

Scientific Visualization Homework1 (Paraview)

Please take the screenshots of the visualizations from paraview to support/show your answers. You may use multiple visualization image to support/show your answers.

● Christmas Present Dataset

Download the “present.raw” dataset (it is a raw data file) from Moodle and use Paraview to load and visualize it. The following is the data format and description.

Data resolution and size: 492x492x442 (204.1 MB)

Description: An industrial CT scan of a christmas present.

Data type: uint16 (unsigned short)

Spacing: 1x1x1

Use isosurface, direct volume rendering or slicing (or combination of them) to explore the dataset. Please describe and what objects you discover in this dataset (Please list at least 5 items).

Note: there are no 'perfect' answers in this practice. Instead, the emphasis lies in utilizing ParaView's capabilities to explore the data comprehensively, experimenting with various visualizations, and offering a visual narrative that describes your discoveries.

For each of these objects, you should generate renderings (images) to depict them. The following example serves as a reference (Please note that this example does not represent the actual dataset to be used in this assignment):

There is an object after a bottle and in front of a small box. By the shape in the following visualization (volume rendering), I guess it could be a knife.

