

Volume rendering using pypython

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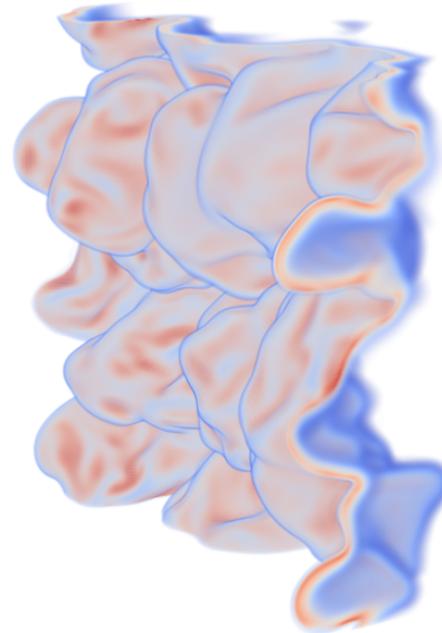
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What is pypython?

- pypython is Paraview build wrapper to python on your computer
- Provides access to the Paraview functions for visualization
- Can make certain processes, such as the rendering of a multitude of images, more efficient.
- Allows you to change settings on the visualization template through python functions that you can define.

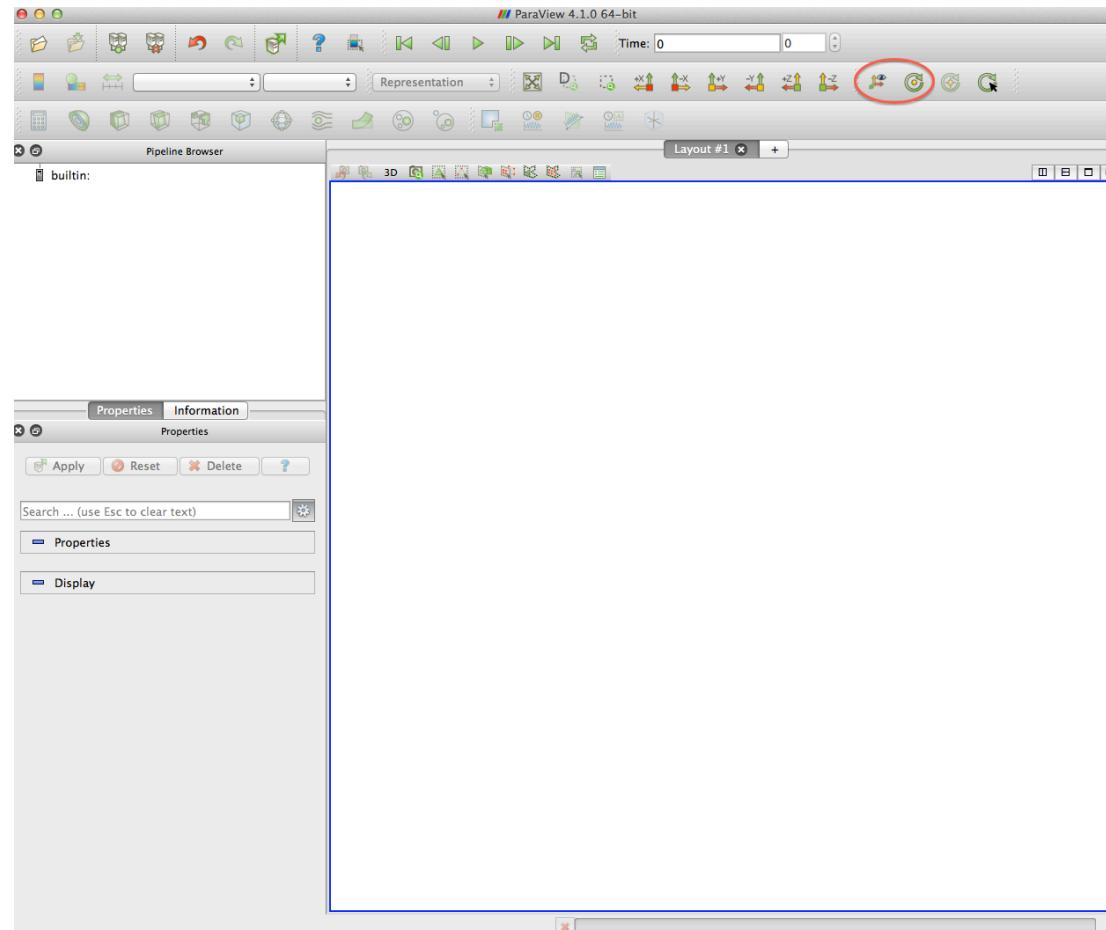
Volume rendering of heat release

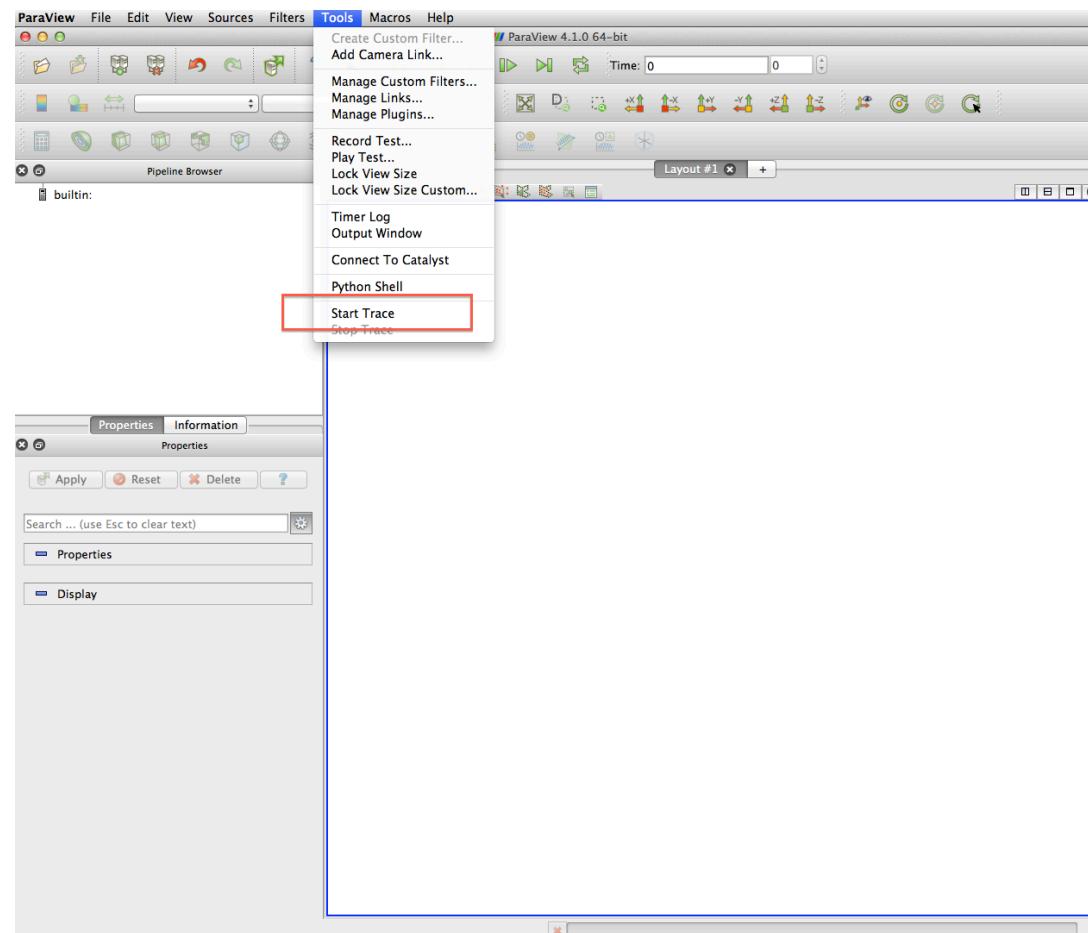
- We will use this example of how to create a simple script that creates you visual representation and saves a screenshot.

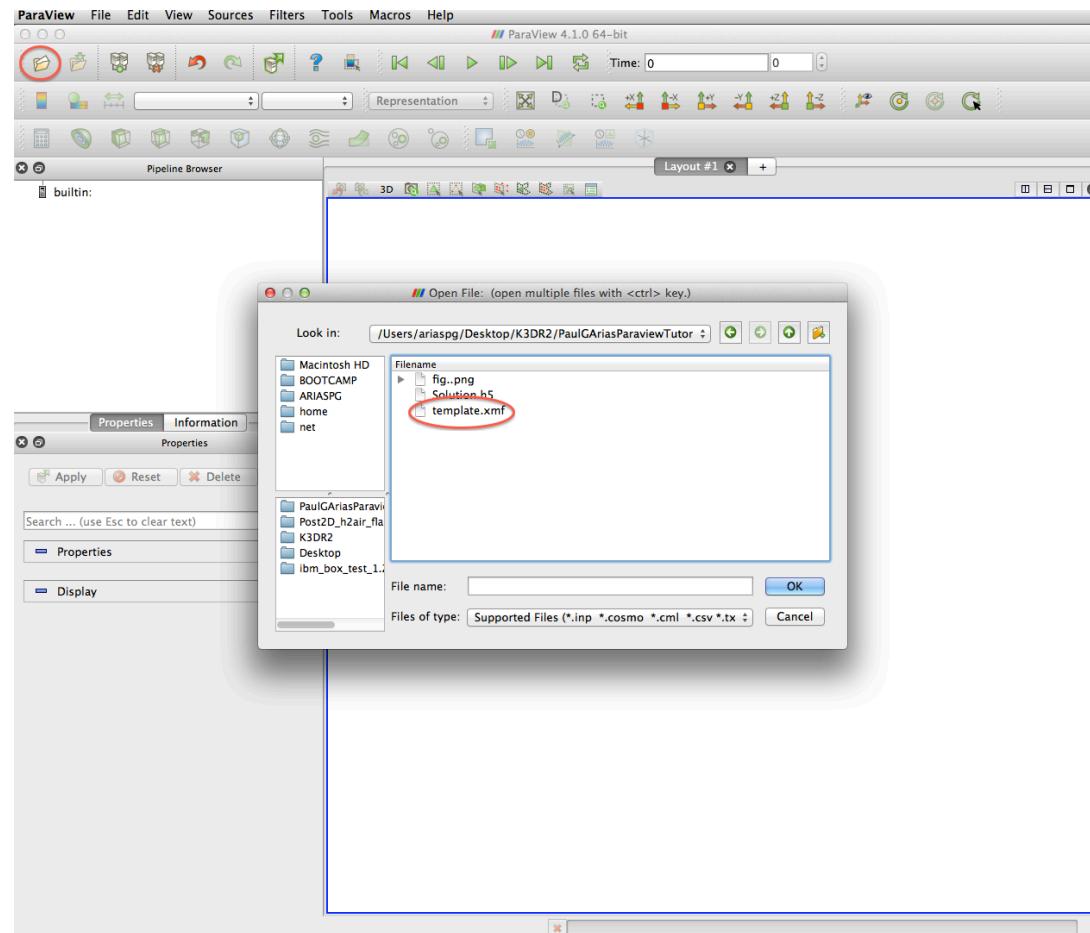


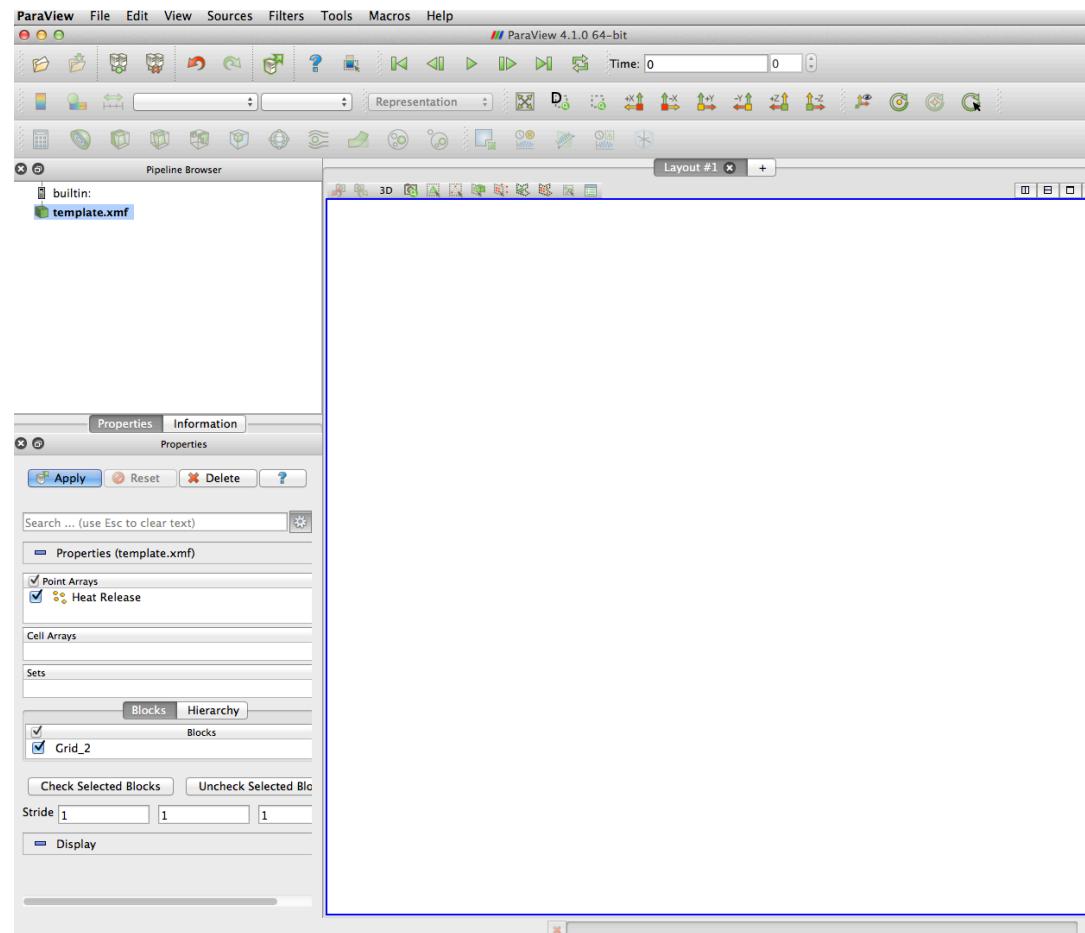
You can download this presentation and necessary files from the git repository:

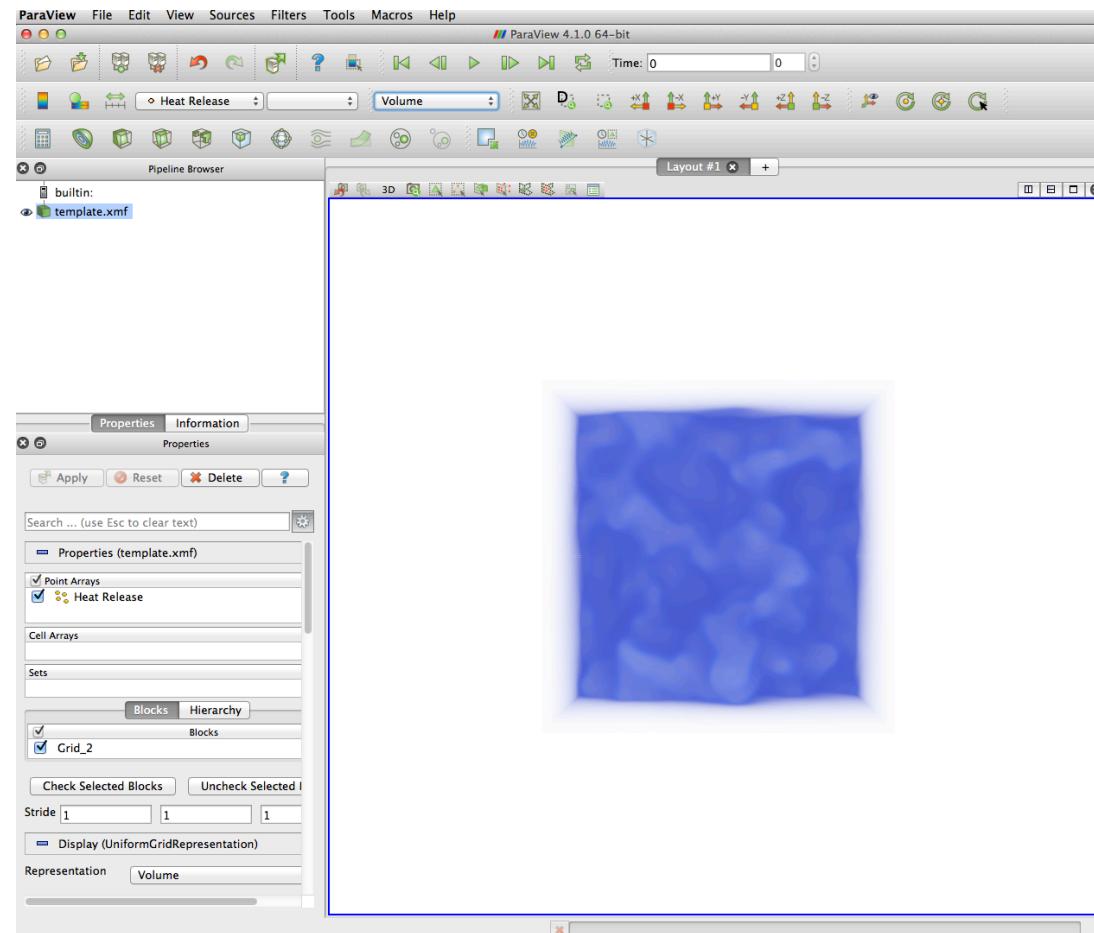
```
~$ git clone https://github.com/paulgarias/pvpython.tutorial.git pvpythontutorial
```

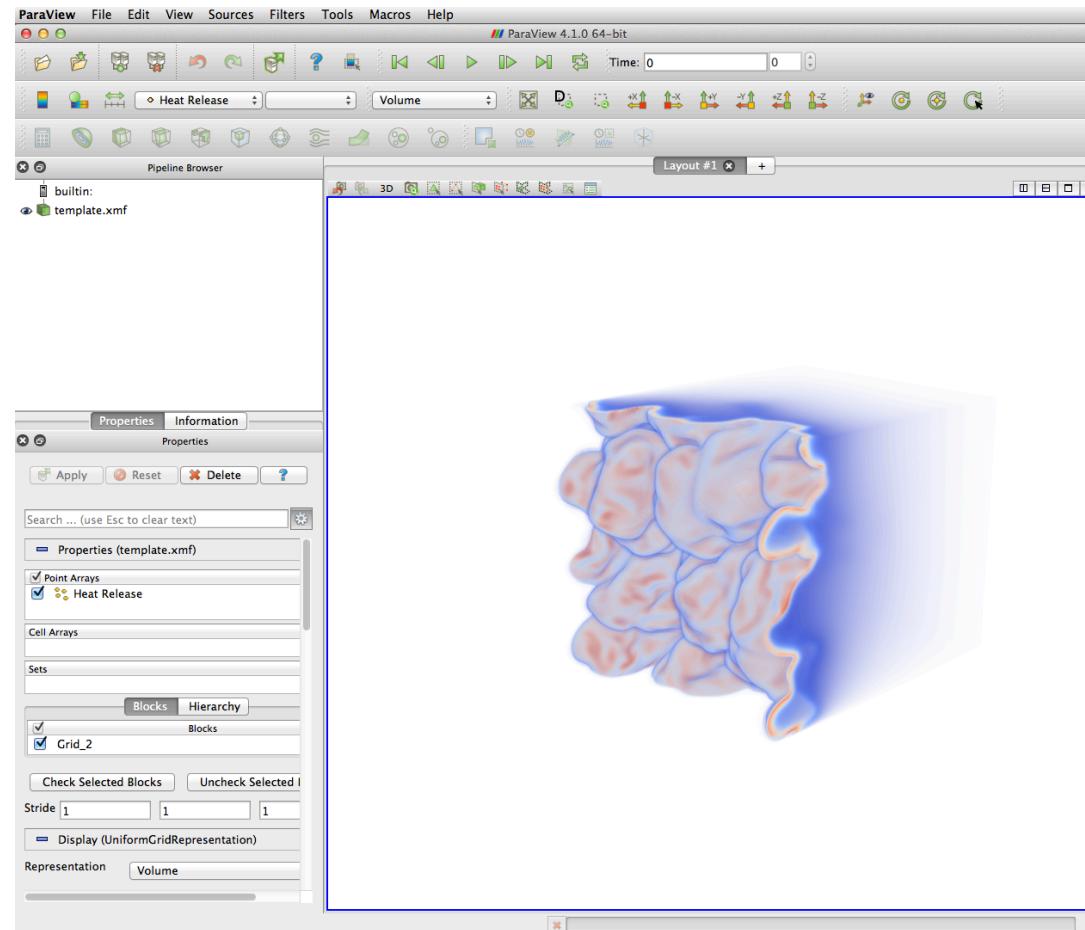


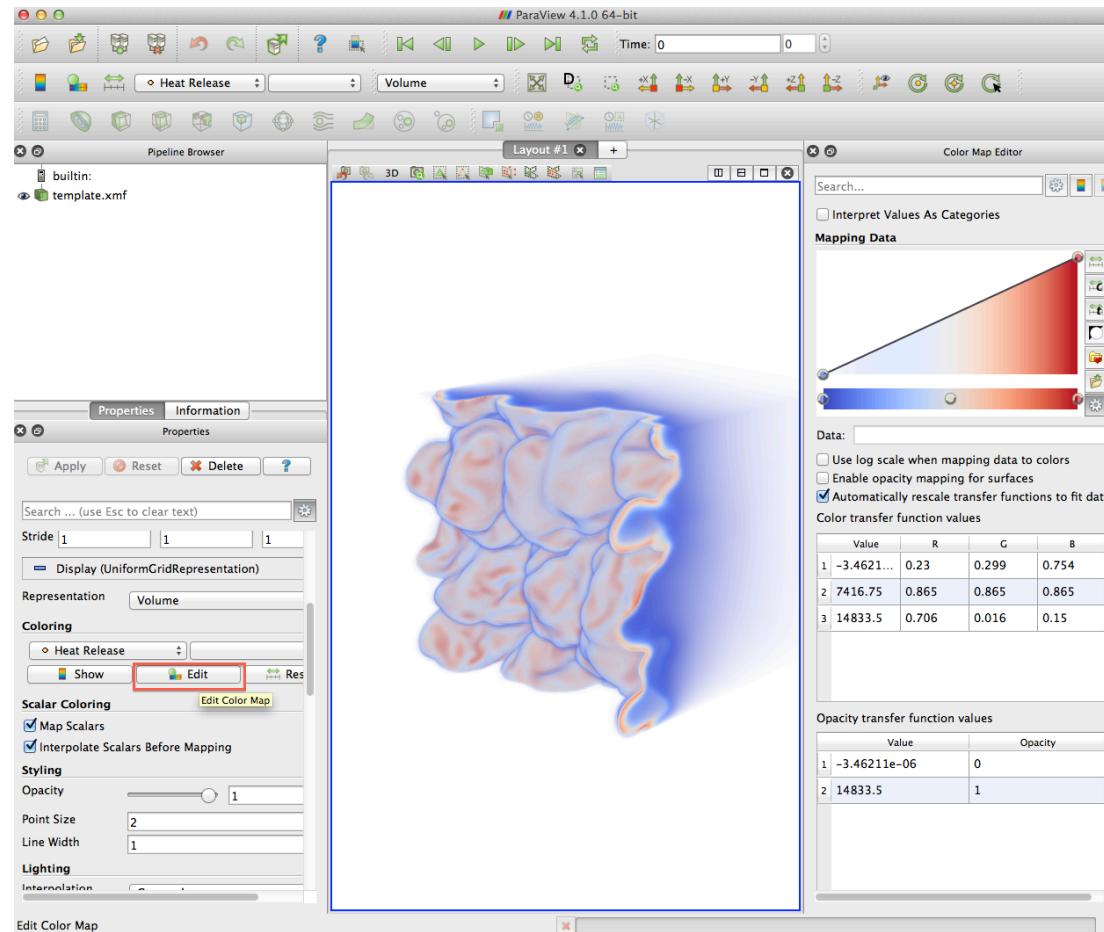


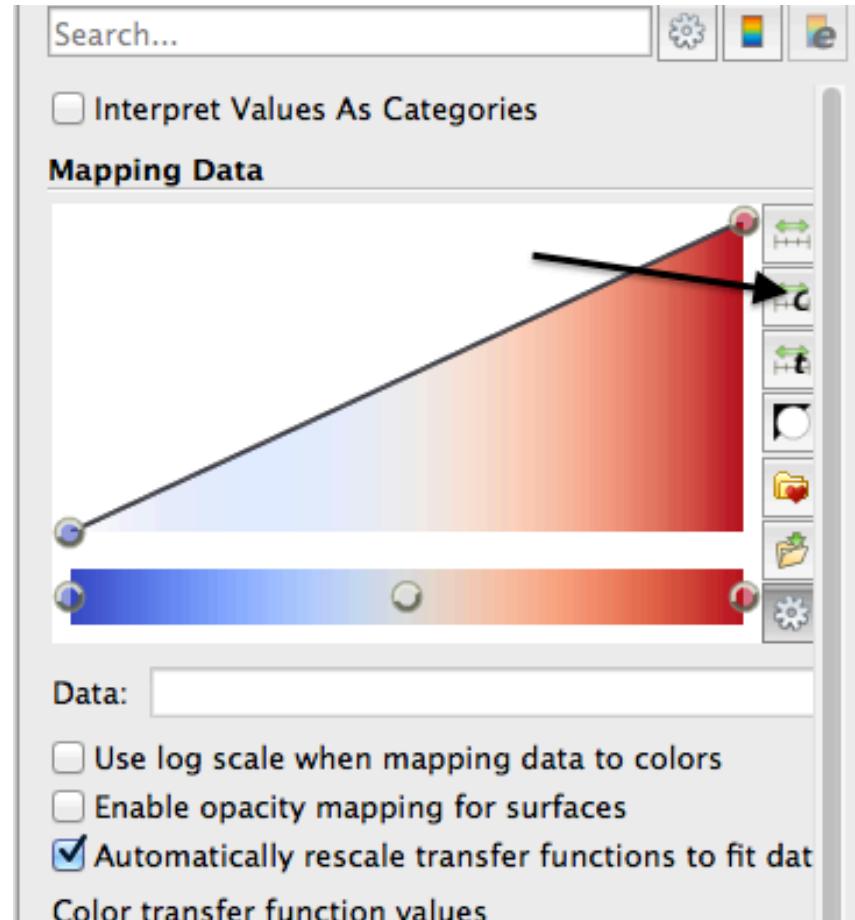


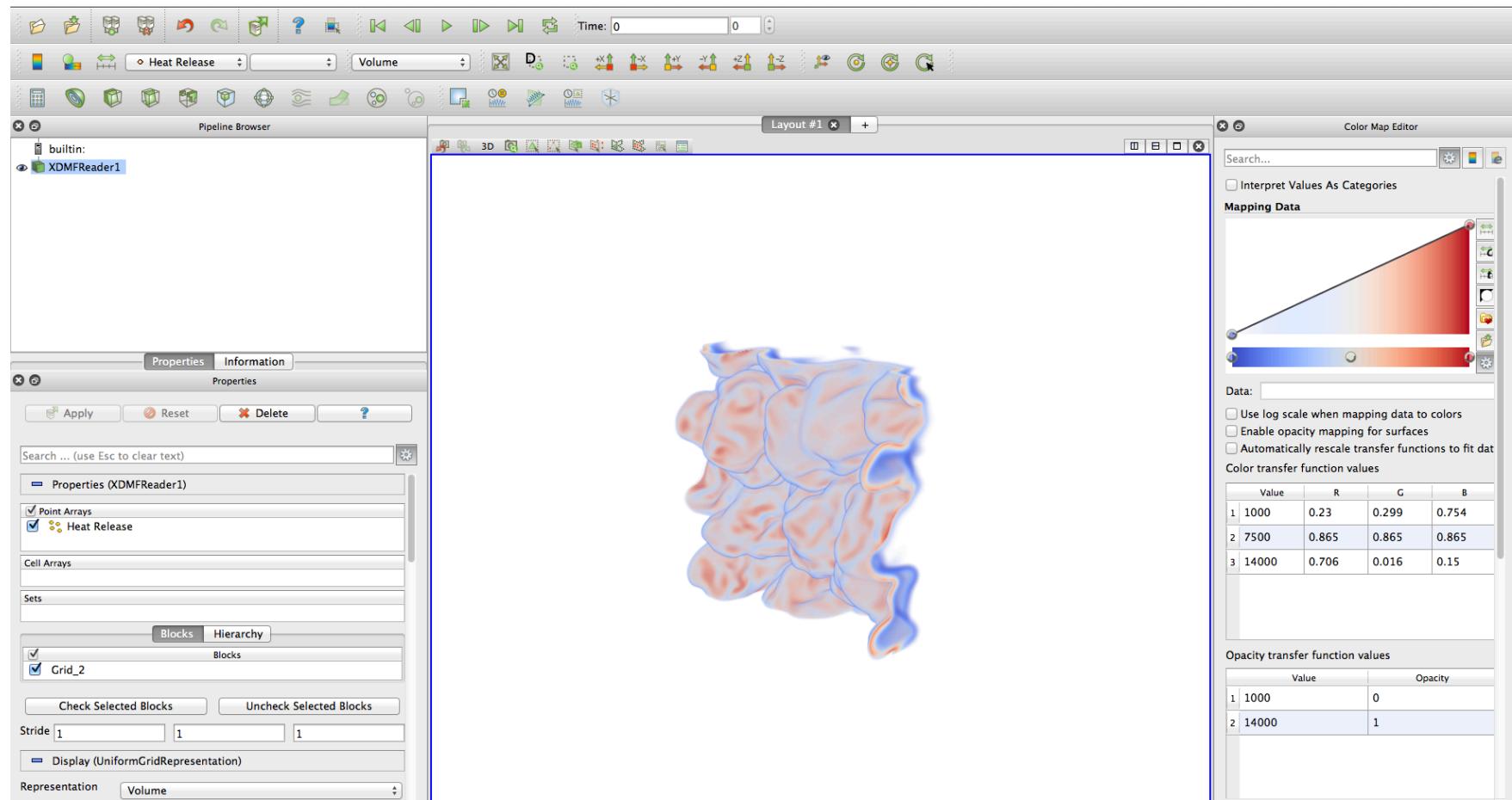


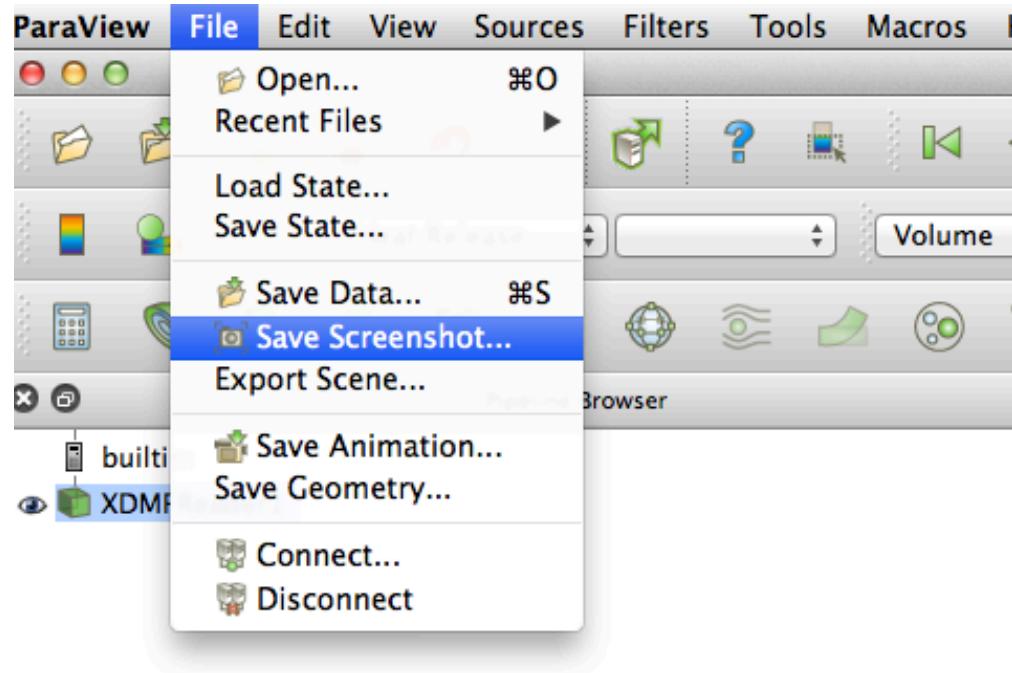


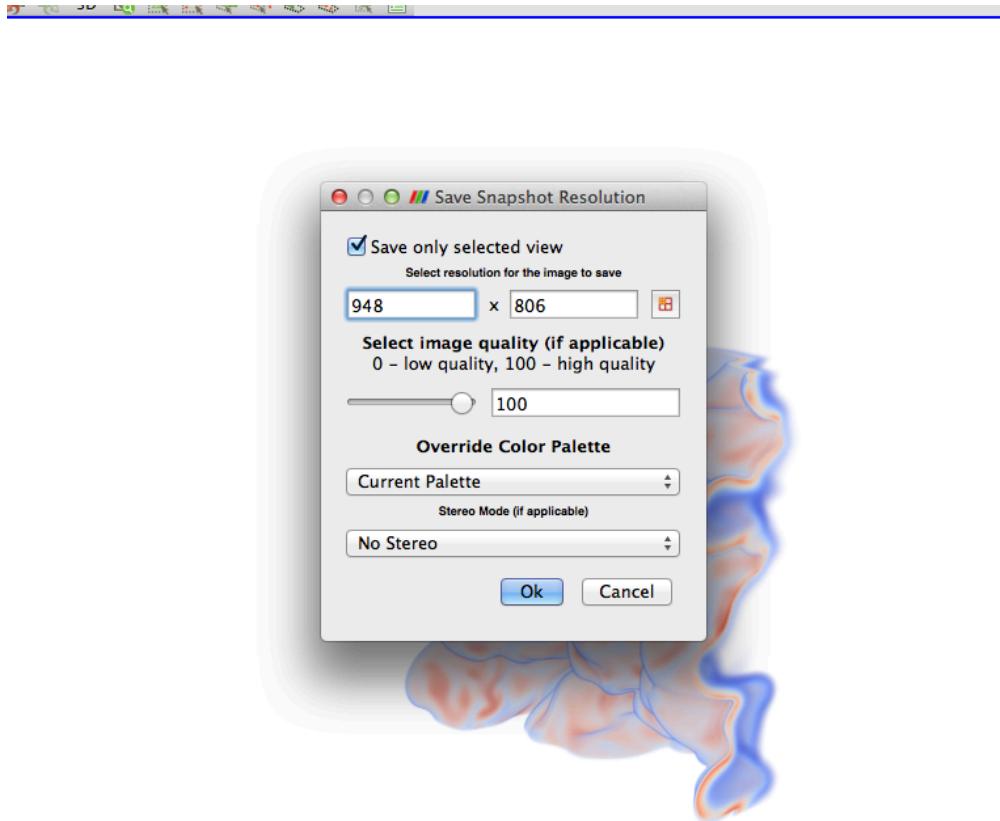


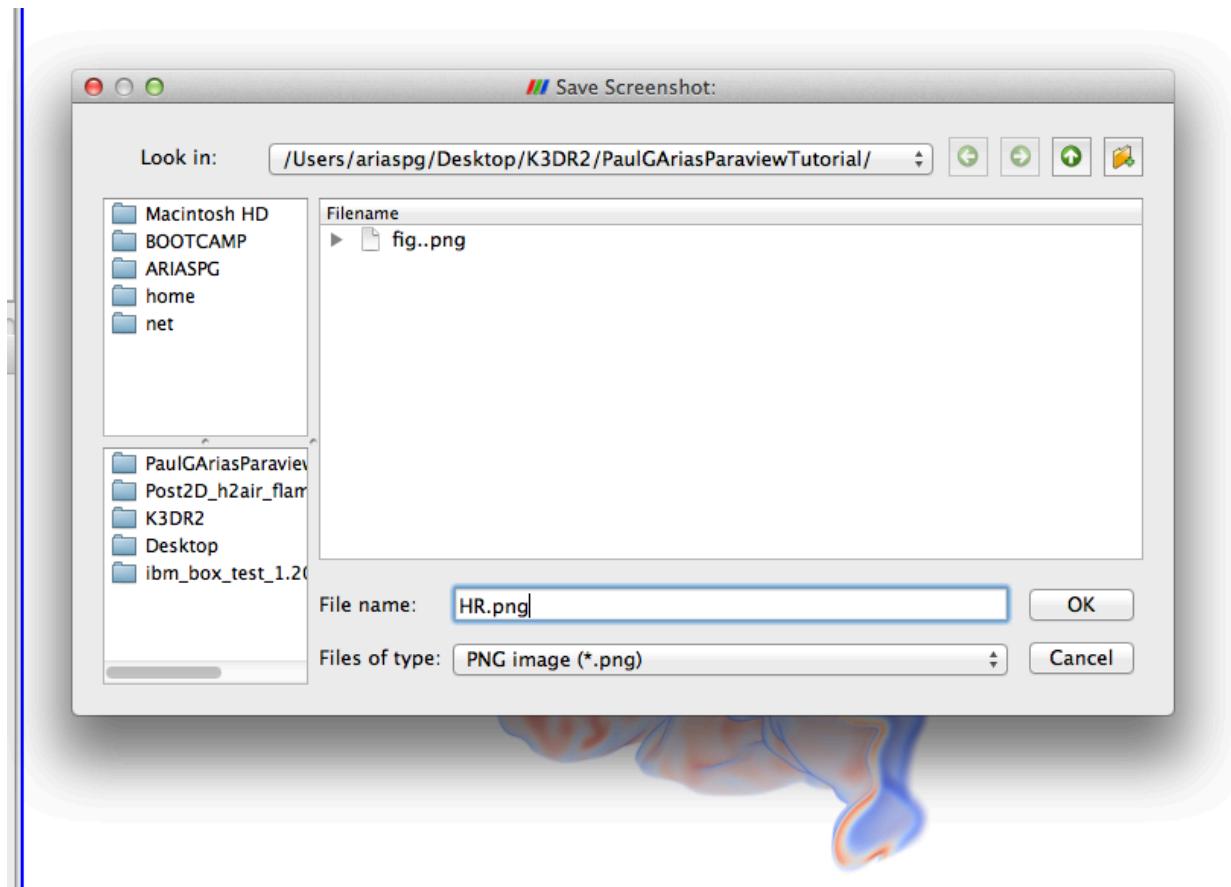


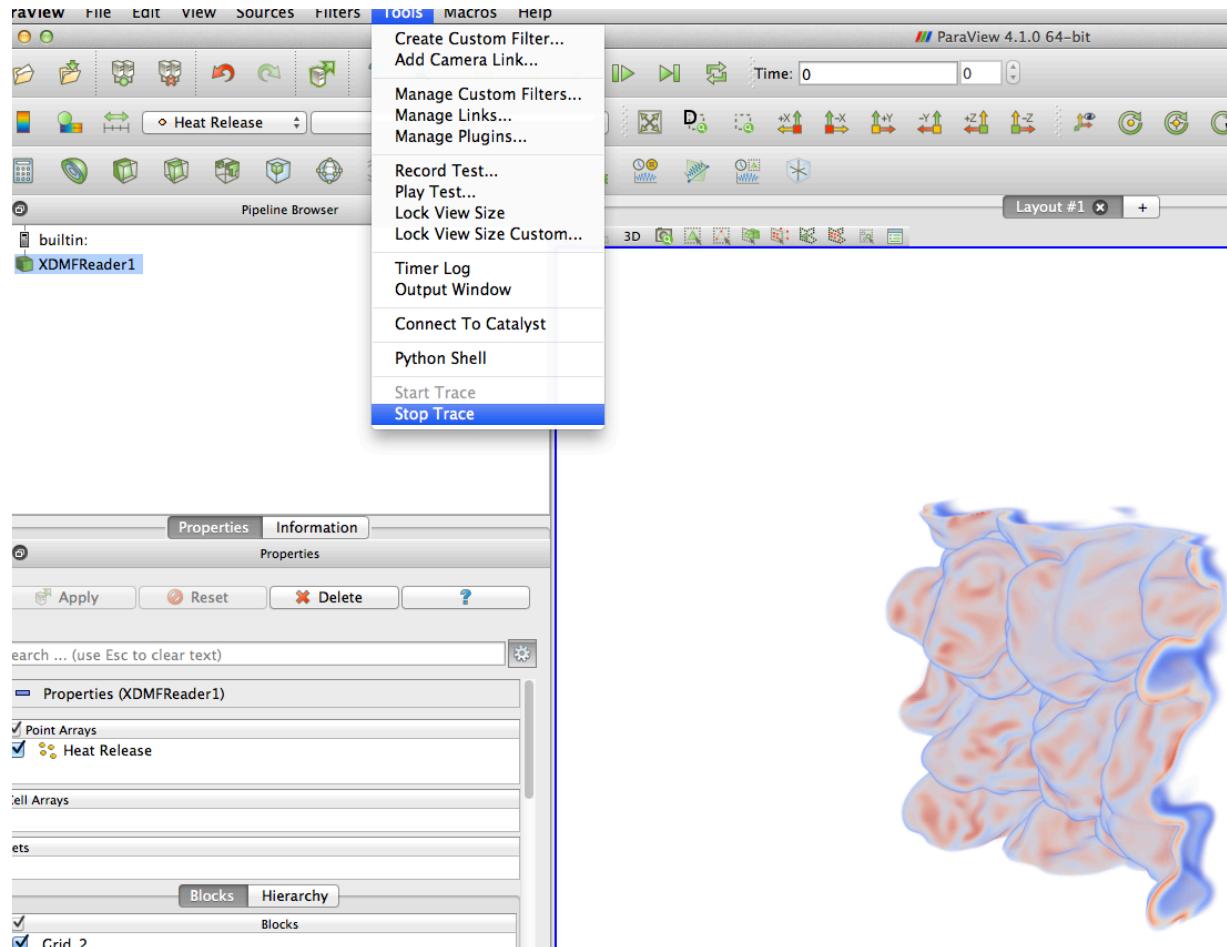












- A set of pvpython command lines will pop up. Copy and paste to a file in the pvpythontutorial directory.
- Edit the file to ensure the following order.
 1. The “write” command is set as last.
 2. Include the following lines:

```
RenderView1.ViewSize = [1200, 1200]
RenderView1.Background = [1.0, 1.0, 1.0]
```
 3. A sample python file is include “HR_volume.py”

- To run the script:

/Applications/paraview.app/Contents/bin/pvpython HR_volume.py

- The volume render should pop up, save the file to the location specified in the python file, and then close.

