

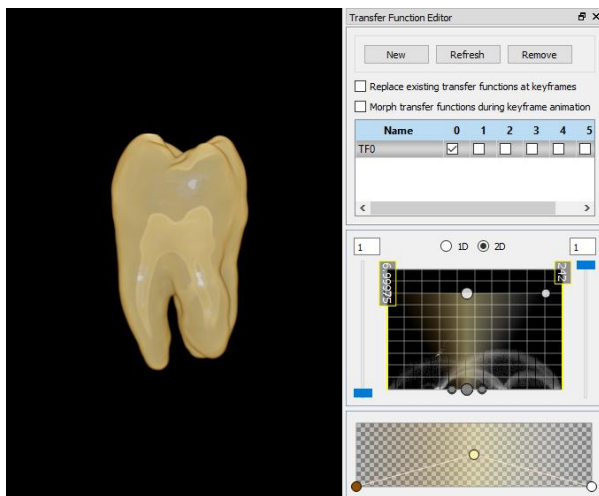
Tutorial-08

Open Drishti Render.

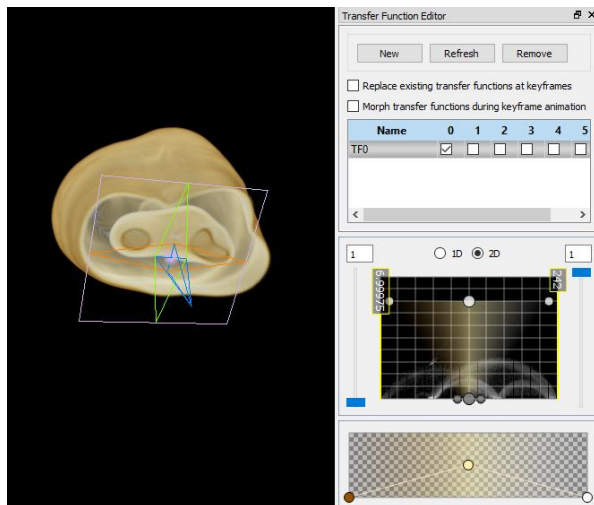
Load **tooth.pvl.nc** (created in tutorial 01) in Drishti Render.

Switch to HiRes mode.

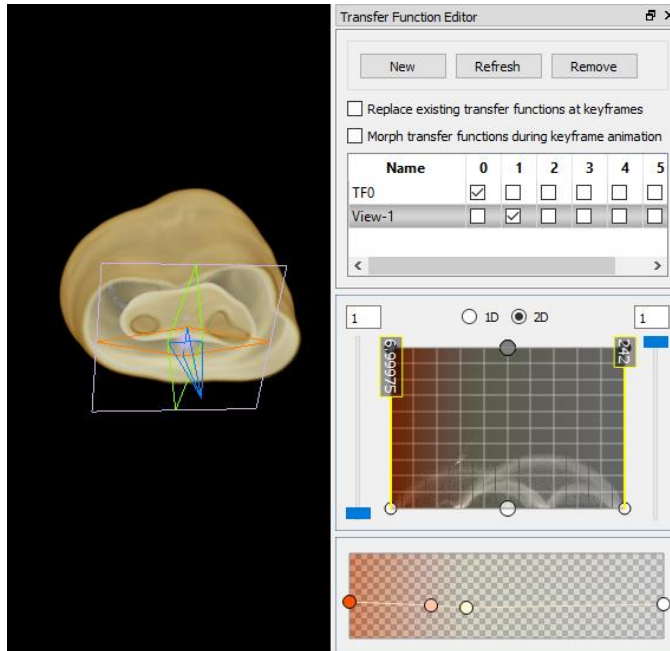
Choose a suitable transfer function to show the tooth.



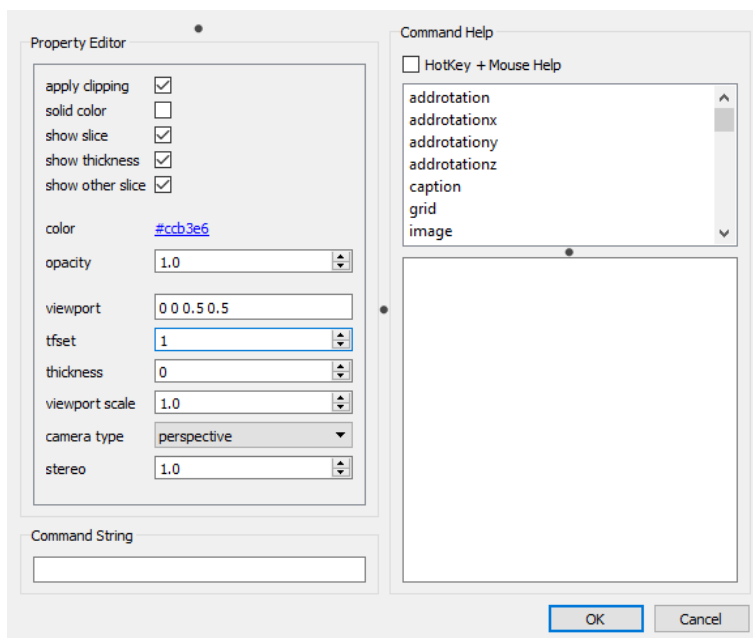
Press **c** to add a clipping plane.



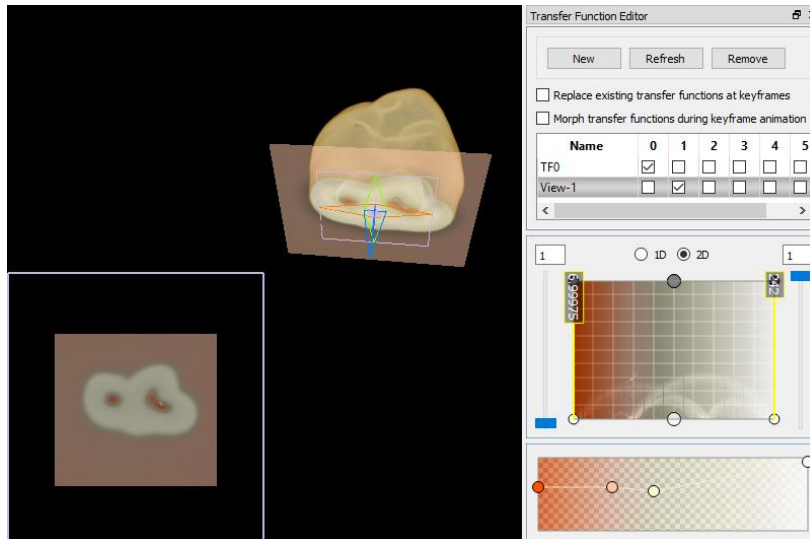
Add a new suitable transfer function using **New** button in the **Transfer Function Editor**. Deselect check box for Set 0 of this transfer function and select checkbox 1. This means that this new transfer function is added to Transfer Function **Set 1**. We want to use this transfer function as a slice texture on clip plane.



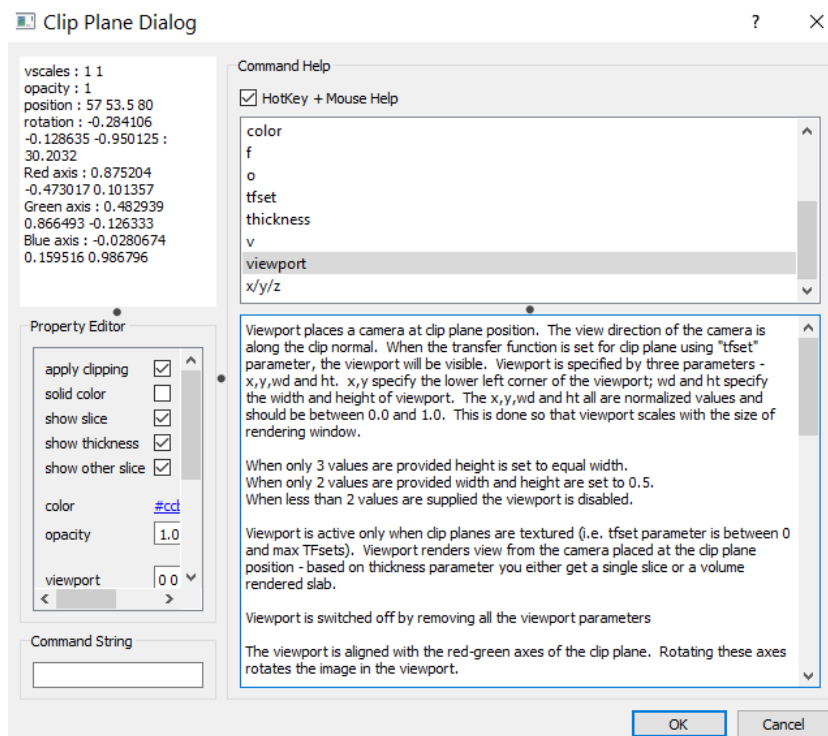
Hover over the clipping plane and press Space Bar to bring up **Clip Plane Dialog**. Go down to **tfset** parameter and set it to 1 (default value is -1) like in Tutorial 07. Additionally set **viewport** parameter to 0 0 0.5 0.5 - this will set the viewport in the lower left corner.



Now the clipping plane can be used to as a virtual camera along with textured slice through the volume. The clipping plane can be manipulated from its viewport. Clipping plane rotation from within viewport is usually locked down so as to prevent inadvertent orientation change. Press R (capital r) to toggle this rotation lock. Translation and zoom are available for the viewport.

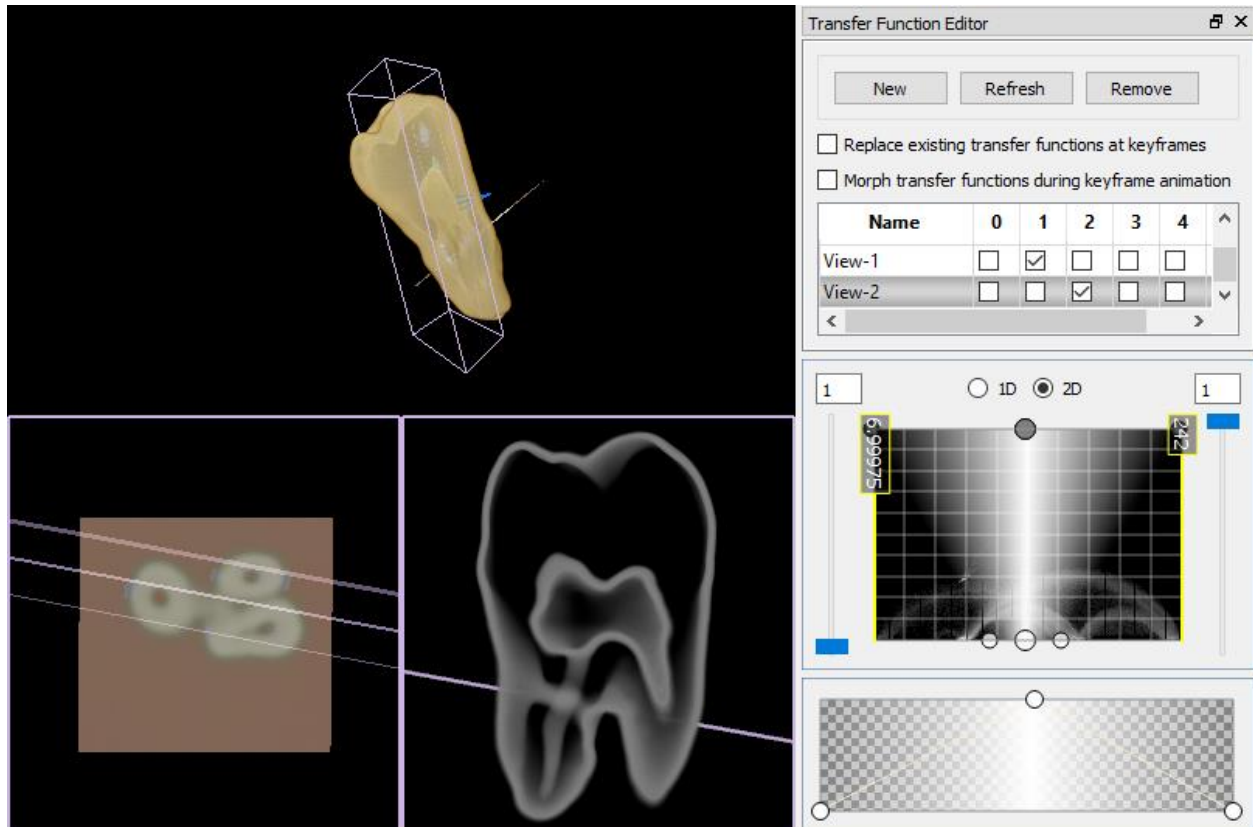


If the rotation is locked *MOP DRV* (disabled rotation in viewport) will be displayed at the top when trying to rotate within viewport. Pressing **SPACE** inside the viewport will bring up dialog for that clipping plane. Under *HotKey + Mouse Help* in *Command Help* you will find help on **viewport**.



Add another clipping plane and set its **tfset** parameter to 2. Add another transfer function and add it to Set 2. Set **viewport** parameter to 0.5 0 0.5 0.5 - this will set the viewport in the lower right corner.

Switch off **apply clipping** for both the clipping planes - this will disable application of clipping to the volume. For the second clipping plane, increase the **thickness** parameter to say 15 - this will show 15 slices from the volume in the viewport.



Play with various parameters and observe their effect on the rendering. Viewport border color is controlled by the **color** parameter.

show slice - show textured slice

show thickness - show virtual camera frustum

show other slice - show other slices in the viewport

viewport scale - zoom factor

Try animating the textured slice.