

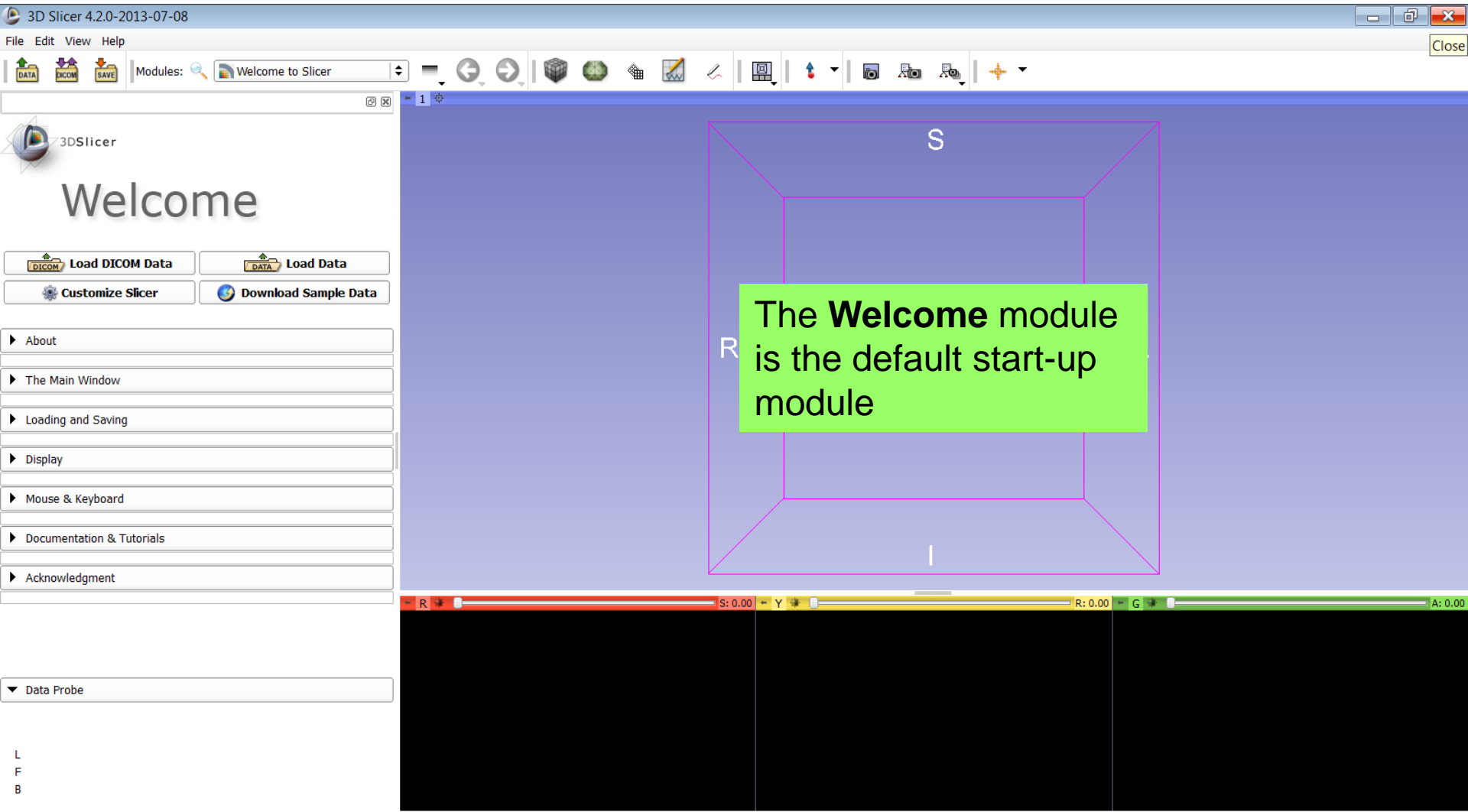


SlicerWelcome Tutorial

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3DSlicer Version 4.2



3DSlicer Version 4.2

The screenshot shows the 3D Slicer 4.2.0-2013-07-08 interface. The title bar reads "3D Slicer 4.2.0-2013-07-08". The menu bar includes "File", "Edit", "View", and "Help". The toolbar contains various icons for data loading, saving, and navigation. The main window displays the "Welcome" module. A green callout box with black text is overlaid on the interface, stating: "Each module of Slicer includes a series of tabs, which gives access to different functionalities" and "Click on the arrow symbol to display the content of each tab". A red arrow points from the top-left corner of the green box to the "About" tab in the left sidebar. The sidebar lists several tabs: "About", "The Main Window", "Loading and Saving", "Display", "Mouse & Keyboard", and "Data Probe". The "About" tab is currently selected, showing introductory text about 3D Slicer. The main 3D view area is currently empty, with a purple wireframe box visible. At the bottom, there are sliders for "R", "Y", "G", and "A" with values of 0.00.

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 Sample Data

About

3D Slicer is a free open source software platform for medical image processing and 3D visualization of image data. This module contains some basic information and useful links to get you started using Slicer. For more information, please visit our website <http://www.slicer.org>.

3D Slicer is distributed under a BSD-style license; for details about the contribution and software license agreement, please see the [3D Slicer Software License Agreement](#). This software has been designed for research purposes only and has not been reviewed or approved by the Food and Drug Administration, or by any other agency.

The Main Window

Loading and Saving

Display

Mouse & Keyboard

Data Probe

L R: 0.00 Y: 0.00 G: 0.00 A: 0.00

L
F
B

3DSlicer Version 4.2

The screenshot shows the 3D Slicer 4.2.0-2013-07-08 interface. The main window is a large 3D viewer with a blue background and a purple wireframe box. The sidebar on the left contains several sections: 'Load DICOM Data', 'Load Data', 'Customize Slicer', 'Download Sample Data', 'About', and 'The Main Window'. A red arrow points from the 'The Main Window' section to a green text box. Below the 'The Main Window' section is a diagram of the UI layout with labels: File Menu, GUI Panel, Data Probe, Toolbar, 3D Viewer, Slice Viewers, and Message Bar. Below the diagram is a list of components and their descriptions: File Menu, Toolbar, GUI Panel, and Data Probe. At the bottom of the sidebar, there are axes labels: L, F, B.

3D Slicer 4.2.0-2013-07-08

File Edit View Help

Modules: Welcome to Slicer

3DSlicer

Load DICOM Data Load Data

Customize Slicer Download Sample Data

About

The Main Window

File Menu GUI Panel Data Probe Toolbar 3D Viewer Slice Viewers Message Bar

The basic organization of Slicer's user interface (UI) is shown above. This module's content will reference these following components, labeled in the figure:

File Menu:
Contains basic load and save functionality, access to application settings, Tcl and Python interfaces for developers, help and mechanisms for users to provide feedback.

Toolbar:
Contains tools for selecting and navigating among Slicer modules, layout and other utilities.

GUI Panel:
Contains a UI for any selected module.

Data Probe

L
F
B

S

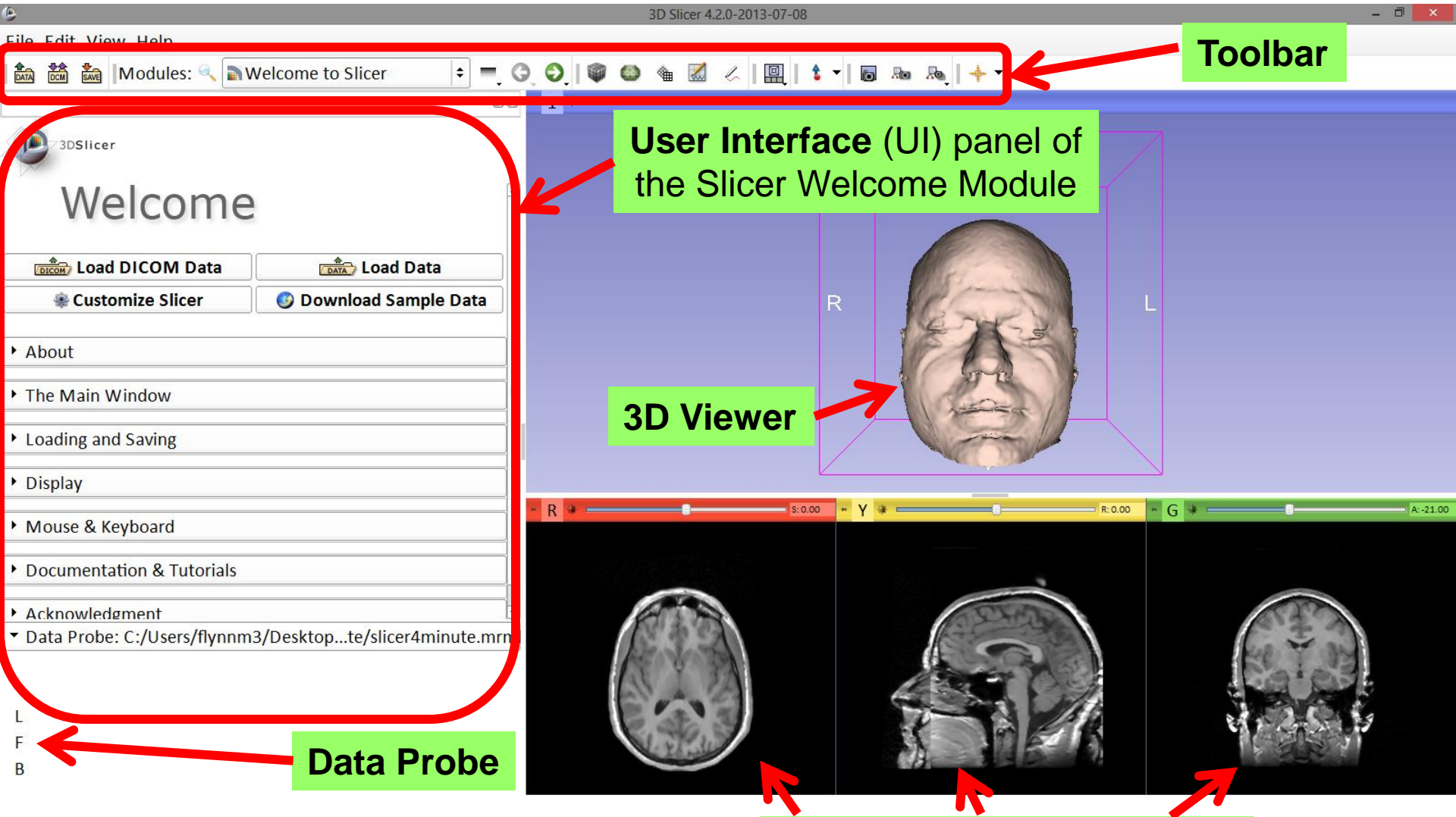
I

R: 0.00 Y: 0.00 R: 0.00 G: 0.00 A: 0.00

The Main Window tab contains information on the basic organization of Slicer's user interface

Scroll down to see all the contents

Slicer User Interface



Toolbar

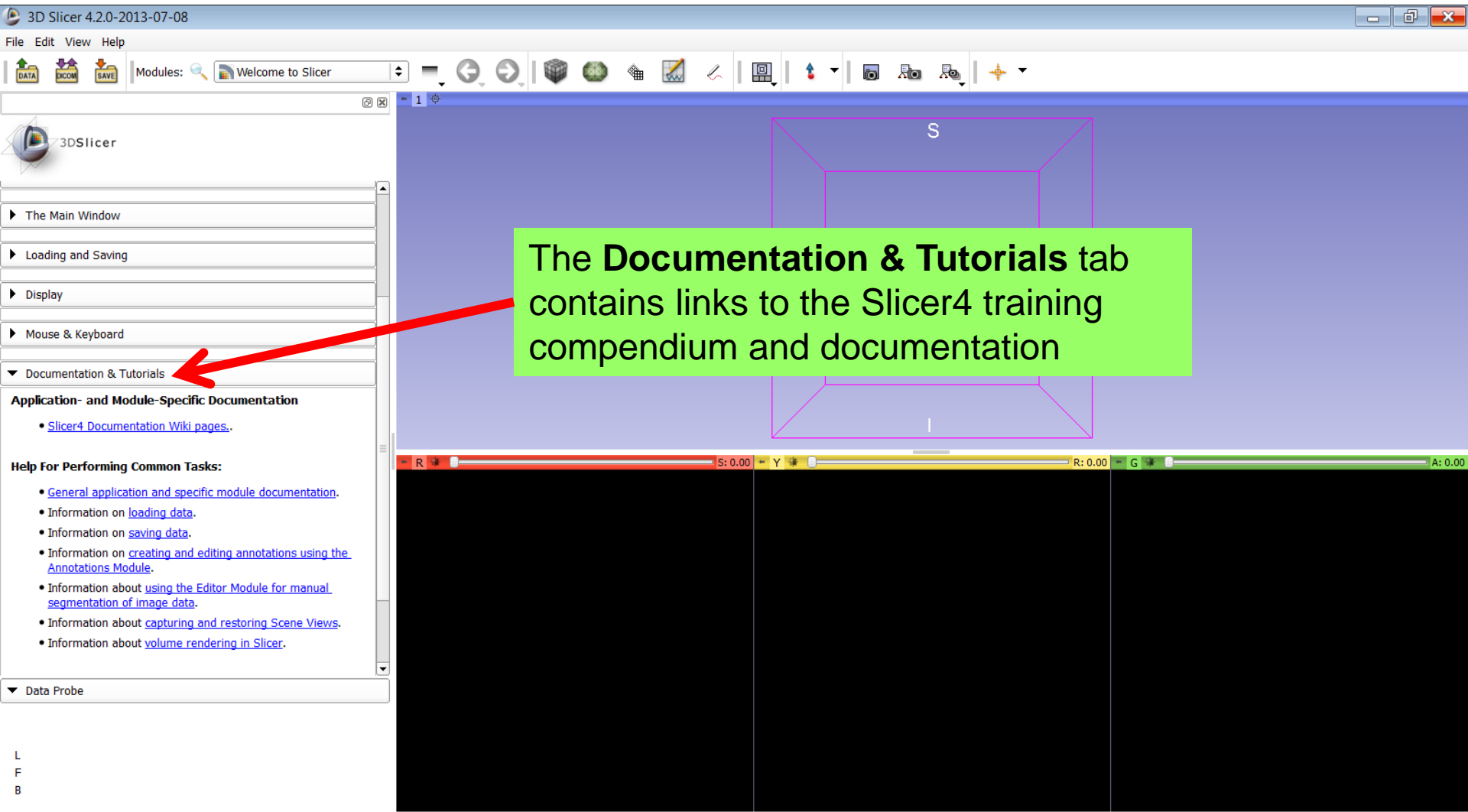
User Interface (UI) panel of the Slicer Welcome Module

3D Viewer

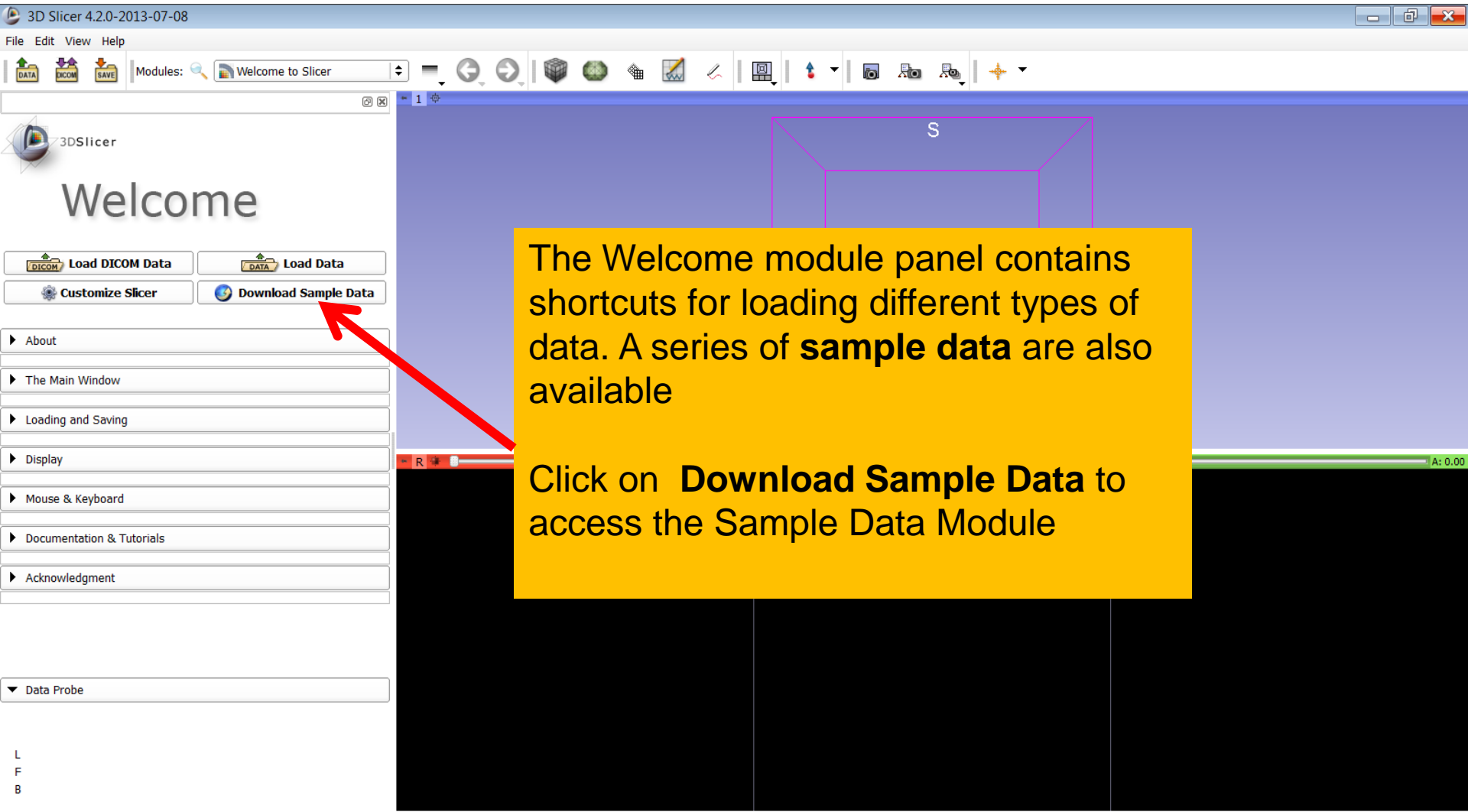
Data Probe

2D anatomical viewers

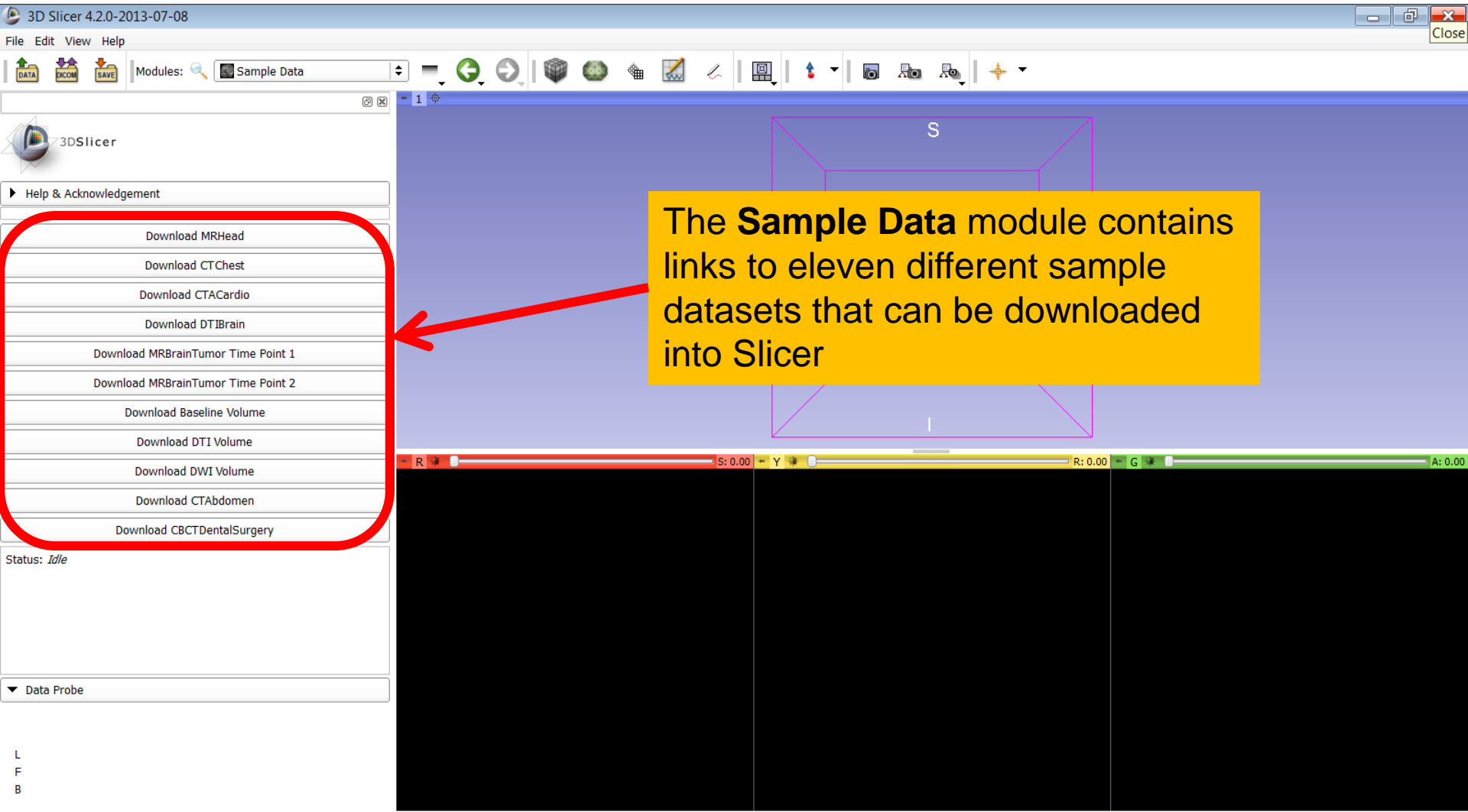
Welcome Module



Welcome Module



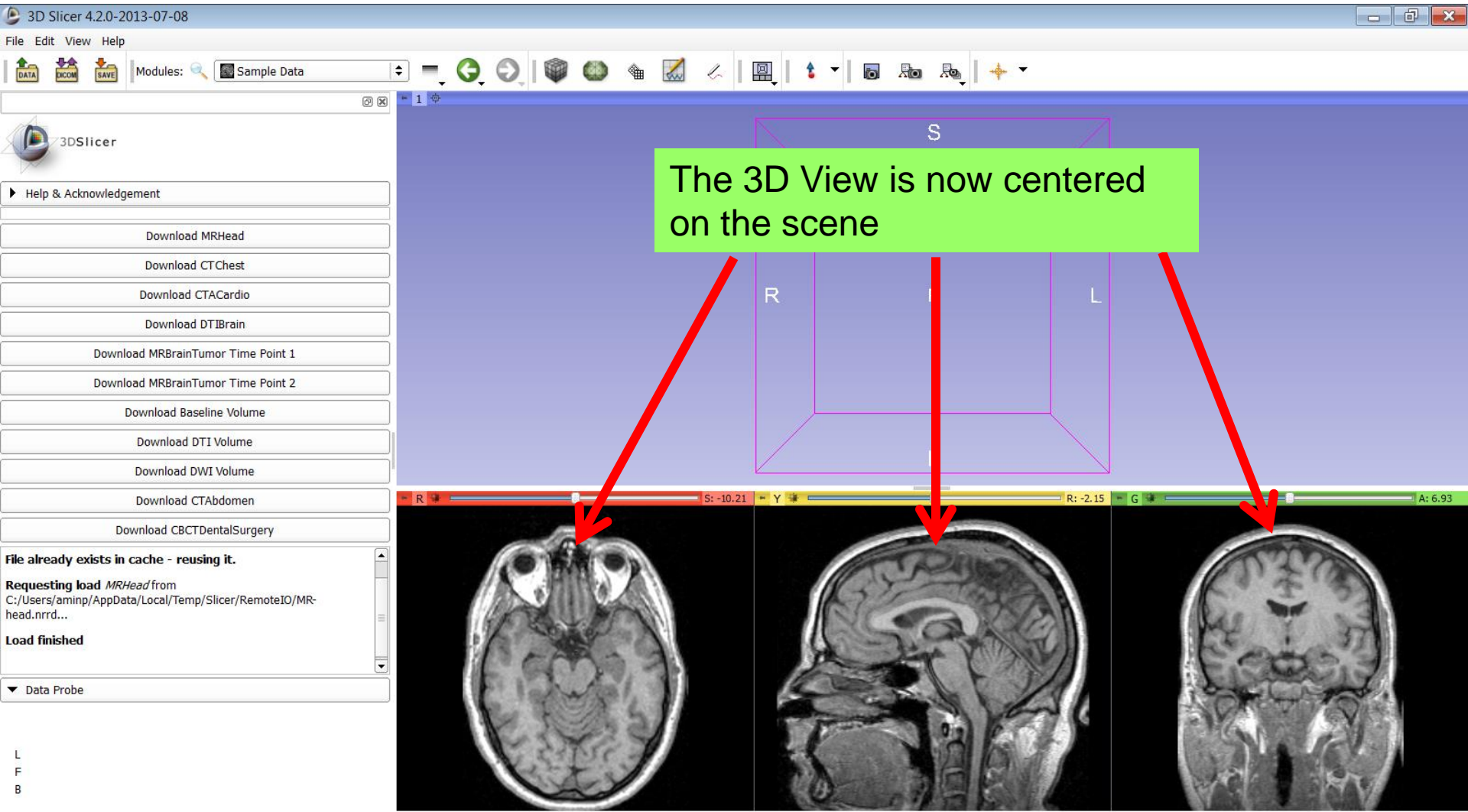
Sample Data



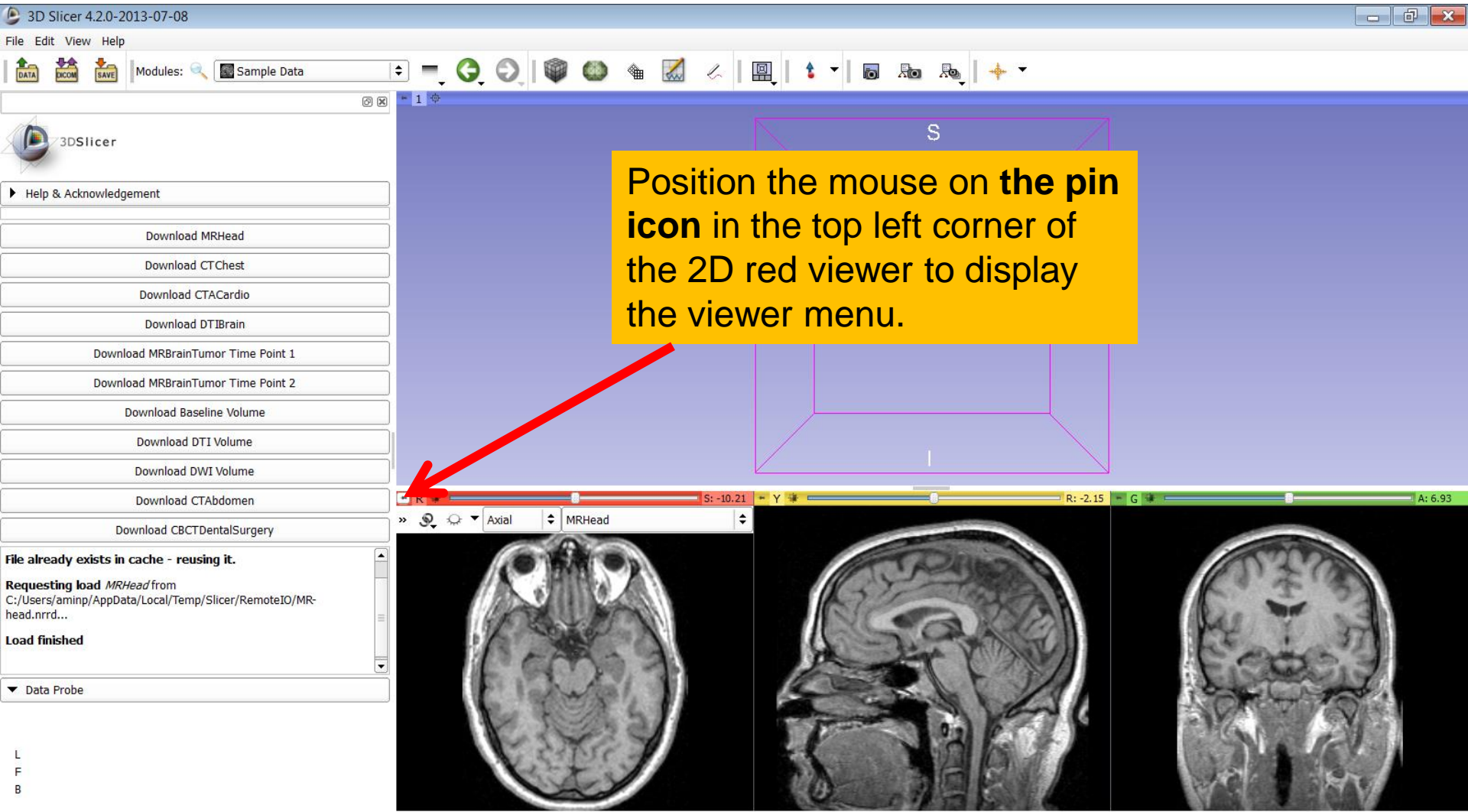
Sample Data



Welcome Module



MR Brain Sample Dataset



MR Brain Sample Dataset

3D Slicer 4.2.0-2013-07-08

File Edit View Help

Modules: Sample Data

3DSlicer

- Help & Acknowledgement
- Download MRHead
- Download CT Chest
- 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

File already exists in cache - reusing it.

Requesting load MRHead from C:/Users/aminp/AppData/Local/Temp/Slicer/RemoteIO/MR-head.nrrd...

Load finished

Data Probe

L
F
B

S
L
I

R S: -10.21 Y R: -2.15 G A: 6.93

Axial MRHead

Link/Unlink the slice controls (except scales) across all Slice Viewers.

Click on the **link icon** to link all three 2D viewers.

MR Brain Sample Dataset

The screenshot displays the 3D Slicer software interface. At the top, the title bar reads "3D Slicer 4.2.0-2013-07-08". Below it is a menu bar with "File", "Edit", "View", and "Help". A toolbar contains various icons for file operations and viewing. The main workspace is divided into three panels: a left sidebar, a top 3D viewer, and a bottom slice viewer.

The left sidebar contains a "3DSlicer" logo and a "Help & Acknowledgement" section. Below this is a list of download buttons for various datasets, including "Download MRHead", "Download CT Chest", "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". A status message indicates "File already exists in cache - reusing it." and "Requesting load MRHead from C:/Users/aminp/AppData/Local/Temp/Slicer/RemoteIO/MR-head.nrrd...". A "Load finished" message is also present. At the bottom of the sidebar, there is a "Data Probe" section.

The top 3D viewer shows a purple wireframe box representing the volume. A yellow callout box with black text says "Click on the eye icon to display the slices in the 3D viewer." A red arrow points from this callout to the eye icon in the slice viewer's toolbar. The slice viewer toolbar includes a red "R" button, a yellow "Y" button, a green "G" button, and a blue "A" button. Below the toolbar are three slice views: Axial, MRHead, and Coronal. The Axial view shows a brain slice with a yellow callout box that says "Toggle slice visibility in 3D view".

At the bottom left of the interface, the letters "L", "F", and "B" are displayed vertically, representing Left, Front, and Back views.

MR Brain Sample Dataset

3D Slicer 4.2.0-2013-07-08

File Edit View Help

Modules: Sample Data

3DSlicer

Help & Acknowledgement

- Download MRHead
- Download CTHead
- 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

File already exists in cache - reusing it.

Requesting load MRHead from
C:/Users/aminp/AppData/Local/Temp/Slicer/RemoteIO/MR-head.nrrd...

Load finished

Data Probe

S
R L

R S: -10.21 Y R: -2.15 G A: 6.93

L
F
B

Slicer displays the image in the 3D viewer after clicking the eye icon

MR Brain Sample Dataset

3D Slicer 4.2.0-2013-07-08

File Edit View Help

Modules: Sample Data

Previous modules

3DSlicer

Help & Acknowledgement

Download MRHead

Download CT Chest

Download DTI Volume

Download DWI Volume

Download CT Abdomen

Download CBCT Dental Surgery

File already exists in cache - reusing it.

Requesting load MRHead from
C:/Users/aminp/AppData/Local/Temp/Slicer/RemoteIO/MR-head.nrrd...

Load finished

The axial, coronal and sagittal slices appear in the 3D viewer.

S

R L

R: -10.21 Y: -2.15 G: A: 6.93

MR Brain Sample Dataset

3D Slicer 4.2.0-2013-07-08

File Edit View Help

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3DSlicer

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About

The Main Window

Loading and Saving

Display

Mouse & Keyboard

Below is basic information about how to use the three-button mouse and one-button mouse (or trackpad) on Windows, Mac, and Linux platforms to perform basic interaction operations in Slicer:

Adjusting Window & Level on All Platforms: Left-clicking and dragging the mouse in any Slice viewer is a quick way to adjust Window and Level. Adjust the middle value (level) of the greyscale window by moving the mouse up (increase level) or down (decrease level), and adjust the greyscale window size by moving the mouse to the left (decrease window size) or right (increase window size). (Slide-Mouse-Module-consider-Right)

Data Probe

L
F
B

S
I
R
L

S: -10.21 Y: R: -2.15 G: A: 6.93

Click on the tab **Mouse & Keyboard** to learn the different mouse actions to rotate the images and zoom in and out.

Acknowledgments



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