

## **User guider**

There are three projects in the file. They are separately view-aligned slicing method, axis-aligned slicing method, and ray casting method.

### **1) axis-aligned slicing**

“Texture” is used to change the texture

“Transfer Function” switch between the three transfer functions.

“Bounding box” and “axis” is chosen to show them or not

“Camera” zoom in & zoom out

“Colour” changes the colours of the object (only influenced when the transfer function is set to 1 or 3)

“Slices” change the drawing model to single slice movement. After tick that box, directions can be chosen to be the direction of the slice movement from x-axis, y-axis, z-axis or diagonal. “Reset” puts the slice back to the default position. “Stop/play” can stop and start the slice movement.

### **2) view-aligned slicing**

There are five different shaders: “color test” “illumination shader” “two layers” “1D colorTable lookup” “isosurface and 1Dtexture lookop”.

For each shader, the belowed “isovalue1” and “isovalue2” are used to change the corresponding parameters in the shader to get an optimal

rendering result.

“stepsize” is used to change the sampling rate of the slice. Other buttons are similar to the axis-aligned slicing.

### **3) Ray casting**

There are five different shaders: “color test” “illumination shader” “two isosurfaces” “1D colorTable lookup” “isosurface and 1Dtexture lookop”.

Left click to rotate the scene.