

Homework 5

CSC9005 : Data Visualization
May 23, 2020

1 Question 1

- In this assignment, you are asked to use VTK and same three techniques (slicing, isosurface, direct volume rendering) in Homework 4 to visualize “v02”. You do not have to show them at the same time. You can write three programs and visualize each one individually.
- You have to show the color bar in the view of direct volume rendering. The color map and opacity function do not have to be the same as examples and you can freely change them to make your visualization look nicer.
- The following screenshots are examples, and from left to right are “slicing”, “isosurface” and “direct volume rendering”:

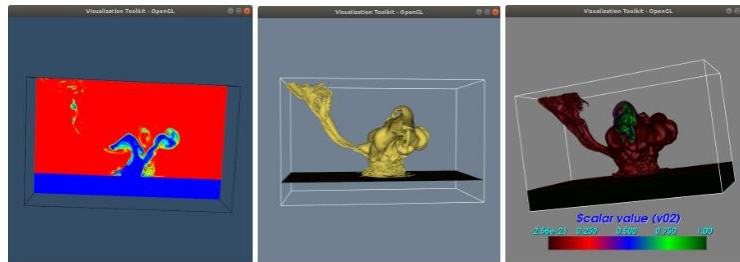


Figure 1: Example of homework 5.

- We provide a .py template for you to quickly start and you can download it from [here](#). In addition, a lot of VTK-Python sample codes can be found [here](#).
- Volume Rendering Transfer function help:
 - [Python example to load a paraview transfer function.](#)
 - [A simple cool to warm transfer function in Json format.](#)
 - An image using the above transfer function:

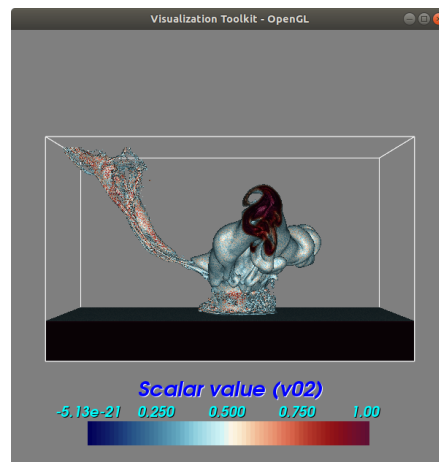


Figure 2: Example of the image using above transfer function.