

Lecture 15 – Paraview

Today's Learning Objectives:

1. Practice creating graphics in Paraview.

Install Paraview

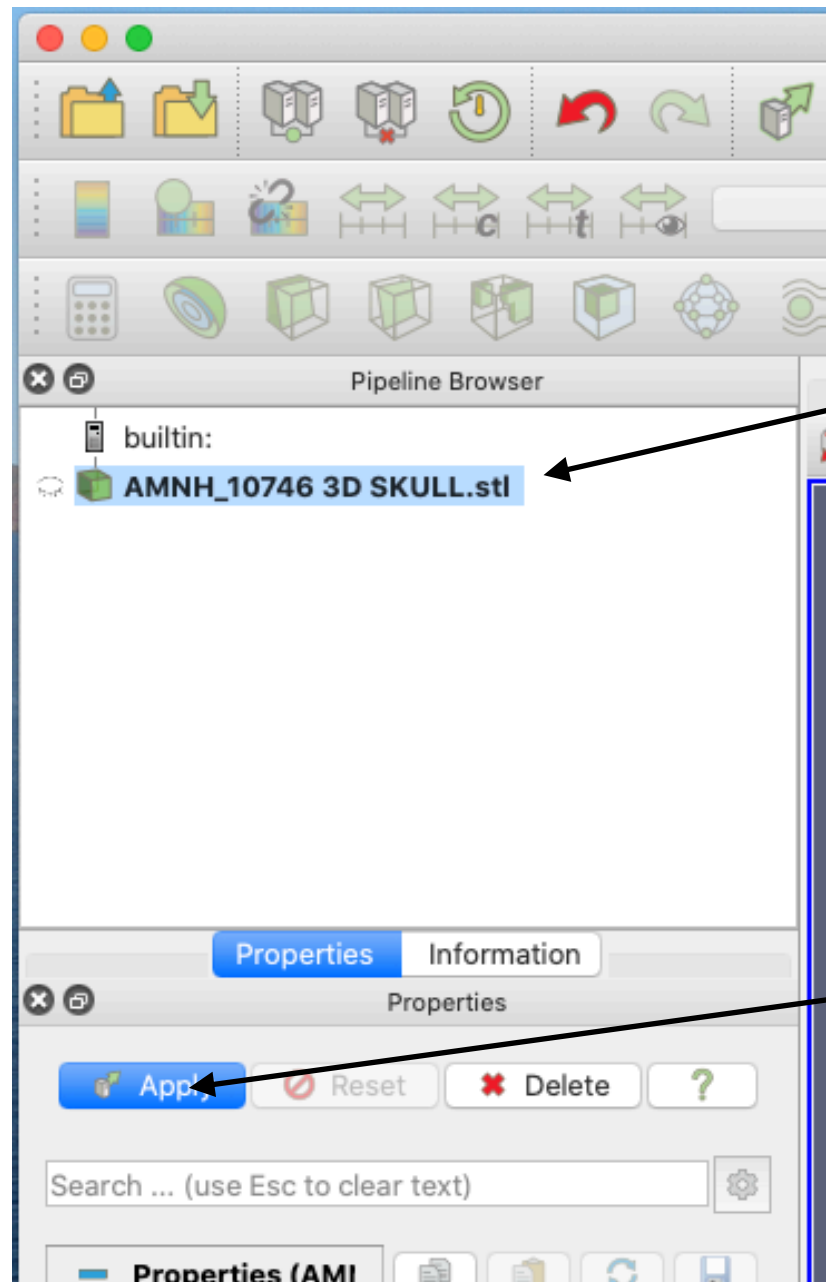
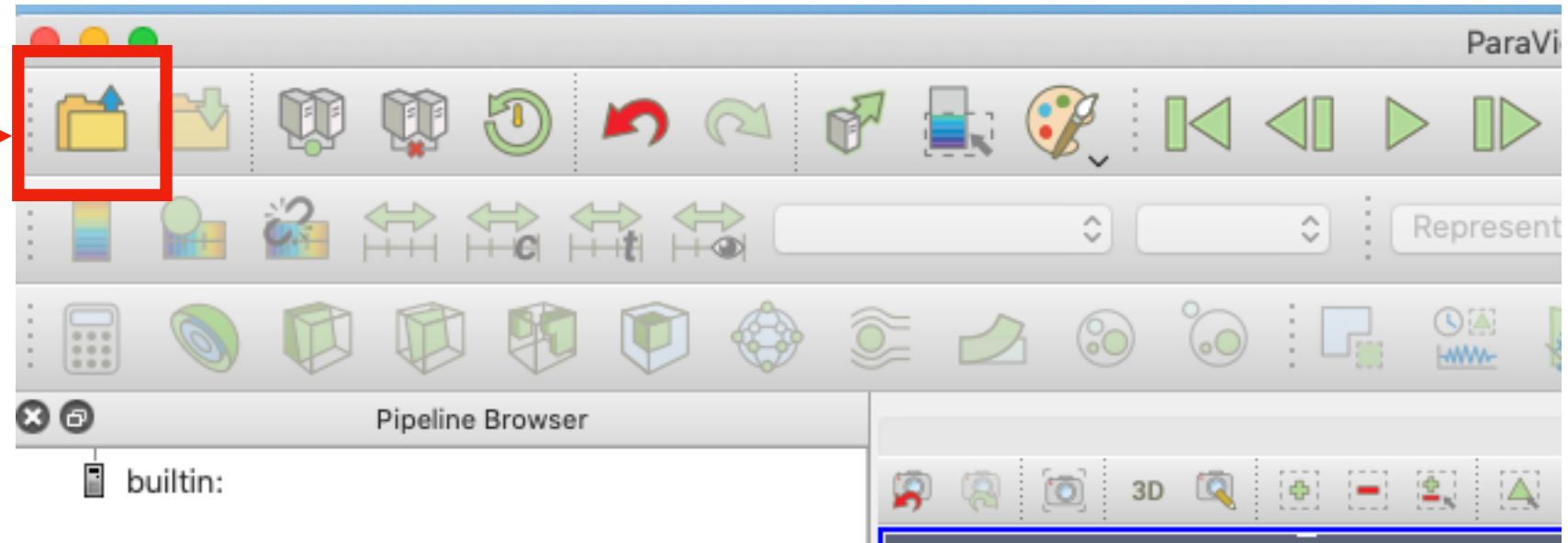
- Go to <https://www.paraview.org/download/>
 - Select your platform.
 - Download the latest release, open and follow instructions.
 - Download the documentation and data, if desired
- Download dog skull STL files:
 - Border collie skull: [AMNH_10746_3D_SKULL.stl](#)
 - Affenpinscher skull: [AMNH_212877_3D_SKULL.stl](#)

(Note: you must have Chapman credentials in order to view and download skull files)

Visualize STL in Paraview

1. In Paraview, click the File Open icon.

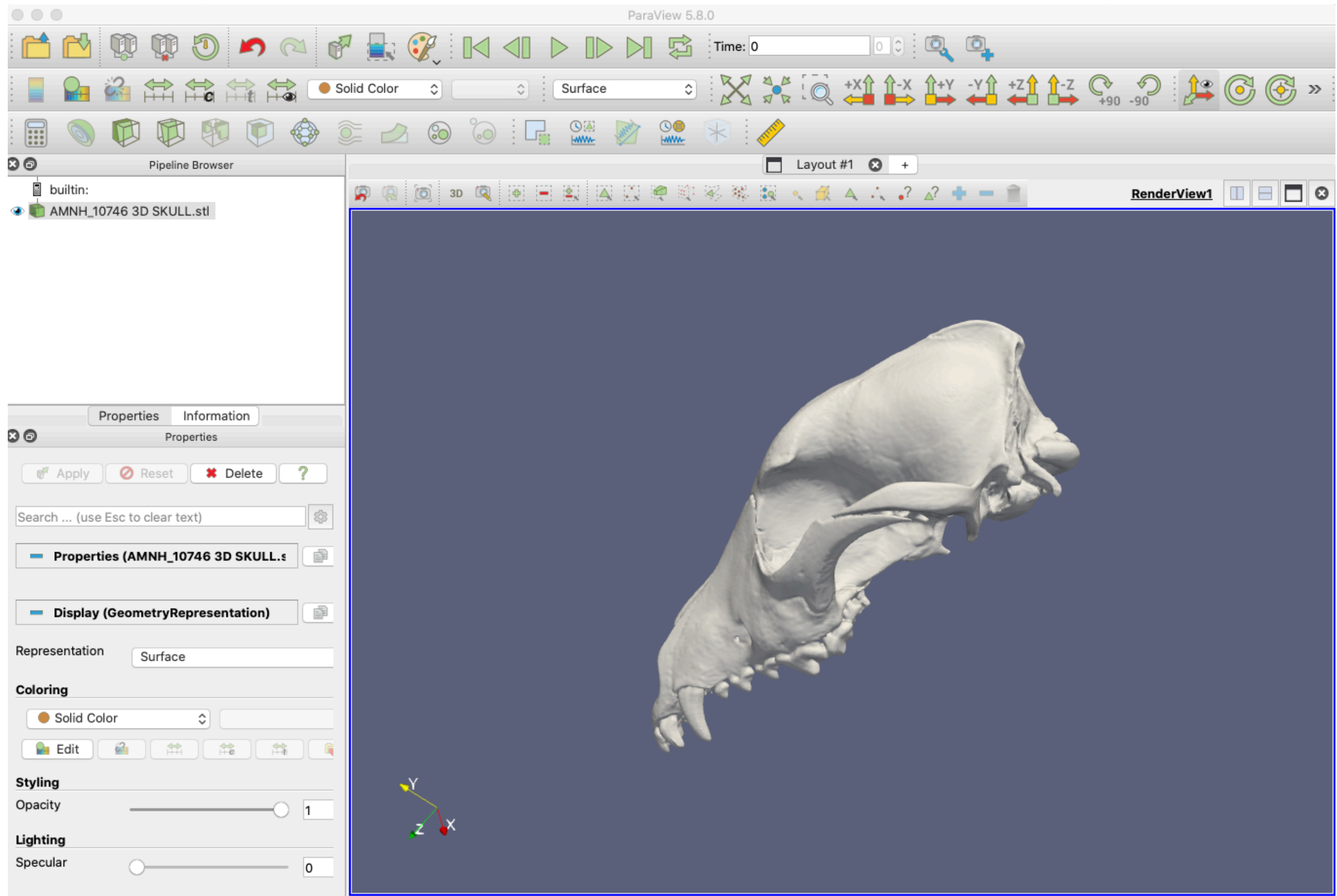
2. Select the SLT file and click ok.



3. Highlight the SLT in the Pipeline browser.

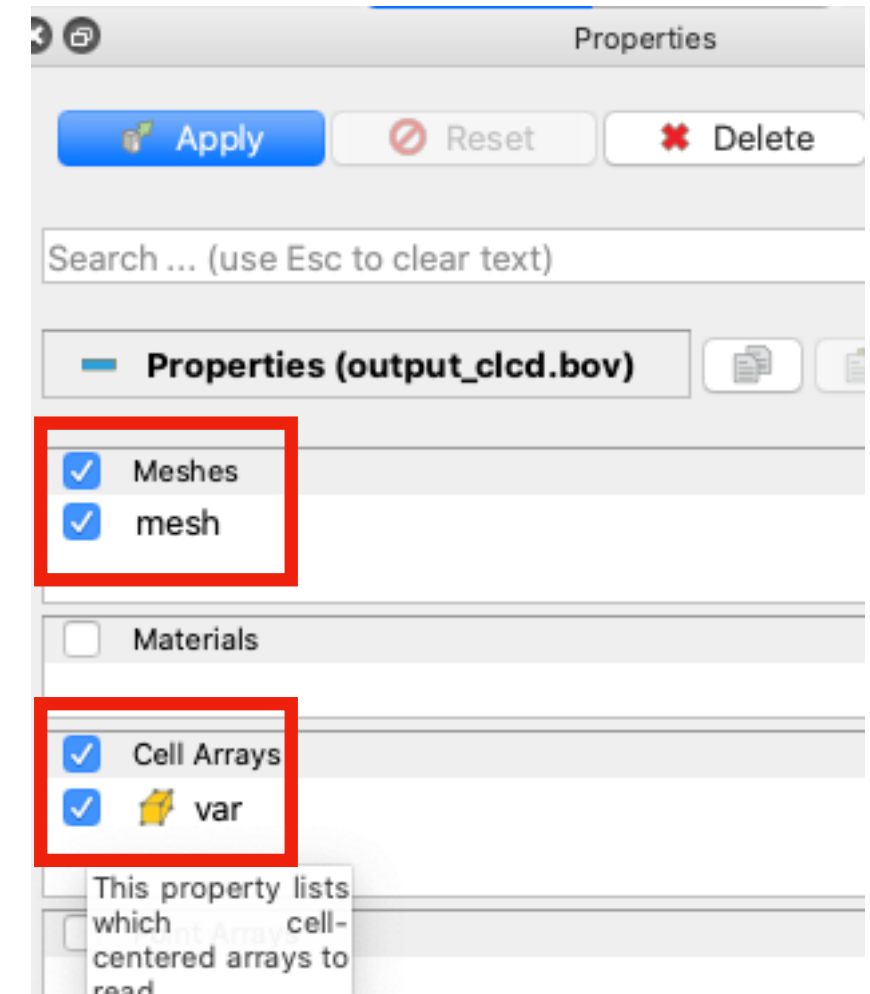
4. Click "Apply". The "eye" will open.

Visualize STL in Paraview

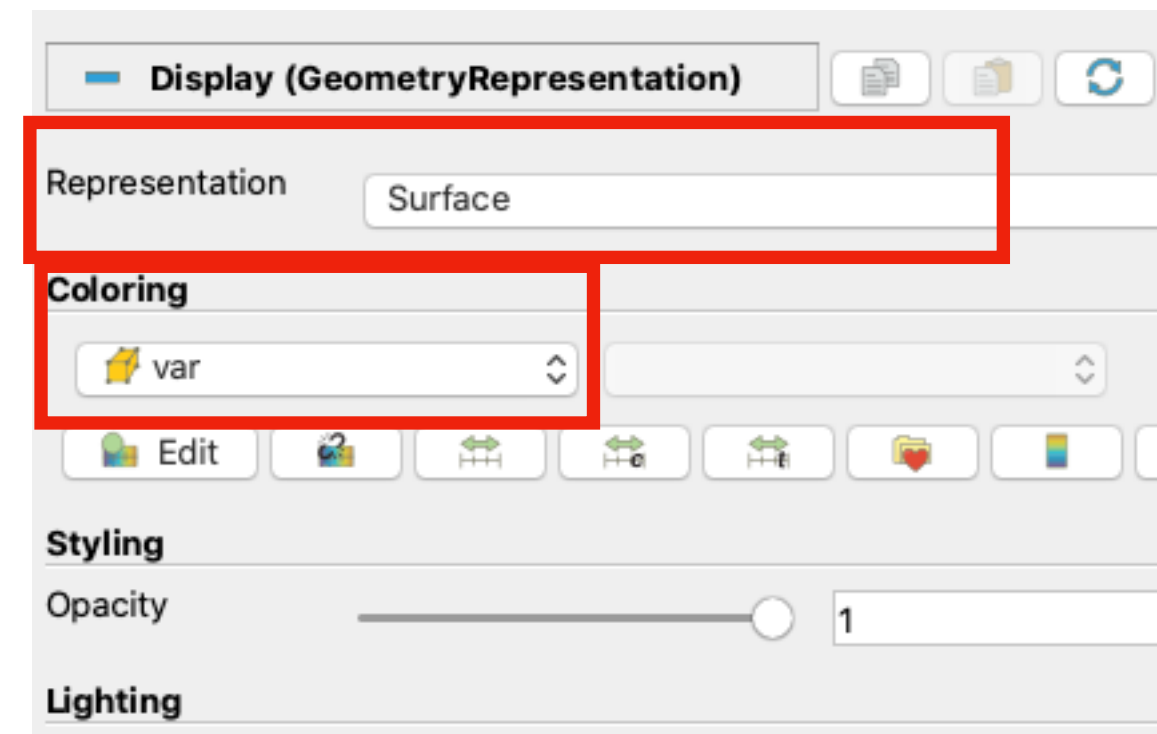


Visualize BOV in Paraview

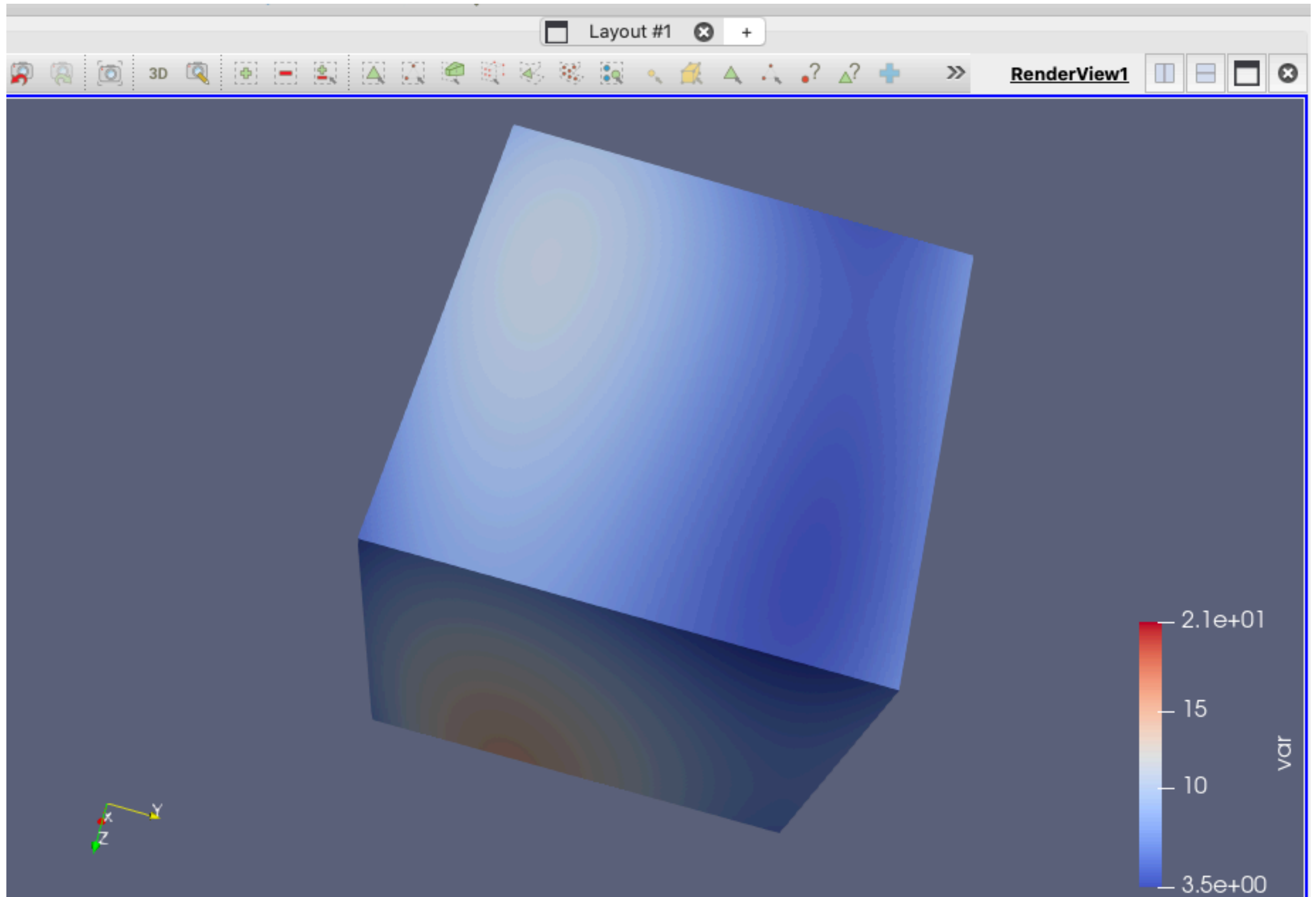
1. In Paraview, click the File Open icon.
2. Select the output_clcd.bov file and click ok.
3. Highlight the output_clcd.bov line and in Properties click the boxes for “mesh” and “var”. Click “Apply”.



4. Under display, select “Surface” from the representation field and “var” in the coloring field.



Visualize BOV in Paraview



Assignment in Paraview

Part 1: Render the skull of the Affenpinscher. Change the color of the surface to orange. Now, make a cut across the skull from nose to the base of the skull to show the internal anatomy of the nose. Save as a screen shot or PNG.

Part 2: The output_clcd.bov is a gPC surrogate function of values for wing aspect ratio (x axis), wing camber (y axis), and Reynolds number (z axis). The function value is maximum lift-to-drag ratio, which is a function of the three variables (x, y, z). What would be the best way to qualitatively show the pattern between the three variables in a paper? Create the view in Paraview and screen shot or save as a PNG. Put several together, if necessary.