

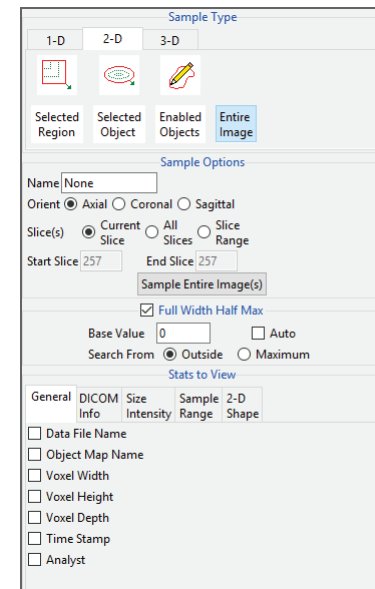


Entire Image

The Entire Image option allows users to sample measurements for the entire slice for the current slice, all slices, or a range of slices.

Sample Options: Provides users the following sampling controls:

- **Orient:** Select the orientation to sample enabled objects in.
 - **Axial:** Sets the sampling orientation to axial.
 - **Coronal:** Sets the sampling orientation to coronal.
 - **Sagittal:** Sets the sampling orientation to sagittal.
 - **Slices:** Allows users to specify the slices sampled.
 - **Current Slice:** Samples the current displayed slice for the selected orientation.
 - **All Slices:** Samples all slices in the selected orientation.
 - **Slice Range:** Samples the range of samples specified using the start and end slice fields for the selected orientation.
 - **Start Slice:** Allows users to set the starting slice for sampling. Slices before the start slice will not be sampled.
 - **End Slice:** Allows users to set the ending slice for sampling. Slices after the end slice will not be sampled.
 - **Sample Entire Image:** Initiates the sampling process.
- Stats to View:** The stats to view area allows users to enable and disable measurements and information reported to the stats log.
- **General:** Allows users to report general image data parameters in the stats log file (see General under Sample Point(s) > Stats to View.)
 - **DICOM Info:** Allows users to report DICOM tag information (see DICOM Info under Sample Point(s) > Stats to View.)
 - **Size Intensity:** Reports an array of size intensity information and measurements (see Size Intensity description for Sample 2-D Rectangle.)
 - **Sample Range:** Samples voxels within a defined region based on a min/max intensity range (see Sample 2-D Rectangle > Sample Range.)
 - **2-D Shape:** Reports 2-D shape measurements for the defined region (see Sample 2-D Rectangle > 2-D Shape.)





Sampling the Entire Image

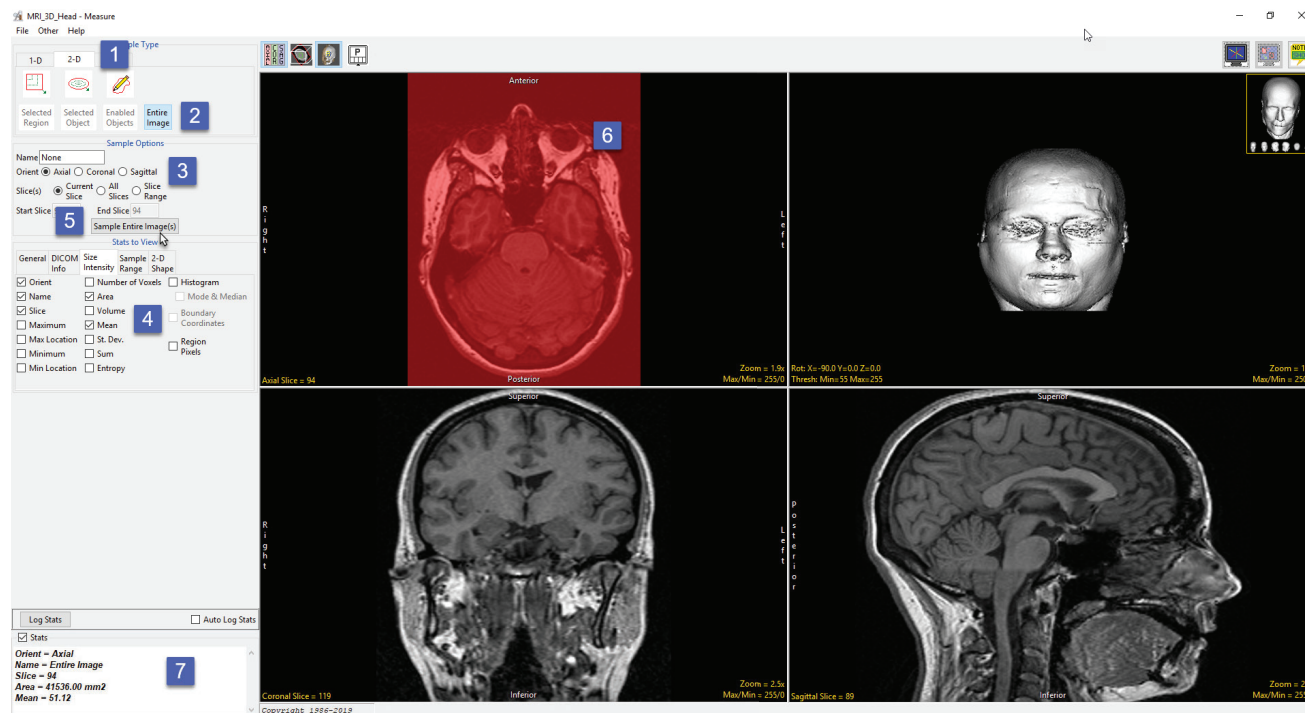
Download the MRI_3D_Head.avw data set from analyzedirect.com/data to follow along.

- Open Input/Output and load MRI_3D_Head.avw into Analyze. Select MRI_3D_Head and open Measure.
- Select the 2D Sample Type [1] and choose Entire Image [2].

Sampling the Entire Current Slice

To sample the entire current slice, do the following:

- Leave Orient set to Axial and Slice(s) set to Current Slice [3]. This will sample the current axial slice when Sample Entire Image(s) is selected.
- In the Stats to View area check all the measurements [4] you would like returned.
- Click the Sample Entire Image(s) button [5].
- The current axial image will be sampled [6].
- The selected measurements will be returned to the stats review area [7].





Sampling the Entire Image (continued)

Sampling the Entire Slice for All Slices

To sample the entire slice for all slices in the selected orientation, do the following:

- Set Orient to Coronal and then set Slice(s) to All Slices [8].
- Check the Auto Log Stats check box [9].
- Click the Sample Entire Image(s) button [10].
- All slices in the current orientation will be sampled [11].
- Measurements for each slice will be returned to the stats log [12].

The screenshot shows the MRI_3D_Head - Measure software interface. The 'Sample Type' panel on the left is configured for '2-D' sampling. The 'Sample Options' section shows 'Orient' set to 'Coronal' and 'Slice(s)' set to 'All Slices' (indicated by a blue box with the number 8). The 'Stats to View' section shows 'Auto Log Stats' checked (indicated by a blue box with the number 9). The 'Sample Entire Image(s)' button is highlighted with a blue box with the number 10. The main display area shows three views: Axial, Coronal, and Sagittal. The Coronal view is highlighted in red and labeled 'Coronal Slice = 119' (indicated by a blue box with the number 11). The 'Stats' panel at the bottom shows a table of measurements for each slice in the Coronal orientation (indicated by a blue box with the number 12).

Index	Orient	Name	Slice	Area mm ²	Mean	Comment
222	Coronal	Entire Image	222	32912.00	3.80	
223	Coronal	Entire Image	223	32912.00	3.74	
224	Coronal	Entire Image	224	32912.00	3.61	
225	Coronal	Entire Image	225	32912.00	3.54	
226	Coronal	Entire Image	226	32912.00	3.45	
227	Coronal	Entire Image	227	32912.00	3.40	
228	Coronal	Entire Image	228	32912.00	3.27	
229	Coronal	Entire Image	229	32912.00	3.10	
230	Coronal	Entire Image	230	32912.00	2.89	
231	Coronal	Entire Image	231	32912.00	2.74	
232	Coronal	Entire Image	232	32912.00	2.69	
233	Coronal	Entire Image	233	32912.00	2.64	
234	Coronal	Entire Image	234	32912.00	2.58	
235	Coronal	Entire Image	235	32912.00	2.51	
236	Coronal	Entire Image	236	32912.00	2.17	



Sampling the Entire Image (continued)

Sampling the Entire Slice for a Range of Slices

To sample the entire slice for a range of slices in the selected orientation, do the following:

- Dismiss the previous stats log by clicking the x in the upper right-hand corner of the stats log.
- Next, set Orient to Sagittal and then set Slice(s) to Slice Range [13].
- Set the Start Slice to 50 and the End Slice to 150 [14]. These settings will allow you to sample a range of slices, slice 50 to 150, in the sagittal orientation.
- Click the Sample Entire Image(s) button [15].
- Only slices in the current range for the selected orientation will be sampled [16].
- Measurements will be returned to the stats log [17].

The screenshot displays the MRI_3D_Head - Measure application window. The interface includes a menu bar (File, Other, Help), a toolbar with icons for various measurement tools, and a main display area with four panels showing different views of a brain scan: Axial, Coronal, Sagittal, and a 3D surface model. The Sagittal view is highlighted with a red overlay and a blue box labeled '16'. The Axial view shows a slice at 94, the Coronal view at 119, and the Sagittal view at 89. The 3D model shows a head with a blue box labeled '16' on the forehead area.

On the left side, there is a 'Sample Type' panel with tabs for 1-D, 2-D, and 3-D. The 2-D tab is selected, and the 'Sample Options' section shows 'Orient' set to Sagittal, 'Slice(s)' set to 'Current', 'Add Slices' set to 'Range', 'Start Slice' set to 50, and 'End Slice' set to 150. A blue box labeled '13' is next to the 'Orient' dropdown, and a blue box labeled '14' is next to the 'End Slice' input field. The 'Sample Entire Image(s)' button is highlighted with a blue box labeled '15'.

Below the 'Sample Type' panel is a 'Stats to View' section with checkboxes for 'General', 'DICOM', 'Info', 'Size', 'Sample', '2-D', 'Range', 'Shape', 'Histogram', 'Number of Voxels', 'Area', 'Volume', 'Mean', 'Max Location', 'Min Location', 'St. Dev.', 'Sum', 'Entropy', 'Boundary', 'Coordinates', 'Region', and 'Pixels'. The 'Stats' checkbox is checked, and the 'Auto Log Stats' checkbox is also checked.

At the bottom, there is a 'Stats' log showing a table of measurements for various slices. A blue box labeled '17' is next to the 'Stats' log header. The table has columns for Index, Orient, Name, Slice, Area mm2, Mean, and Comment. The data shows measurements for slices 86 through 100, all in the Sagittal orientation, with values for Area and Mean.