## Sampling 4D Multivolumes using 3D Tools

Measure can sample 4D image data. When 4D image data is loaded into Measure a volume slider is available allowing users to selected different volumes.

Download the 4D\_Cardiac\_Cycle.avw data set from analyzedirect.com/data to follow along.

- Open Input/Output and load 4D\_ • Cardiac\_Cycle.avw into Analyze. Select 4D\_Cardiac\_Cycle and open Measure.
- Select File > Load Object Map ٠ and load the 4D\_Cardiac\_Cycle object.
- Select the 3D Sample Type [1] and choose Enabled Objects [2]. ۲
- Select Size Intensity [3] and check Name, Volume and Mean, and uncheck Area. •
- Check Auto Log Stats [4] and check Sample All Volumes [5]. ۲
- Click Sample Enabled Objects [6]. ٠
- The total volume of the blood pool for each of the 18 3D volumes in the 4D multivolume will be reported in the 3D log [7]. Right click to ٠ save the log as a .CSV file.



## Sampling 4D Multivolumes using 3D Tools (continued)

Measure can also generate 4D histograms from 4D image data. When 4D image data is loaded into Measure a volume slider is available allowing users to selected different volumes.

Download the 4D\_Cardiac\_Cycle.avw data set from analyzedirect.com/data to follow along.

- Open Input/Output and load 4D\_ Cardiac\_Cycle.avw into Analyze. Select 4D\_Cardiac\_Cycle and open Measure.
- Select File > Load Object Map and load the 4D\_Cardiac\_Cycle object.
- Select the 3D Sample Type [1] and choose Enabled Objects [2].
- Select Size Intensity [3] and ensure that Name, Volume and Mean, and Histogram are checked [4].
- Check Auto Log Stats [5] and check Sample All Volumes [6]. Click Sample Enabled Objects [7].
- The histogram measurements will be reported [8] and the histogram plotted [9] in a new tab.
- The volume slider [10] beneath the histogram stats allows review of histograms for all 3D volumes in the 4D multivolume.

