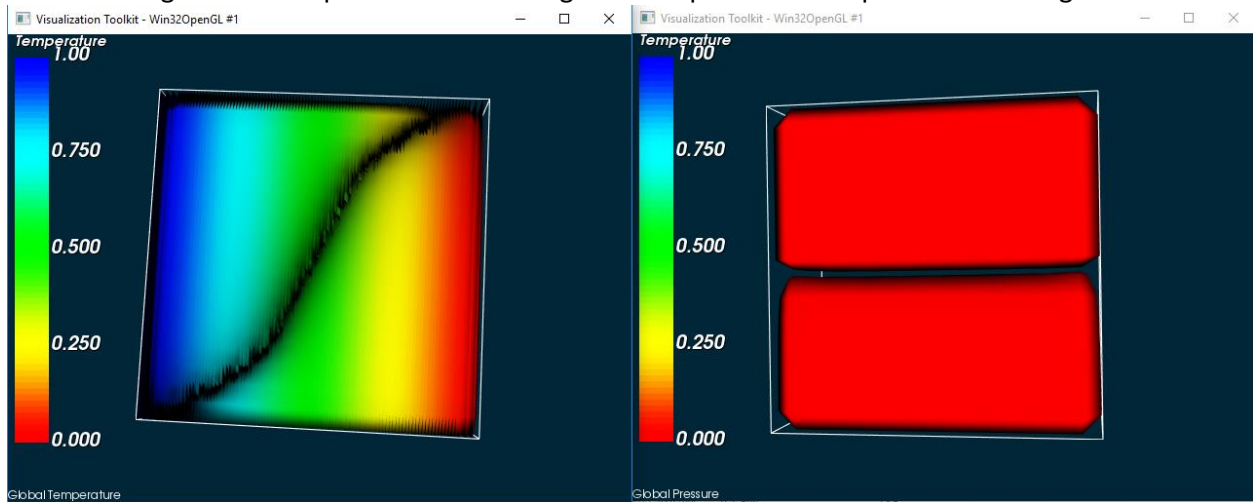
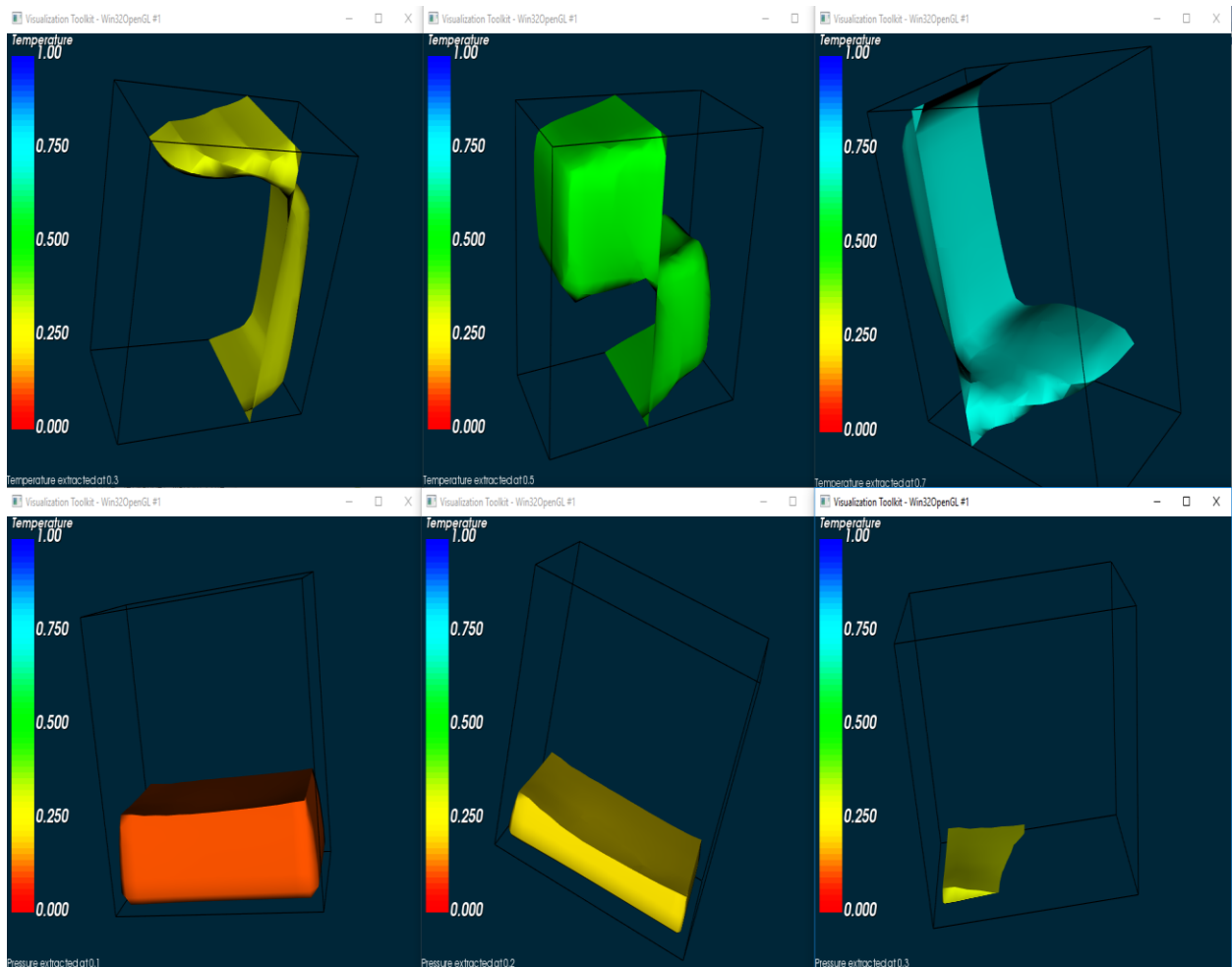


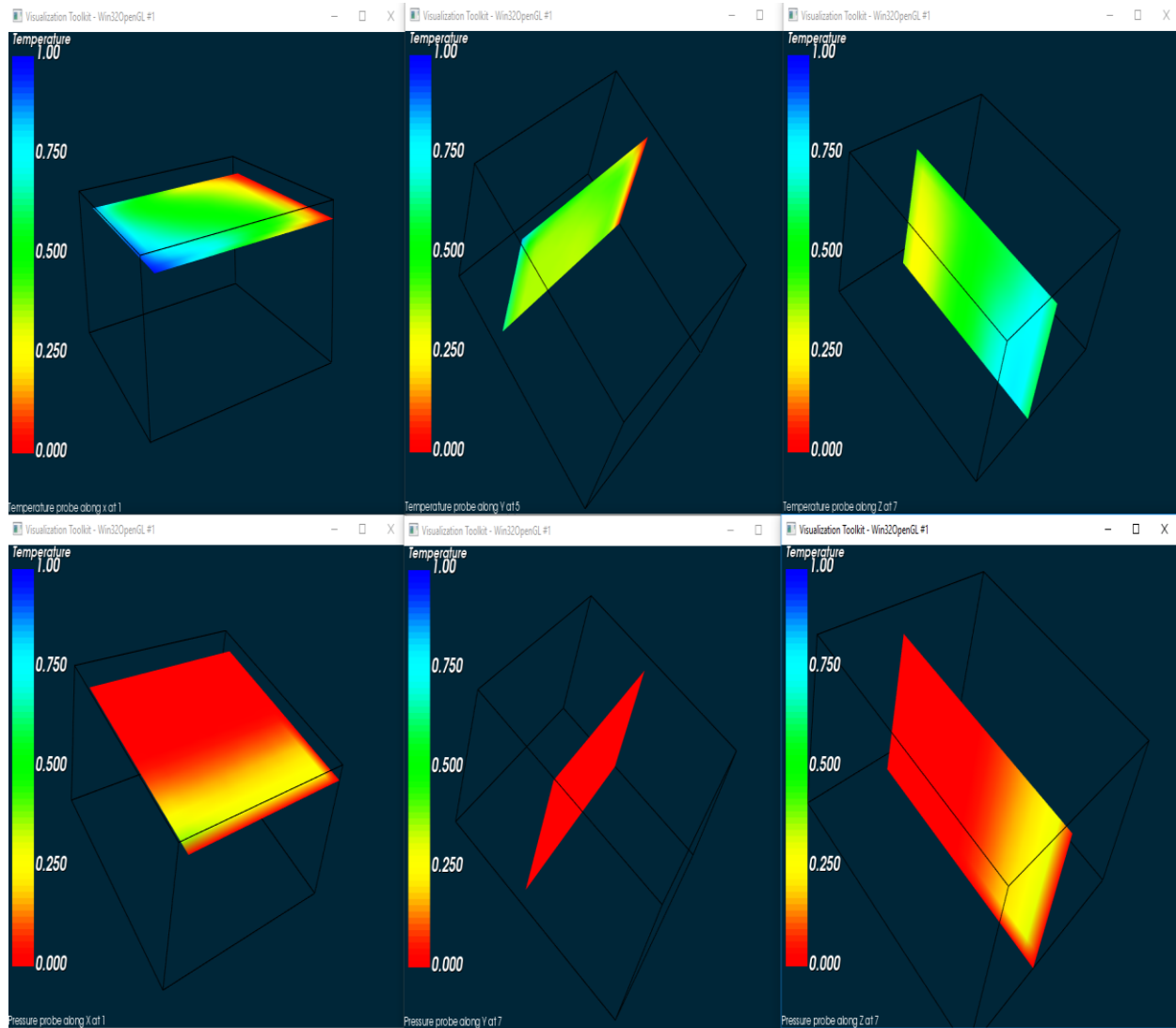
The following is a visual representation of the global temperatures and pressures of the given data files:



This shows that the temperature has a much larger range of data than pressure. From here, we can extract and probe “slices” of the data to give us a better look at the visualized data in order to understand it better. The following is an isosurface extraction of several slices of data at various points using the marching cube algorithm, see the text actor at the bottom-left of each window for a label.



The following is a probing of the data at various points, again, see the text actor at the bottom of each window:



The point of this data visualization is to make it easier to understand the given data. Using these extractions and probes, we can tell that the data varies quite often because of how varied the heat maps are on these visualizations. Creating the heat maps was key in this visualization exercise because without them, the data would mean very little. The 3-D space was also key in this because this data would be much harder to understand on a 2-D plane. This combination of a 3-D plane and heat maps gives us a very good look at what is happening with the data, and this was accomplished with VTK.