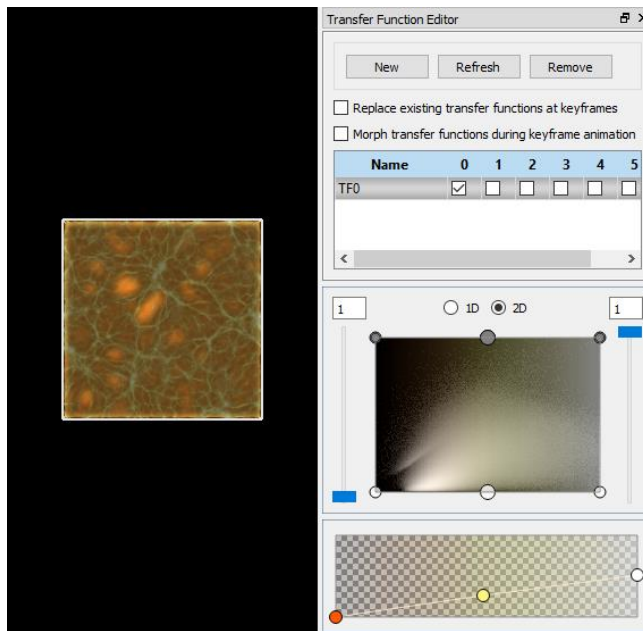


Tutorial 12

Open Drishti Render and load cosmo.pvl.nc created in tutorial 11.

Press F2 to switch to HiRes mode.

Choose a suitable transfer function.

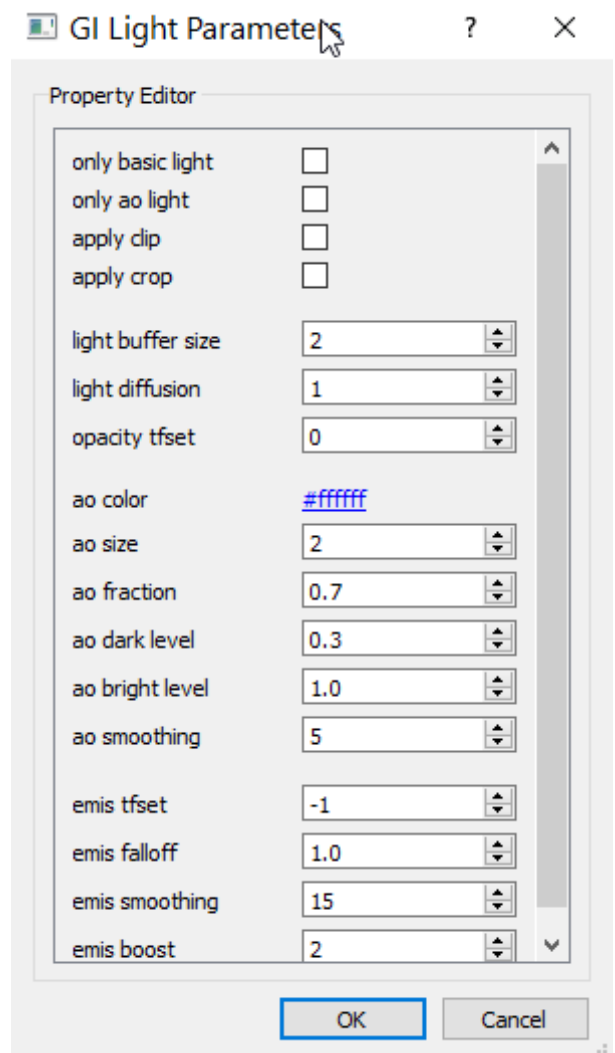


Detach (or close) **Transfer Function Editor**.

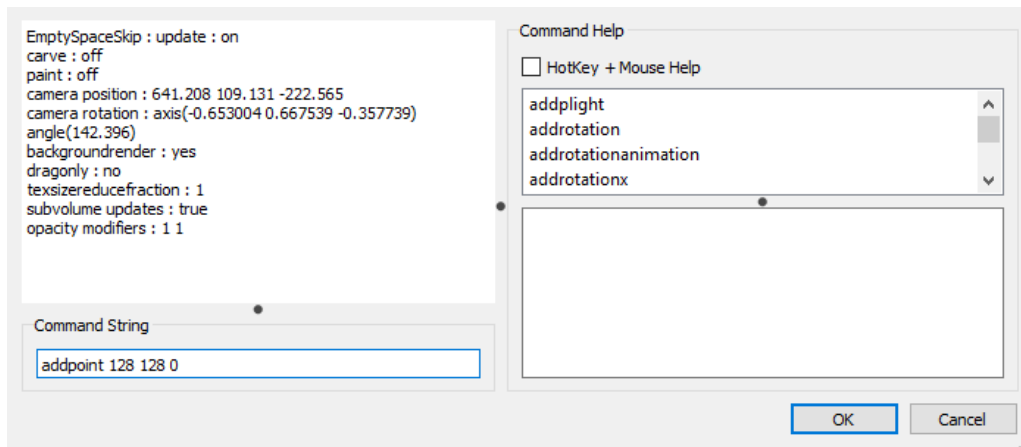
Move the mouse cursor into the rendering window and press **TAB** to bring up **GL Light Parameter** dialog. The reason for detaching any attached panels to the rendering window is that default behavior of TAB is to change keyboard focus and we want to bypass that behavior.

Check **only basic light** - we want to use only default lighting for this tutorial. We will switch on screen-based shadows later on in this tutorial.

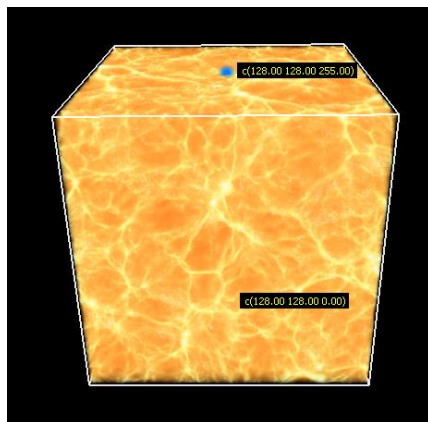
With **only basic light** switched on, you should see a brighter rendering of the data.



Press spacebar to bring up main **Command** dialog. In the **Command String** textbox enter *addpoint 128 128 0*



This will add a point at coordinates (128, 128, 0).



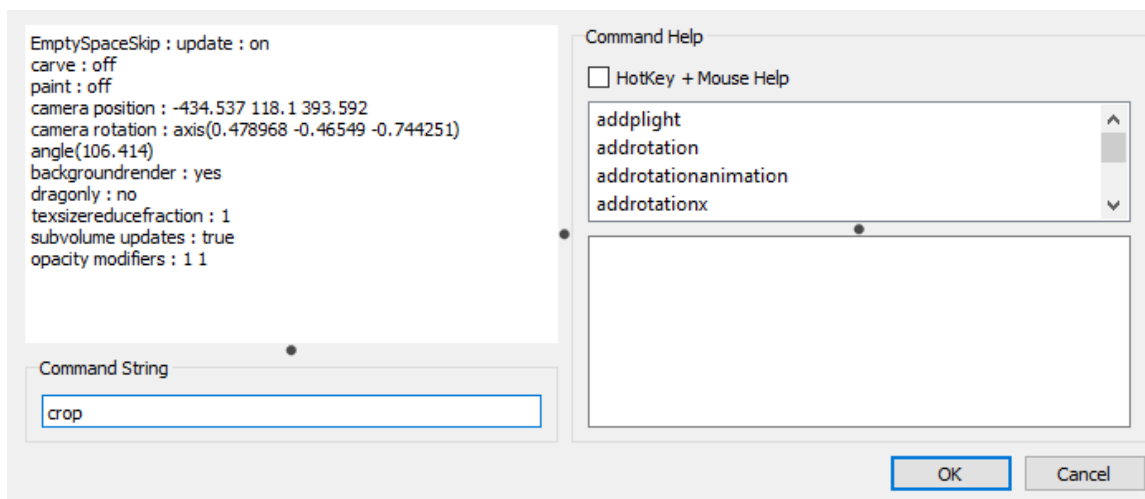
Add another point at (128, 128, 255).

Points can also be added via Shift+Left mouse click.

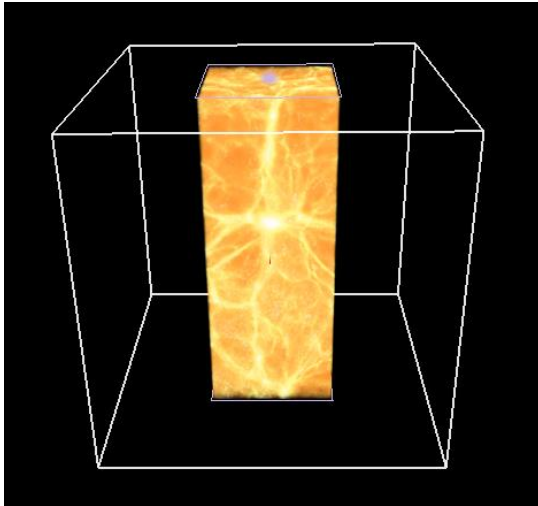
Hover over one of the points (will turn green) and press **c**. This will show the coordinates of the points.

c acts as a toggle switch - to switch off the coordinate display press **c** again while hovering over a point.

Press spacebar again to bring main **Command** dialog. In the **Command String** enter *crop*.

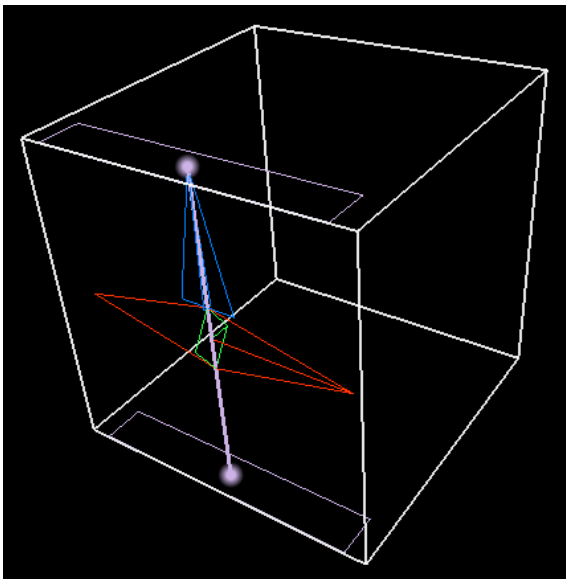
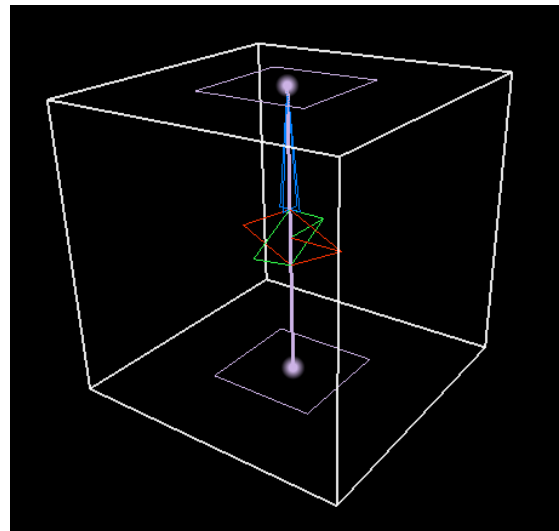


This results in the following rendering.



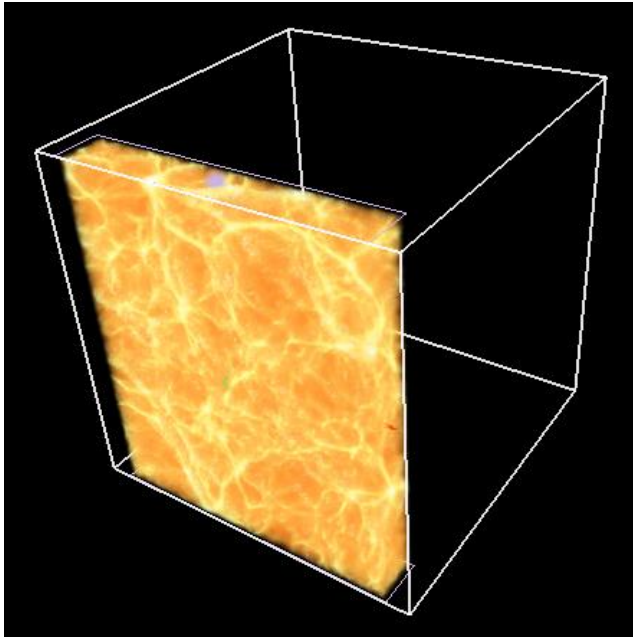
Bring up **Transfer Function Editor** and switch off the check box in **Set 0** for TF0. This will show the crop widget. The red, green and blue handles on the crop widget allow users to move, rotate and scale the widget along those axes. Hover over any of the red/green/blue axes and click to select. Rotate with left mouse drag and translate with right mouse drag.

Use Ctrl+Right mouse drag to change the size of crop for that particular axis.

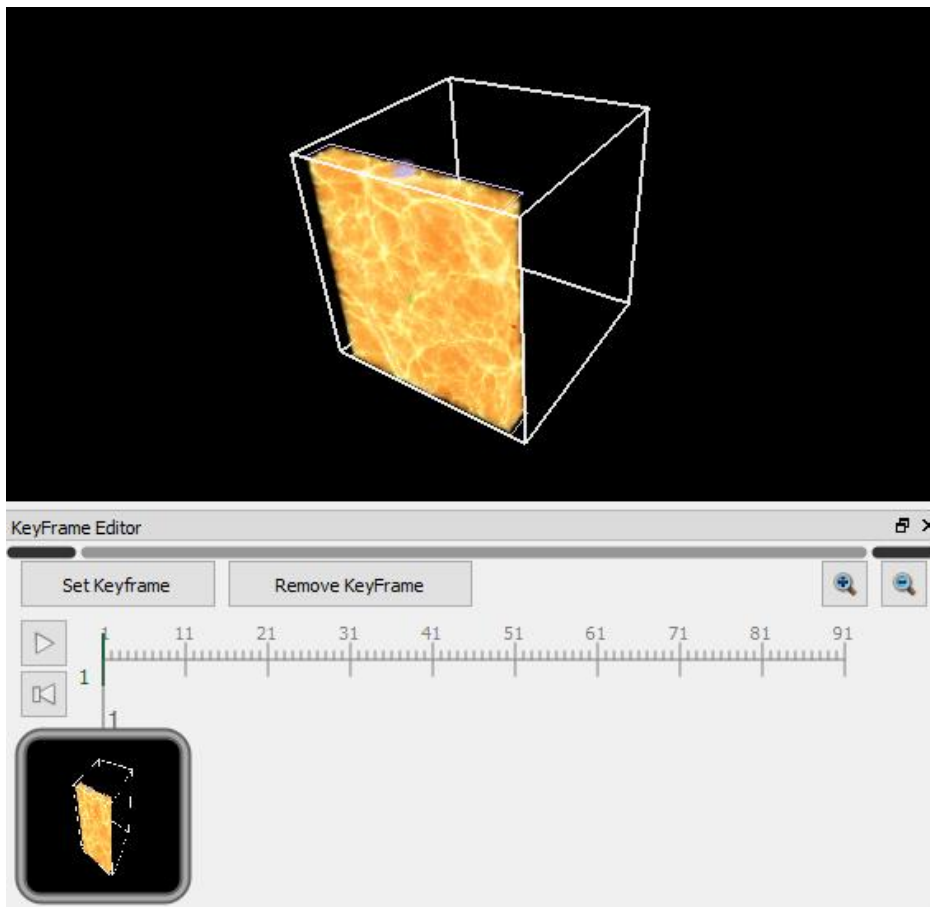


Now move the crop in such a way that it is at the edge of the box. Scale red and green sides such that we get a thin slab.

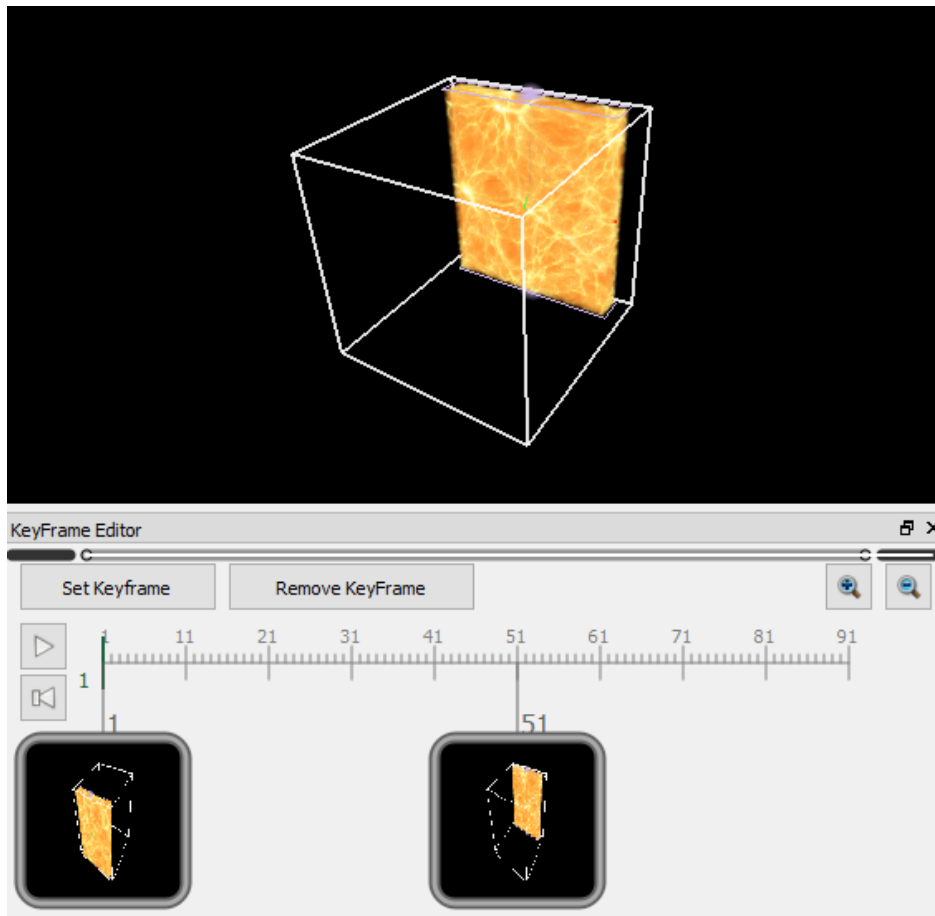
Now switch on TF0 in **Set 0**.



Open **Keyframe Editor** and set a keyframe.



Move the crop to the other end of the bounding box and set another keyframe.



Press **v** (**Toggle->Visibility**) to toggle the visibility of crop widget. Overwrite the keyframes without the crop widget visible.

Press **1** (**Toggle->Shadow Render**) to turn on screen-based shadows.

Play the crop animation.

Crop parameters are interpolated for intermediate frames. Change the crop size and rotation, save keyframes and see the effect on animation.

Crop widgets will become ungrabbable once a keyframe is selected. This is to ensure that users do not unintentionally change the settings. To make the widgets grabbable press toggle switch **g** (**Toggle->Mouse Grab**).