Visualize volume

Choose from among available options, such as Render volume, shown here.

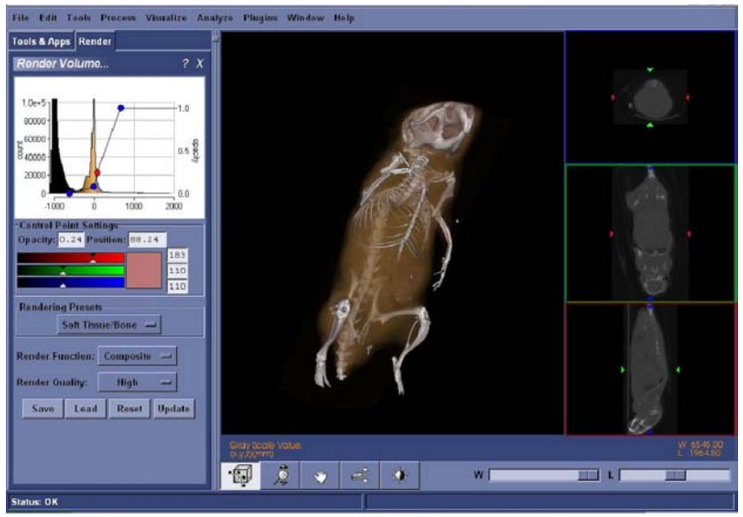
1) Choose RenderVolume… from the Visualize menu.
2) Choose control point settings, rendering presets, function and quality.
3) Save, Load, Reset or Update – as required.

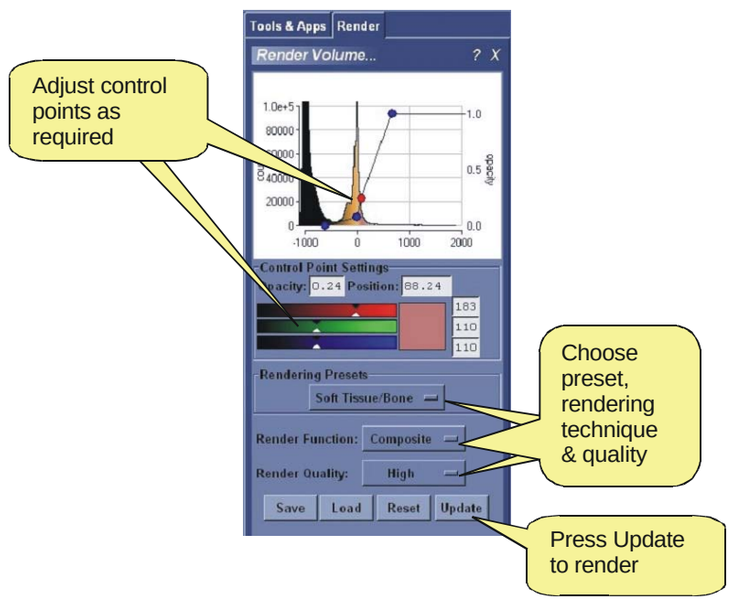
Bone analysis tool (typical)

Step	Notes
Open Bone Analysis window.	Basic Bone Analysis window appears
Choose Volume of interest.	Choose from Standard or Advanced ROI (Region Of Interest)
Determine threshold.	Determine automatically or assign a value
Select Bone Parameters to run.	Advanced Options allow you to adjust the parameters for each analysis
Select Output File options for resulting files.	Load existing file or create new file. Files can be kept together as part of a project, and project parameters can be recorded*
Select Visualization options.	Choose from RAW, Anisotropy and Direct Measures
Run analyses.	Results are shown in spreadsheet* window
Choose file formats to export.	Choose from among export options*
Results can be added to an existing project.	Basic application allows you to save results in text file only

* options available with the Advanced Bone Application version

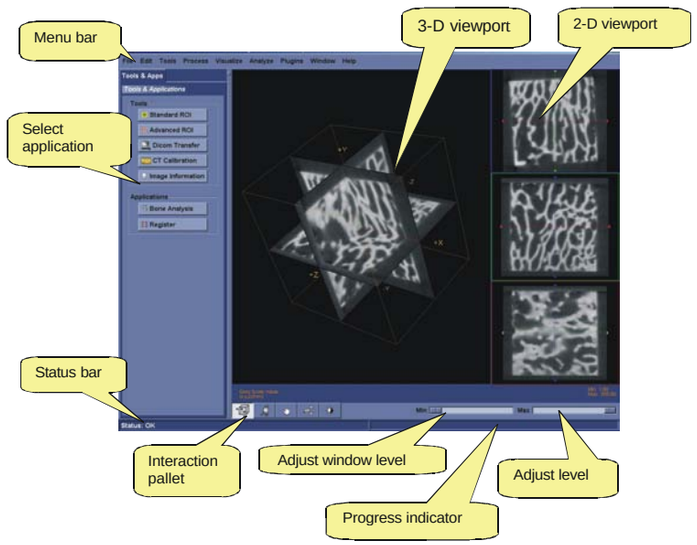
Render tool (typical)





MicroView Quick Reference Guide

Main Screen Layout



Start program & load image file

Win: Double-click **.vff** file, **OR** double-click *MicroView* Icon and select **.vff** file.

Mac: Select *MicroView* application icon in Application folder.

Linux: Run /opt/GEHC/bin/*MicroView* from an xterm, or similar console.

Get help

Hotkey	Result
h	Launches *MicroView* help when pressed

Save image as .tif

Hotkey	Result
t	View beneath cursor is saved as a .tif when **t** is pressed

Work with volume

Action	Instructions
Window/Level, or Min / Max..	Adjust using the slide bars at bottom right of *MicroView* Window
Rotate volume	Hold down Left Mouse Button and move mouse
Pan volume	Hold **shift** key and **left mouse button** and drag mouse
Move through planes	Hold **middle mouse button** and move mouse while in selected plane. Pressing **up** and **down arrow** keys while the mouse is over a plane moves that plane in one slice increments. Pressing the **page up** and **page down** keys while the mouse is over a plane moves the plane in ten slice steps.
Rotate plane about axis	Hold **middle mouse button** and move cursor at the edge of the selected plane
Zoom image	Hold **right mouse button** and move mouse up or down
Zoom viewport	**Double-click** on one of the four view ports to make that view use the whole *MicroView* window. Double-click on the large image to return to normal.
Reset planes	Press **r** to reset the planes to the starting size and location

Display features

Hotkey	Result
e	toggle intersection lines on and off
f	toggle plane borders on and off
i	toggle background from gray to black
j	show coronal plane
k	show axial plane
l	show sag plane
o	show axes labels
r	resets the view
x	label highlighter on and off

Point - coordinates & value

The coordinates and grayscale value of the cursor location appear in the bottom right-hand corner of the screen when the cursor is within the volume.

Line - select, plot, save

Using cursor, go to start of line and press 1 to set.

Move to end of line, press 2 to set the end of the line.

HotKey	Result
a	Saves grayscales values on the selected line to an ASCII file
p	Plots the grayscale values of the selected line to a graph
y	Clears the line

Sub-volume - select, plot, save

Press **7** to set the first point at the location of the cursor.

Press **8** to set the second point at the location of the cursor and draw the box (or rectangle).

Note: **Ctlr 7** will set the first point to the intersection point of the three planes. **Ctrl 8** will set the second point to the intersection point of the three planes and draw the box (or rectangle).

HotKey	Result
c	Clears sub-volume
g	Plots histogram and computes mean and standard deviation of gray scale values within sub-volume
m	Calculates mean and standard deviation of sub-volume
v	Saves the sub-volume to a VFF file
d	Saves the gray scale values to an ASCII file *

* Only if sub-volume is a rectangle on a single plane.