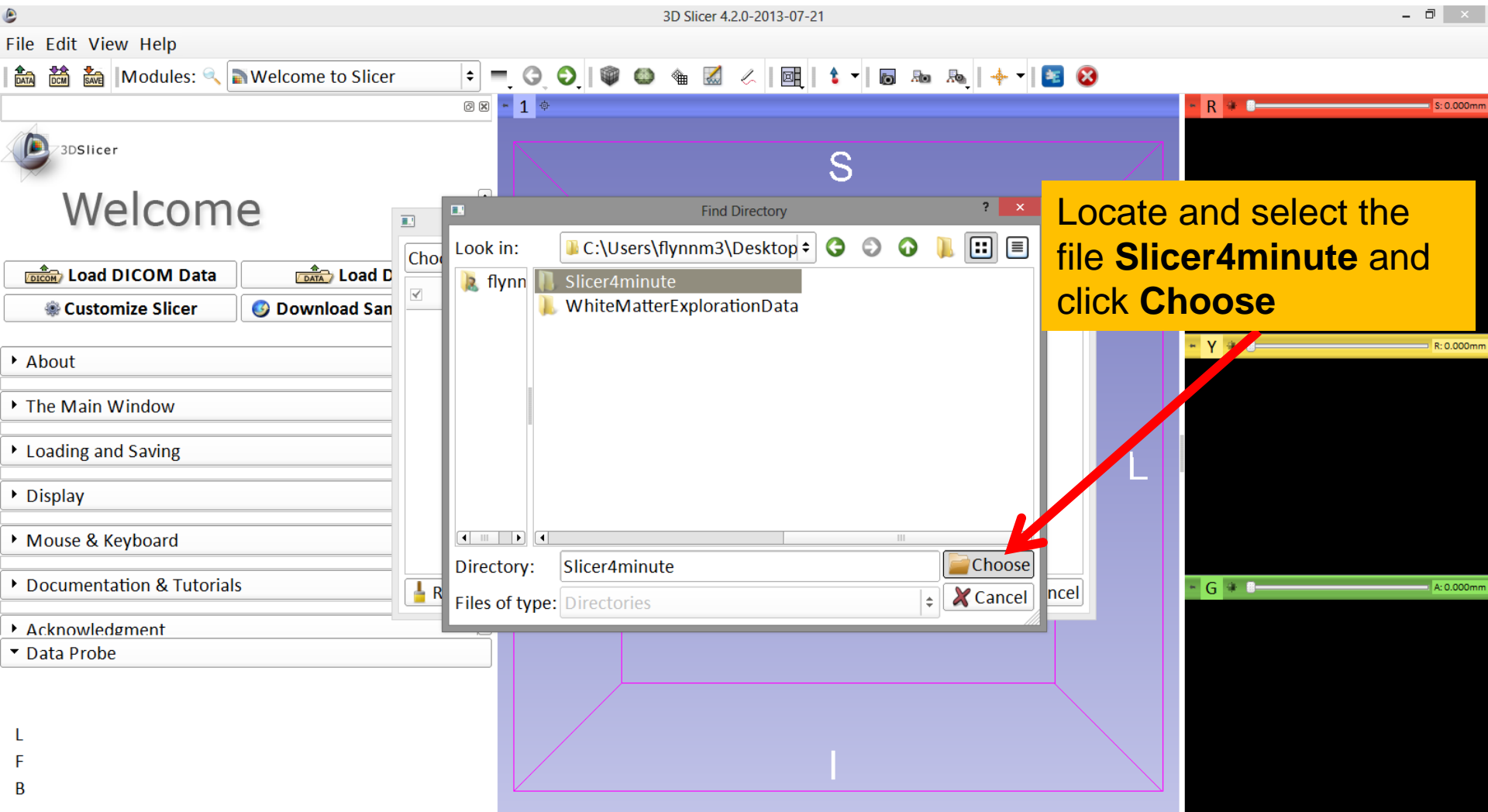
<input checked="" type="checkbox"/>	File	Description
-------------------------------------	------	-------------

Reset OK Cancel

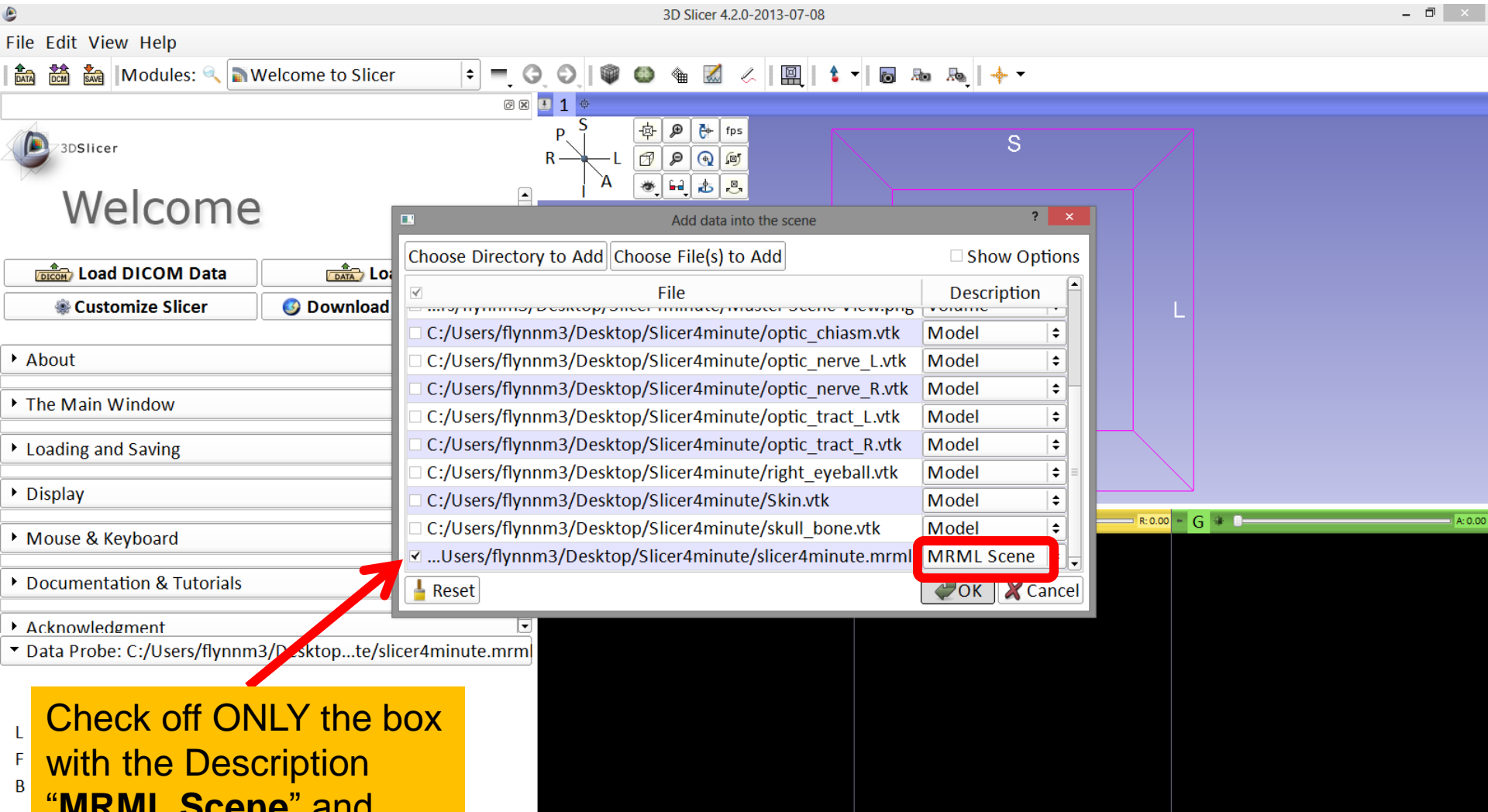
The "Add data into the scene" table appears. Click **Choose Directory to Add**

L
F
B

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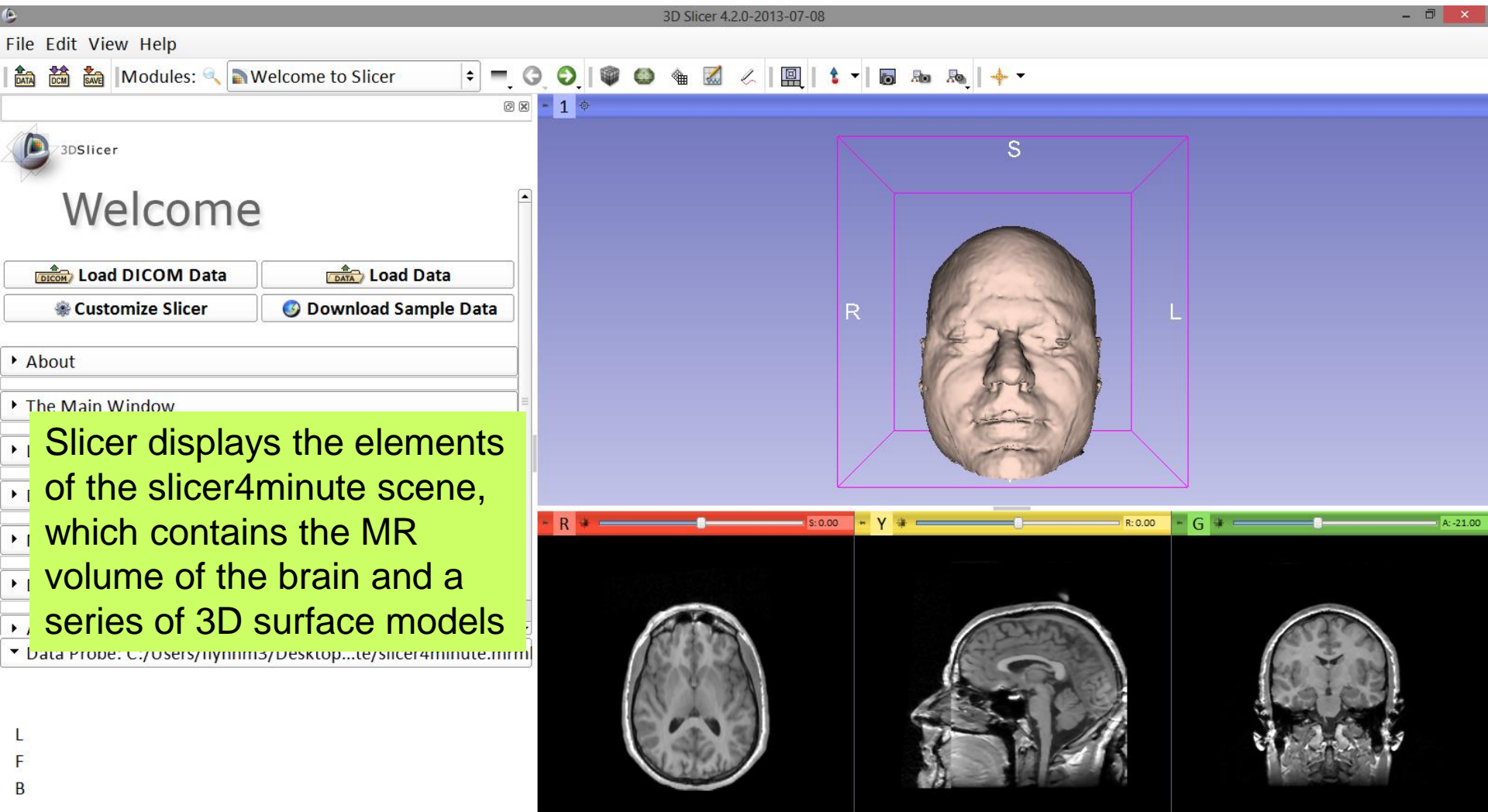


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Check off ONLY the box with the Description "MRML Scene" and click OK

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Welcome

Load DICOM Data Load Data

Customize Slicer Download Sample Data

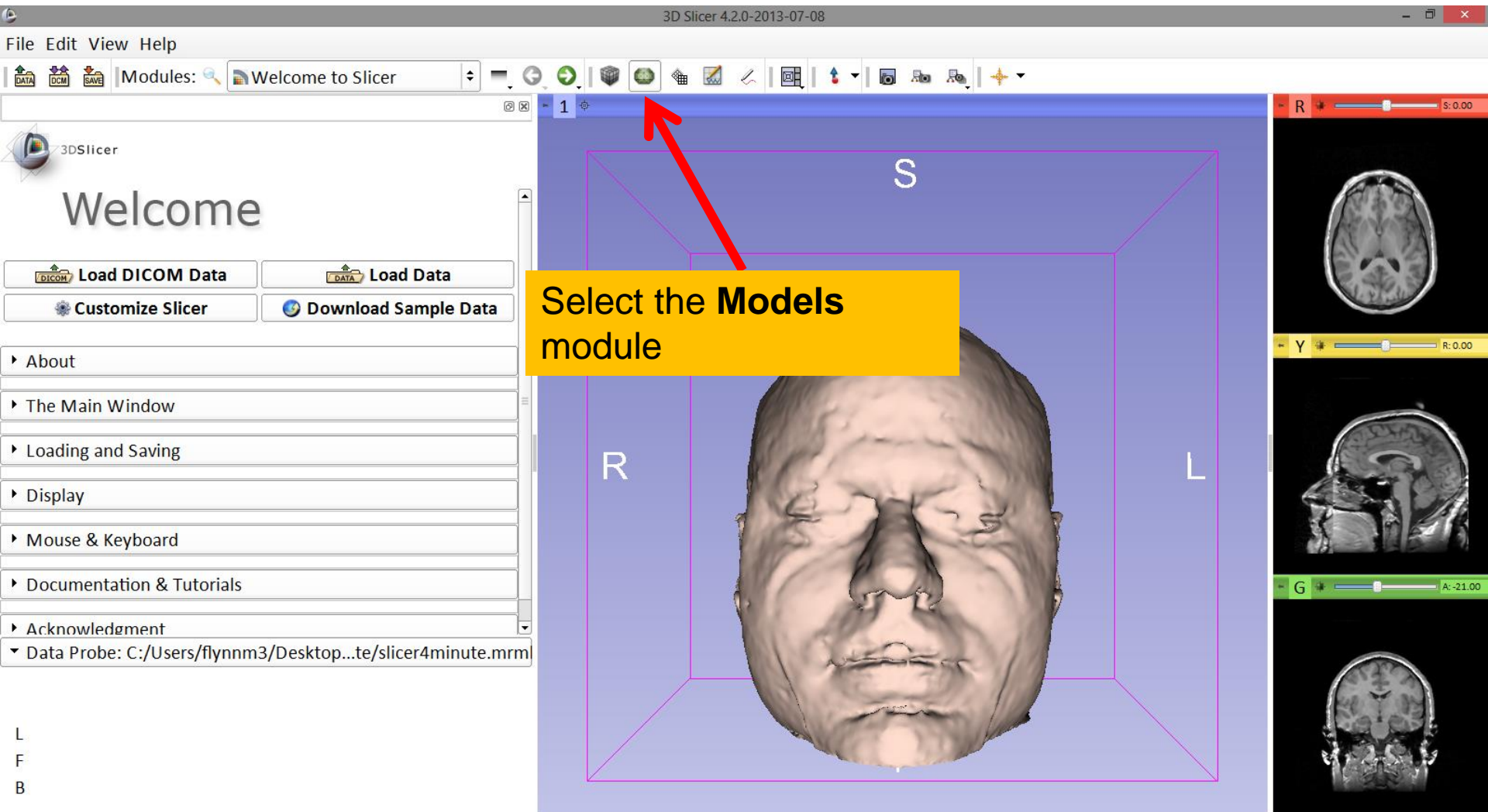
- About
- The Main Window
- Loading and Saving
- Display
- Mouse & Keyboard
- Doc
- Ack
- Data

Next, click the viewing mode menu and select the **Conventional Widescreen** option

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

R G A

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File Edit View Help

Modules: Models

3DSlicer

Help & Acknowledgement

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
- optic_tract_R.vtk 1.00
- right_eyeball.vtk 1.00
- Skin.vtk 1.00
- skull_bone.vtk 1.00

Information

Display

Data Probe: C:/Users/flynnm3/Desktop...te/slicer4minute.mrm

L
F
B

R L

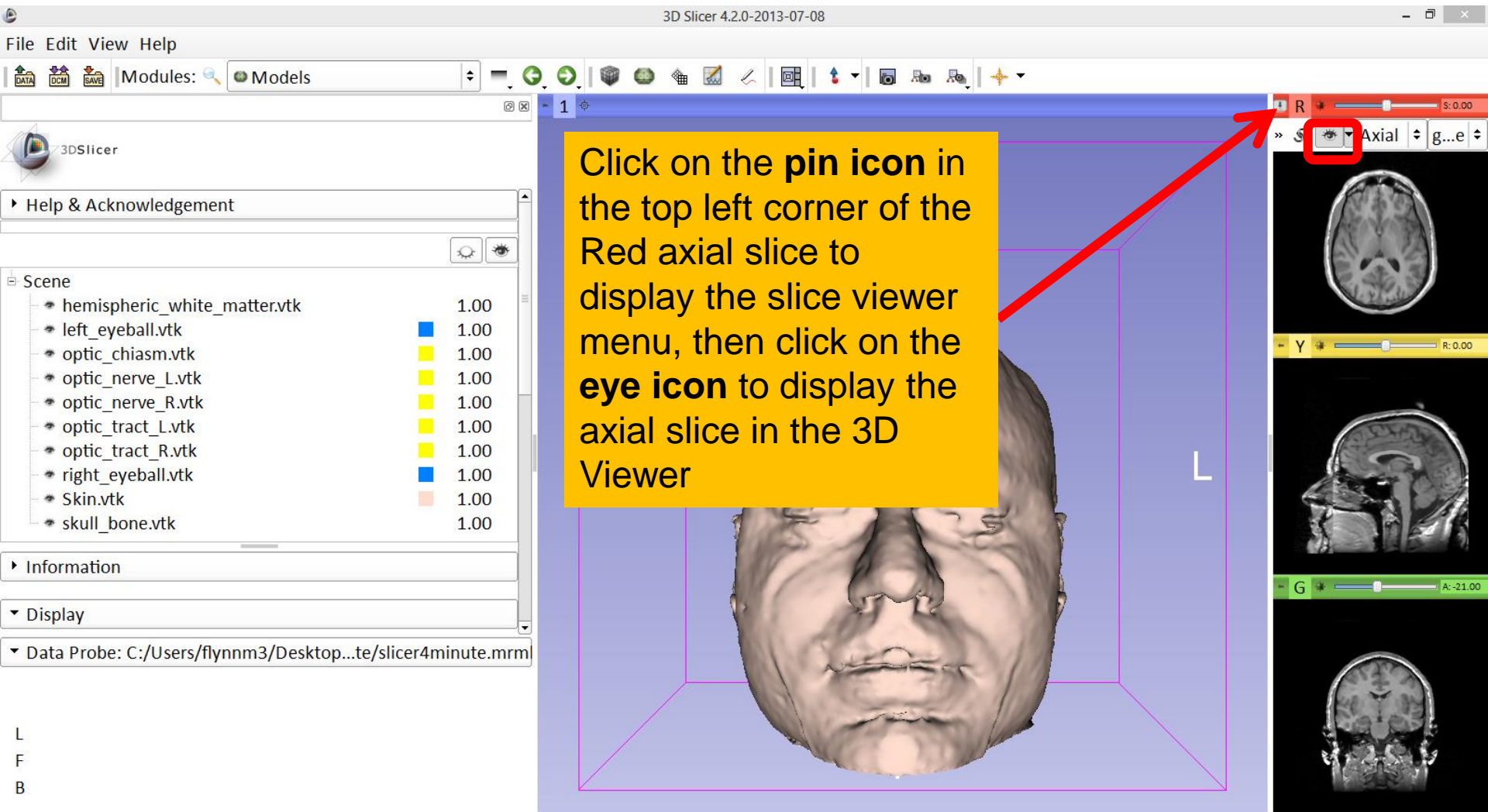
R S: 0.00

Y R: 0.00

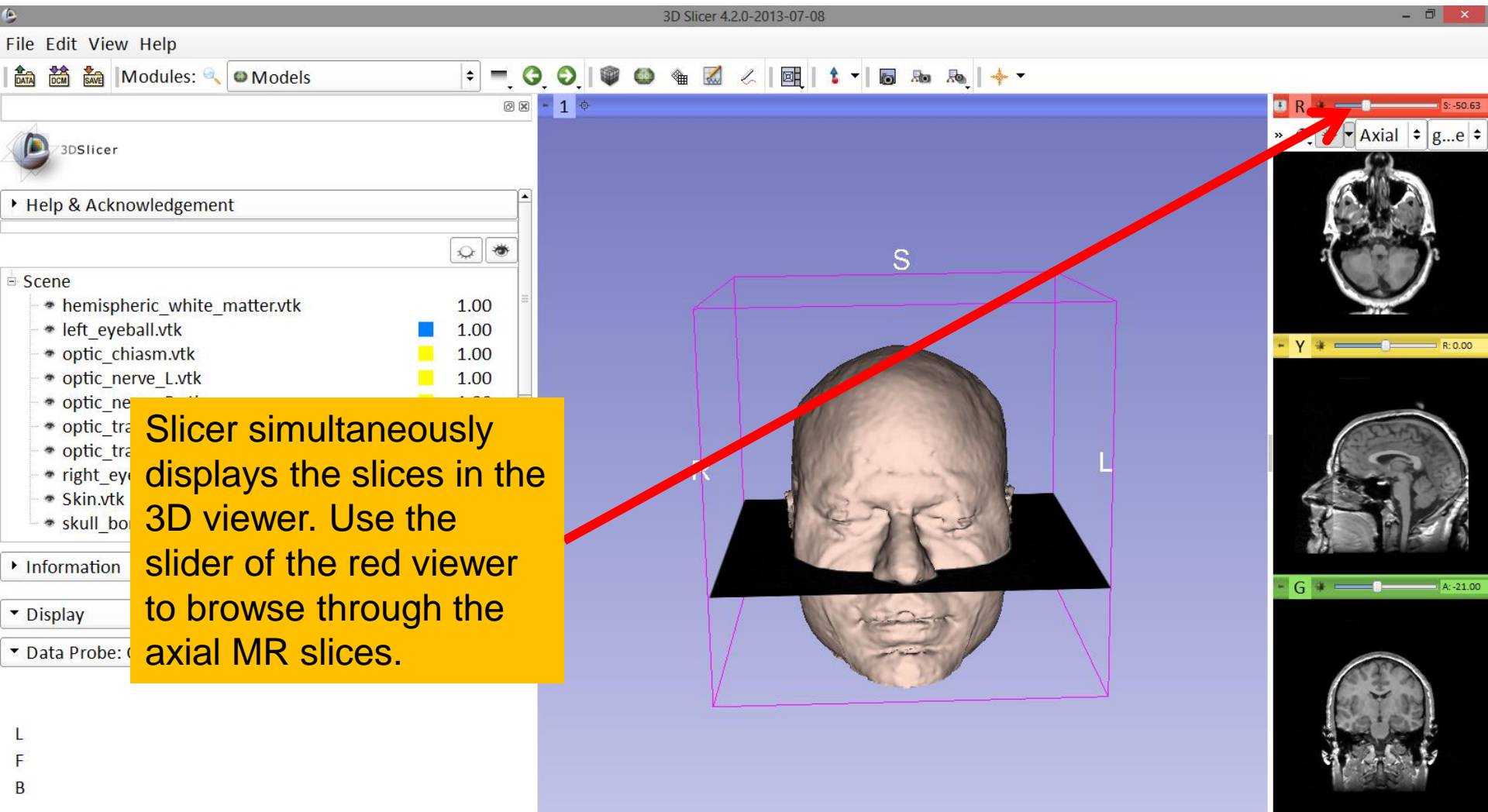
G A: -21.00

The **Models** module GUI displays the list of models loaded in the **slicer4minute** scene, their color, and the value of their opacity (between 0.0 and 1.0)

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File Edit View Help

Modules: Models

3DSlicer

Help & Acknowledgement

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
optic_tract_R.vtk	1.00
right_eyeball.vtk	1.00
Skin.vtk	1.00
skull_bone.vtk	1.00

Information

Display

Data Probe: C:/Users/flynnm3/Desktop...te/slicer4minute.mrm

L
F
B

Under the **Scene** tab, select the scene **Skin.vtk**, then click on the **Display** tab

R L

R S: -50.63

Axial g...e

Y R: 0.00

G A: -21.00

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File Edit View Help

Modules: Models

3DSlicer

SKULL_BONE.VTK 1.00

Information

Display

Visibility

Visible:

Clip:

Slice Intersections Visible:

Slice Intersections Thickness: 1 px

Representation

Color

Color: #ffddce

Opacity: 0.30

Edge Visibility:

Edge Color: #000000

Data Probe: C:/Users/flynnm3/Desktop...te/slicer4minute.mrm

R L

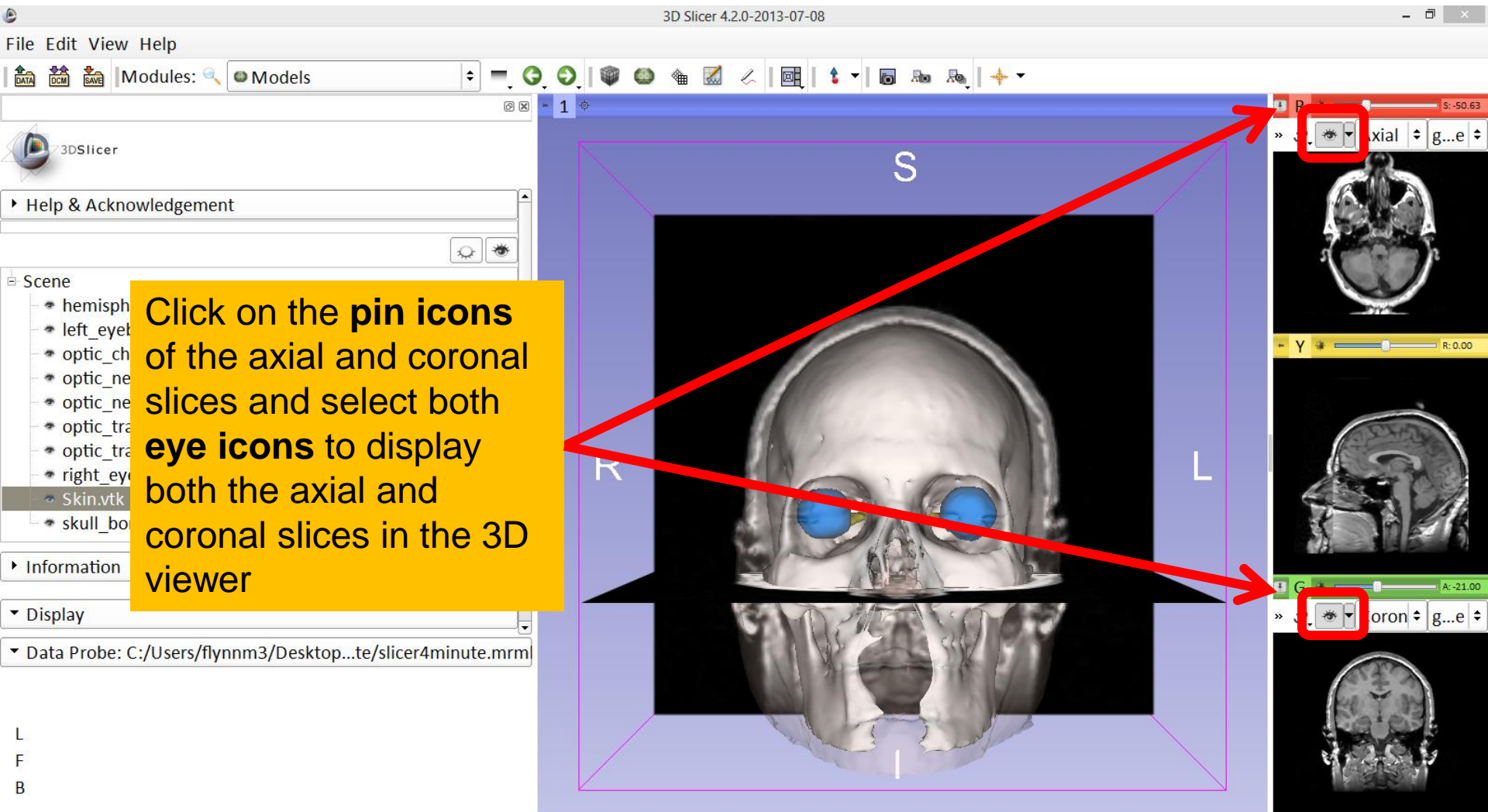
Y R: 0.00

G A: -21.00

L
F
B

Under the **Display** tab, locate the option **Opacity** and lower the opacity of **Skin.vtk**

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File Edit View Help

Modules: Models

3DSlicer

Help & Acknowledgement

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
optic_tract_R.vtk	1.00
right_eyeball.vtk	1.00
Skin.vtk	0.30
skull_bone.vtk	1.00

Information

Display

Data Probe: C:/Users/lynm3/Desktop...te/slicer4minute.mrm

S

R

L

Axial

Coron

G

Select the scene **skull_bone.vtk** and click on the **Display** tab

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The screenshot shows the 3D Slicer interface. The main 3D viewer displays a brain model with a white matter surface and optic nerves. A yellow callout box with black text points to the 'Visible' checkbox in the 'Display' tab of the 'skull_bone.vtk' model's properties. The callout text reads: "Under the **Display** tab, uncheck the option for **Visible**. The white matter surface, as well as the left and right optic nerves, appear in the 3D viewer".

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File Edit View Help

Modules: Models

3DSlicer

- optic_chnasm.vtk 1.00
- 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 0.30
- skull_bone.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Slice Intersections Visible:

Slice Intersections Thickness: 1 px

Data Probe: C:/Users/flynnm3/Desktop...te/slicer4minute.mrm

L
F
B

S
R
A

Under the **Display** tab, uncheck the option for **Visible**. The white matter surface, as well as the left and right optic nerves, appear in the 3D viewer

Slicer4Minute Tutorial

The screenshot shows the 3D Slicer interface. The main 3D view displays a brain model with a yellow box highlighting the 'Clip' option in the Display tab. A red arrow points from the yellow box to the 'Clip' checkbox. The 'Clip' checkbox is checked, and the 'Slice Intersections Visible' checkbox is unchecked. The 'Scene' list on the left shows the following items:

Scene	Color	Value
hemispheric_white_matter.vtk	Grey	1.00
left_eyeball.vtk	Blue	1.00
optic_chiasm.vtk	Yellow	1.00
optic_nerve_L.vtk	Yellow	1.00
optic_nerve_R.vtk	Yellow	1.00

The 3D view shows a brain model with a yellow box highlighting the 'Clip' option in the Display tab. The box contains the text: "Select the scene **hemispheric_white_matter.vtk**, and under the **Display** tab check the option **Clip**".

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3D Slicer 4.2.0-2013-07-08

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

Clipping Type: Union Intersection

Red Slice Clipping: Positive Negative

Yellow Slice Clipping: Positive Negative

Green Slice Clipping: Positive Negative

Data Probe: C:/Users/flynnm3/Desktop...te/slicer4minute.mrm

L
F
B

S
R
P
A

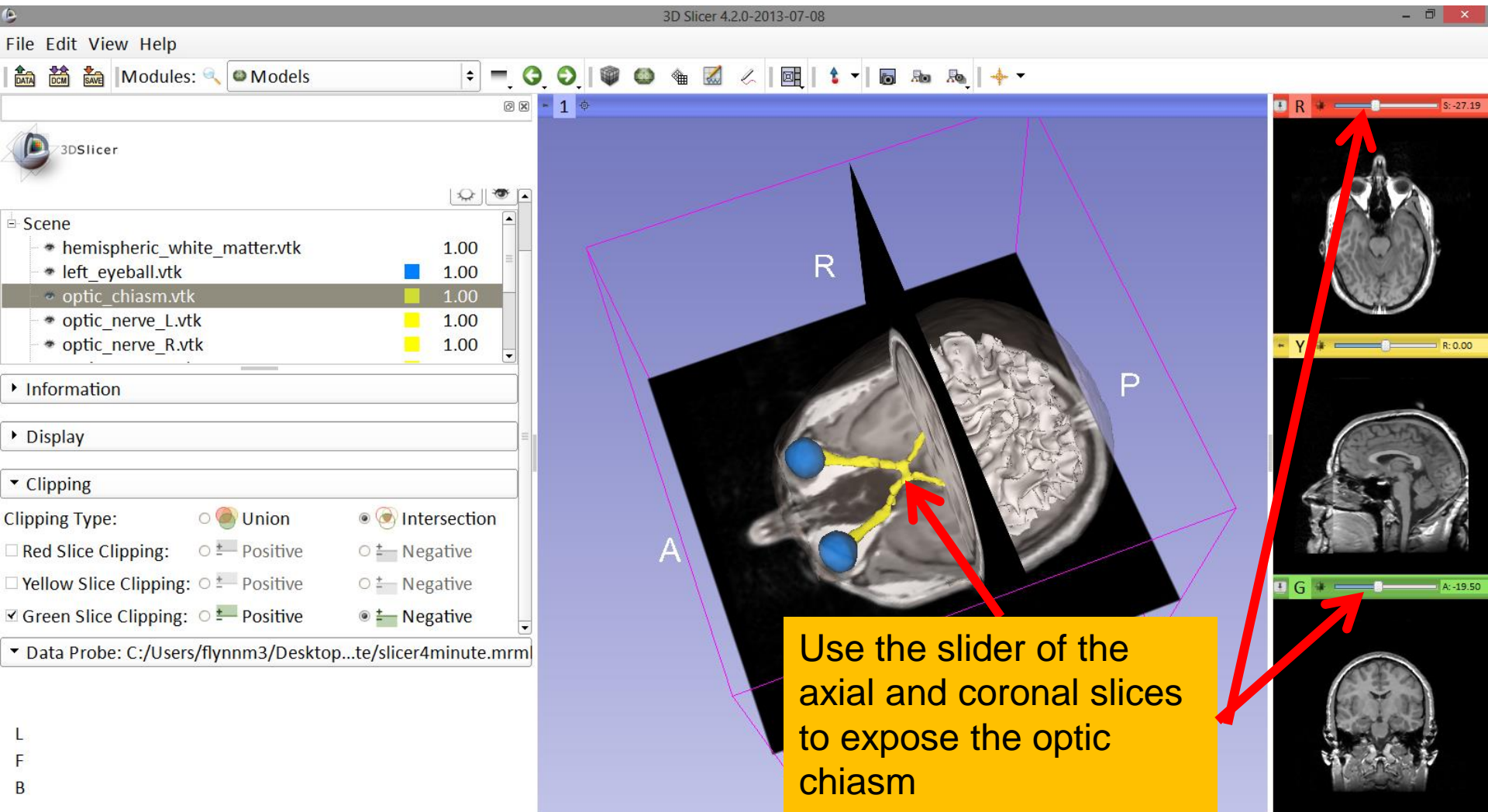
R S-50.63

Y R:0.00

A: -21.00

Scroll down the **Models** module and select the tab **Clipping**, and check off the options for **Green Slice Clipping** in the **Negative** space

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The screenshot shows the 3D Slicer interface. On the left, the 'Models' panel lists 'Skin.vtk' with an opacity of 0.50. The 'Display' tab is active, and the 'Opacity' slider is highlighted with a red box. A red arrow points from this slider to a yellow callout box. The callout box contains the text: 'Select the scene Skin.vtk again, and under the Display tab slightly increase the opacity'. The main 3D view shows a brain model with a yellow callout box and a red arrow pointing to the opacity slider. The callout box contains the text: 'Select the scene Skin.vtk again, and under the Display tab slightly increase the opacity'. The right side of the interface shows three orthogonal views: Axial, Sagittal, and Coronal. The 'Opacity' slider is set to 0.50.

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File Edit View Help

Modules: Models

3DSlicer

- right_eye.vtk 1.00
- Skin.vtk 0.50
- skull_bone.vtk 1.00

Information

Display

Visibility

Visible:

Clip:

Slice Intersections Visible:

Slice Intersections Thickness: 1 px

Representation

Color

Opacity: 0.50

Data Probe: C:/Users/flynnm3/Desktop...te/slicer4minute.mrm

L

F

B

Select the scene **Skin.vtk** again, and under the **Display** tab slightly increase the opacity

Axial g...e

Coron g...e

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File Edit View Help

Modules: Models

3DSlicer

Help & Acknowledgement

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

Information

Display

Clipping

Data Probe: C:/Users/.../Desktop/.../Slicer4MinuteTutorial/...

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

P

R

Axial

Y

R: 0.00

G

A: -19.50

Coron

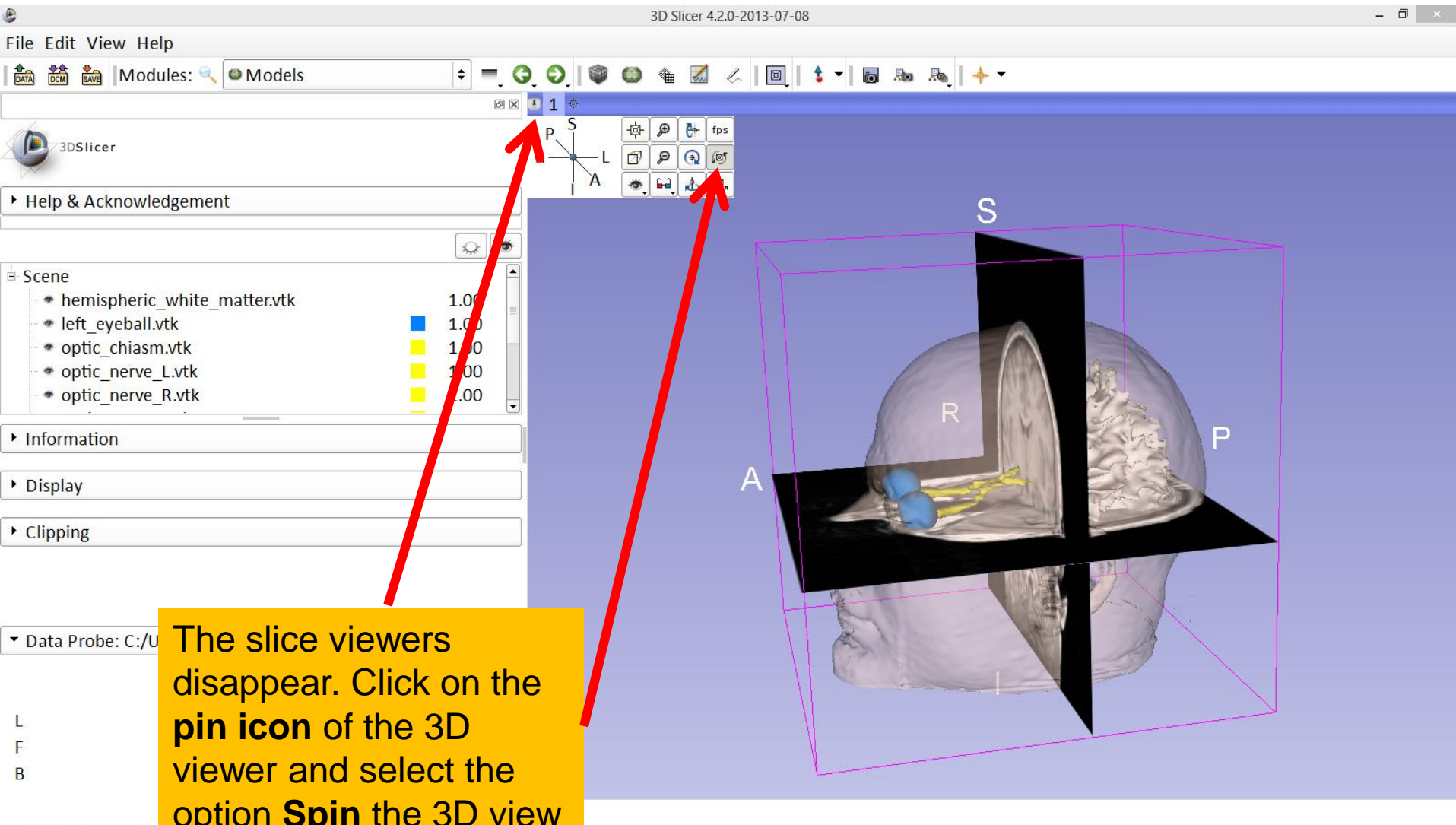
L

F

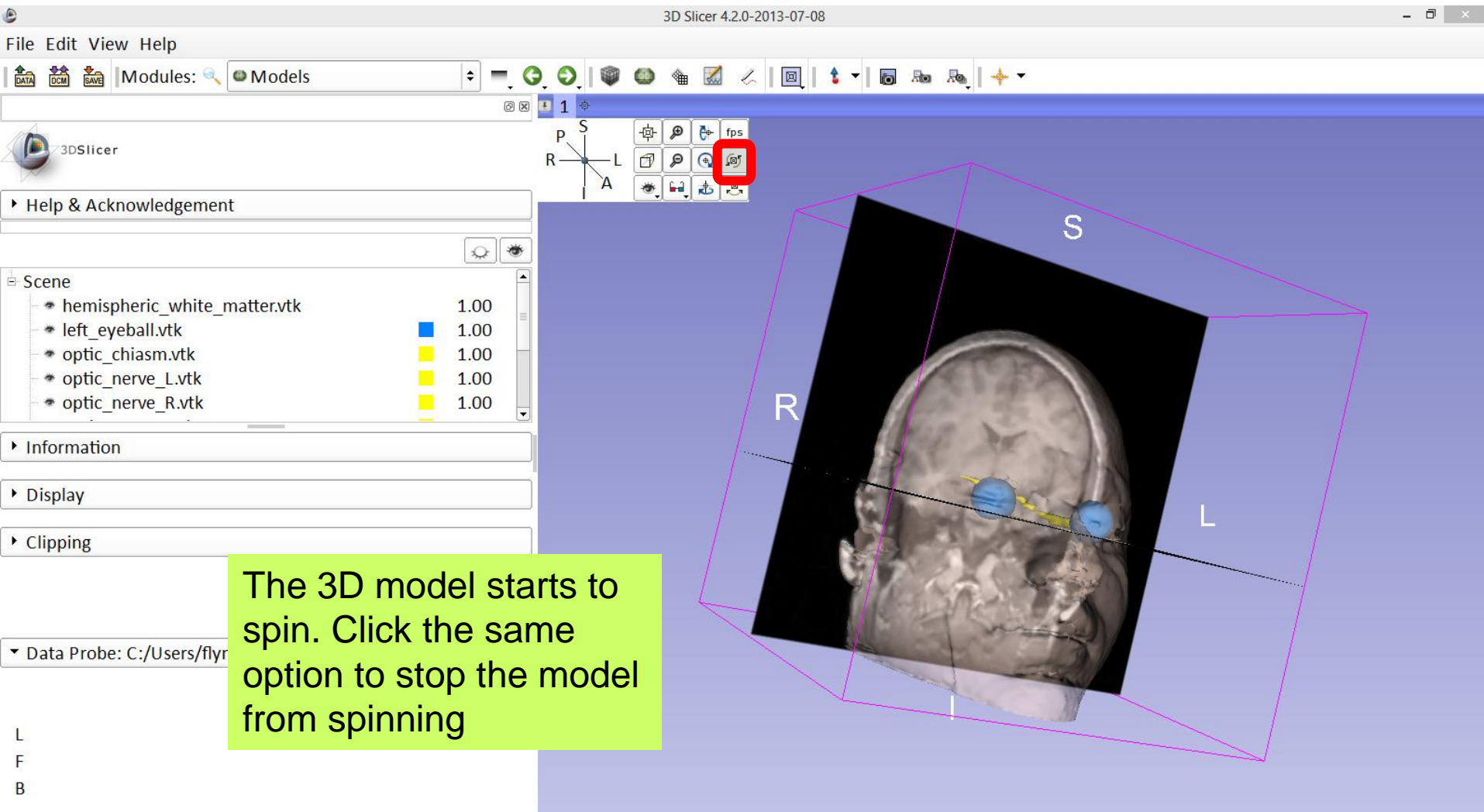
B

Click on the viewing mode menu and select the **3D only** view

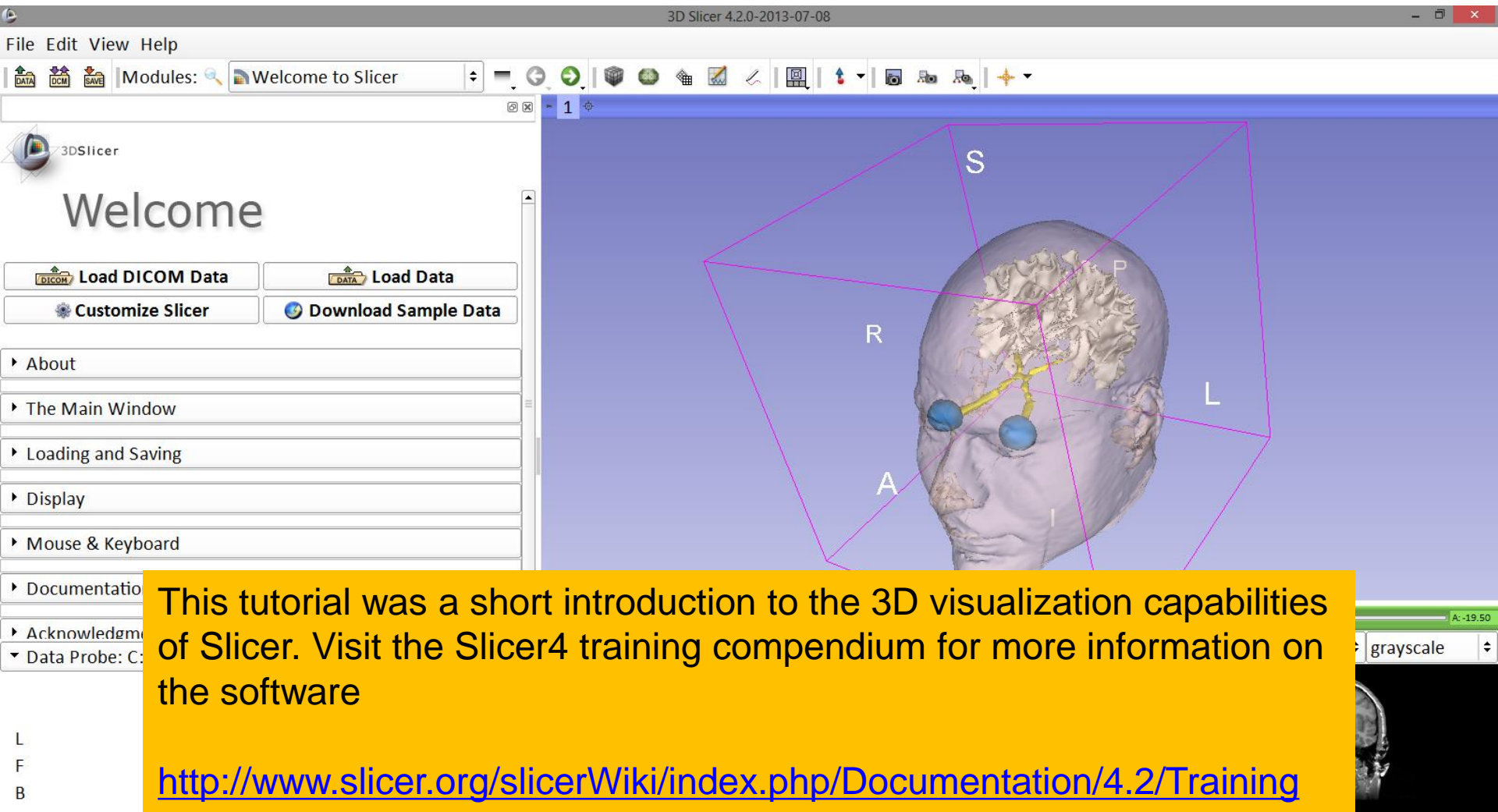
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