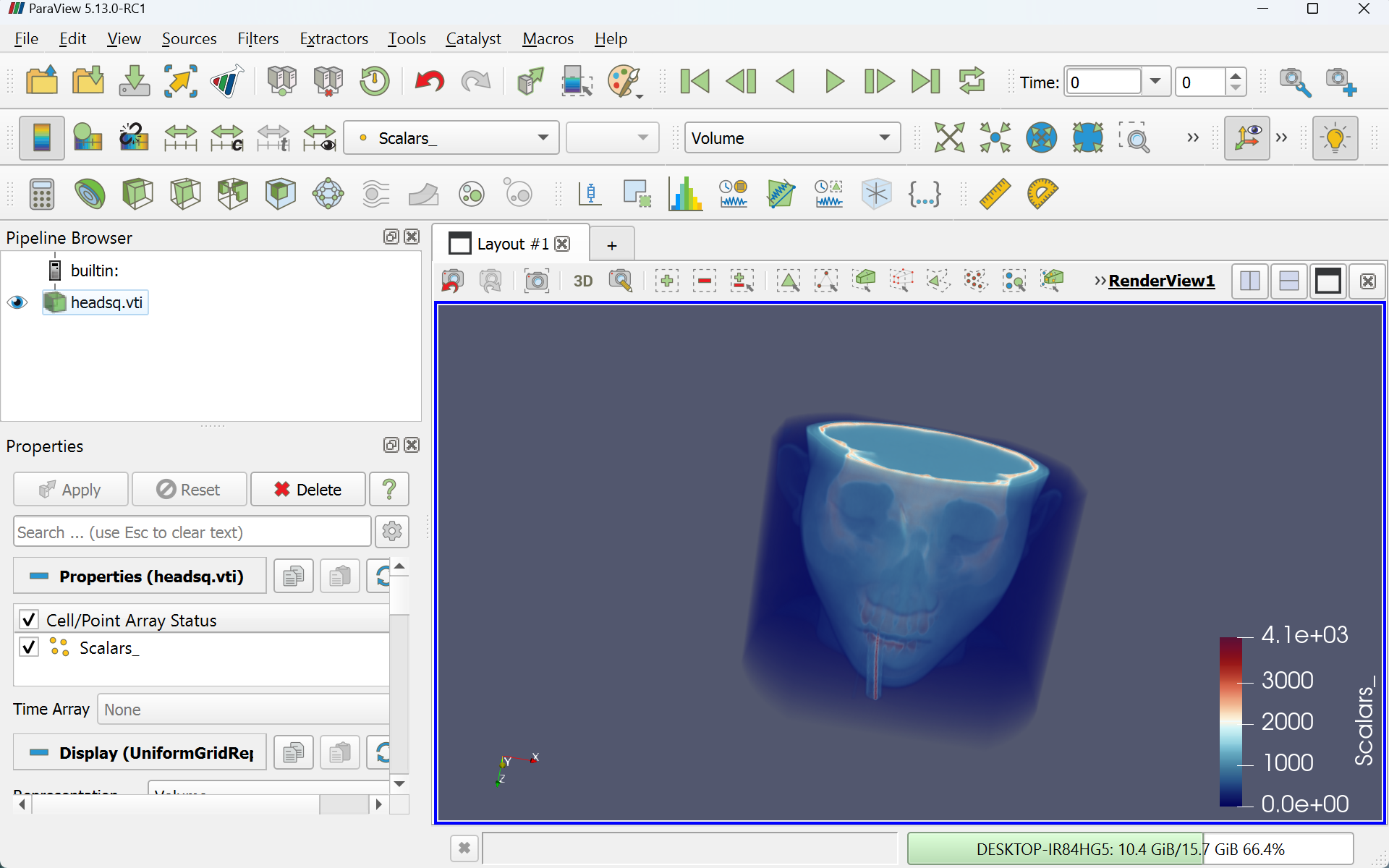
**GitHub Link:**[*https://github.com/Unserved-sleep/Information-visualization-/tree/main/ParaView%20Assignment*](https://github.com/Unserved-sleep/Information-visualization-/tree/main/ParaView%20Assignment)

**3.  Customize visualizations with colour maps, annotations, and the "Clip" filter, then submit annotated screenshots.**

**Volume rendering**

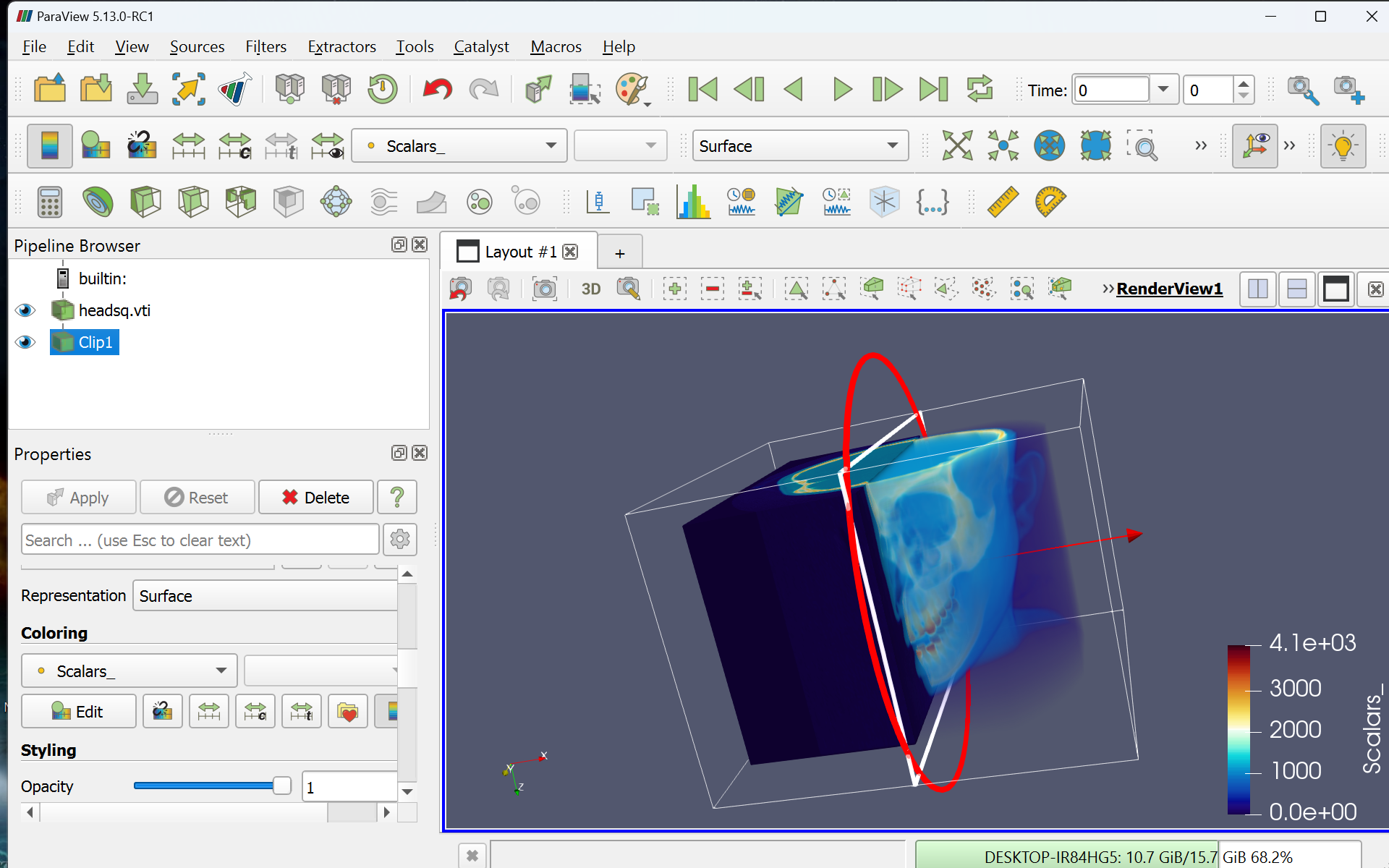
Volume rendering is a technique used to visualize 3D data, particularly for datasets that represent volumetric information (e.g., medical imaging, simulations). Unlike traditional 2D slicing, volume rendering allows you to view the entire dataset as a semi-transparent 3D object. This technique uses colours and opacity to represent different values within the volume, enabling you to see through the data and analyse internal structures.

**Clip Filter:**

A clip filter in 3D visualization tools allows you to "cut" through a dataset to reveal internal features that would otherwise be obscured. By defining a clipping plane or surface, you can hide parts of the data and focus on specific areas of interest.

Clipping is useful when you want to examine cross-sections of your data, study internal structures, or focus on a particular region within a large dataset.

1. Sagittal slice

A sagittal slice divides the body (or object) into left and right halves. It’s a vertical plane that runs from front to back.

A screenshot of a computer program

Description automatically generated

1. Coronal slice

A screenshot of a computer

Description automatically generatedA coronal slice divides the body into front (anterior) and back (posterior) portions. It’s a vertical plane that runs side to side.

1. Transverse Slice

A screenshot of a computer

Description automatically generatedA transverse slice (or axial slice) divides the body into upper (superior) and lower (inferior) parts. It’s a horizontal plane.

A screenshot of a computer

Description automatically generated