



## Selected Object

The selected object option allows users to sample an object within the 3D volume.

An object map must be loaded for this sampling option to be available. The following sampling options are available:

**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.)
- **3-D Shape:** Allow users to sample different 3-D shape-based measurement, see the 3-D Shape description under 3-D > Box for details on each of the 3-D shape measurements available.

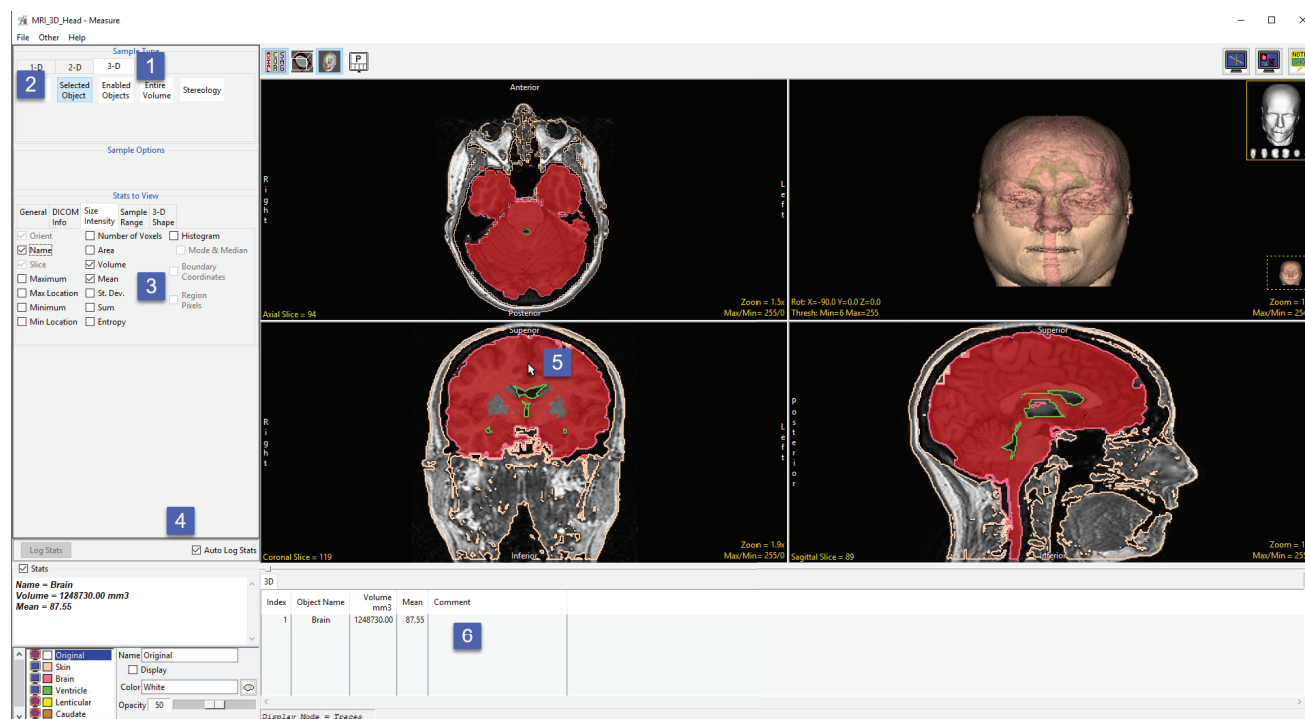
The screenshot shows two panels from a software interface. The top panel, titled 'Sample Type', has tabs for '1-D', '2-D', and '3-D'. Under the '3-D' tab, there are buttons for 'Box', 'Selected Object' (which is highlighted with a blue border), 'Enabled Objects', 'Entire Volume', and 'Stereology'. The bottom panel, titled 'Stats to View', has tabs for 'General', 'DICOM Info', 'Size Intensity', 'Sample Range', and '3-D Shape'. The 'General' tab is selected, showing a list of checkboxes: 'Data File Name', 'Object Map Name', 'Voxel Width', 'Voxel Height', 'Voxel Depth', 'Time Stamp', and 'Analyst'. Above this list, there are settings for 'Full Width Half Max' (checked), 'Base Value' (set to 0), 'Auto' (unchecked), and 'Search From' (set to 'Outside' with a radio button).



## Making Measurements using Selected Object

Download the MRI\_3D\_Head.avw data set from [analyzedirect.com/data](http://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 File > Load Object Map and load the MRI\_3D\_Head.obj.
- Select the 3D Sample Type [1] and choose Selected Object [2].
- In the Stats to View area check the required measurements [3] to be sampled.
- Check Auto Log Stats [4].
- Click on the brain object in any of the three orthogonal slices [5].
- Selected measurements will be reported for the region in the stats log [6]. Right click to save the log to disk as a .csv file.





## Making Measurements using Selected Object (continued)

### Generating Histograms with Selected Object

- Check the Histogram checkbox [7].
- To generate the histogram statistics (intensity and count information) [8] click on the brain [9].
- The histogram for the sampled objects will be displayed below the display area [10] in a new Histogram tab [11] in front of the other statistics tabs.
- Note that objects with the view disabled can accidentally be selected and sampled when using the Selected Object tool. Be aware when selecting an object to sample.
- The histogram information can be saved as a .CSV file by right-clicking and selecting Save Log.

