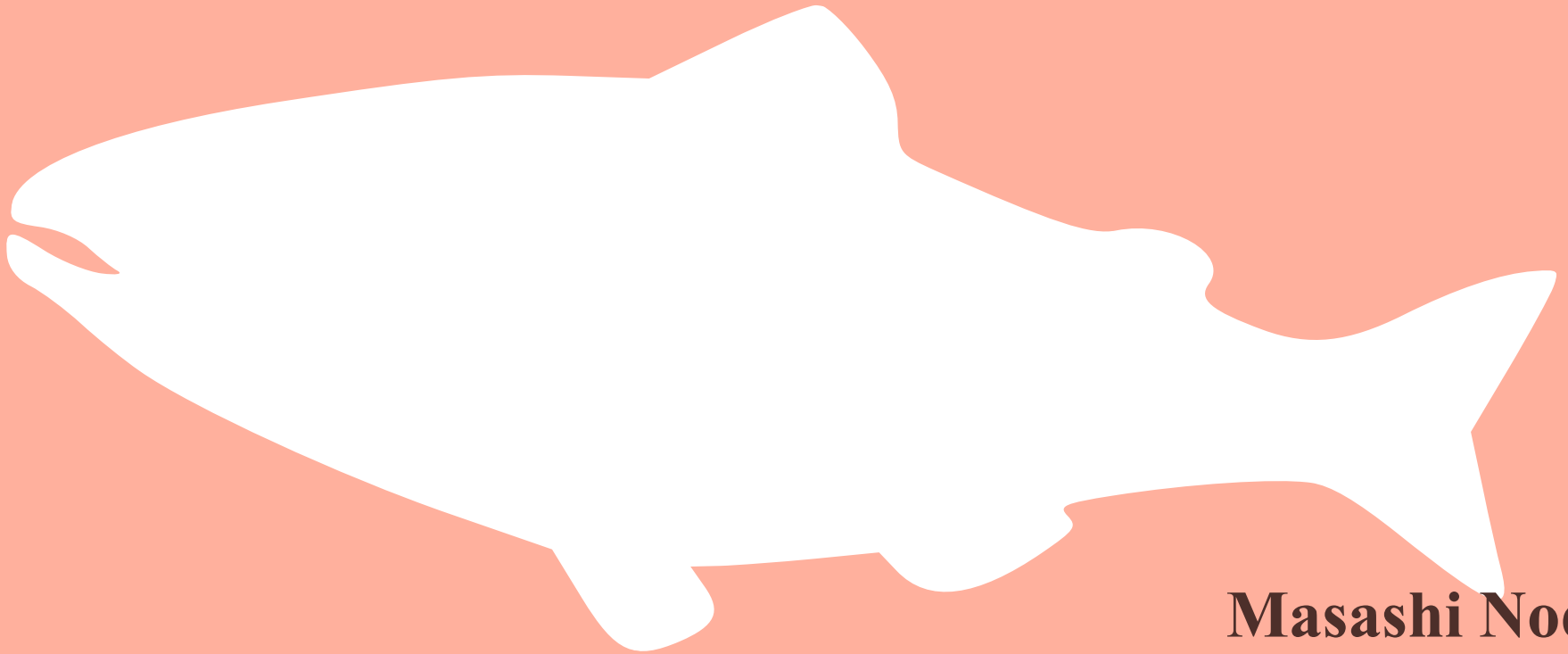


Visualization

Exercise 4-1

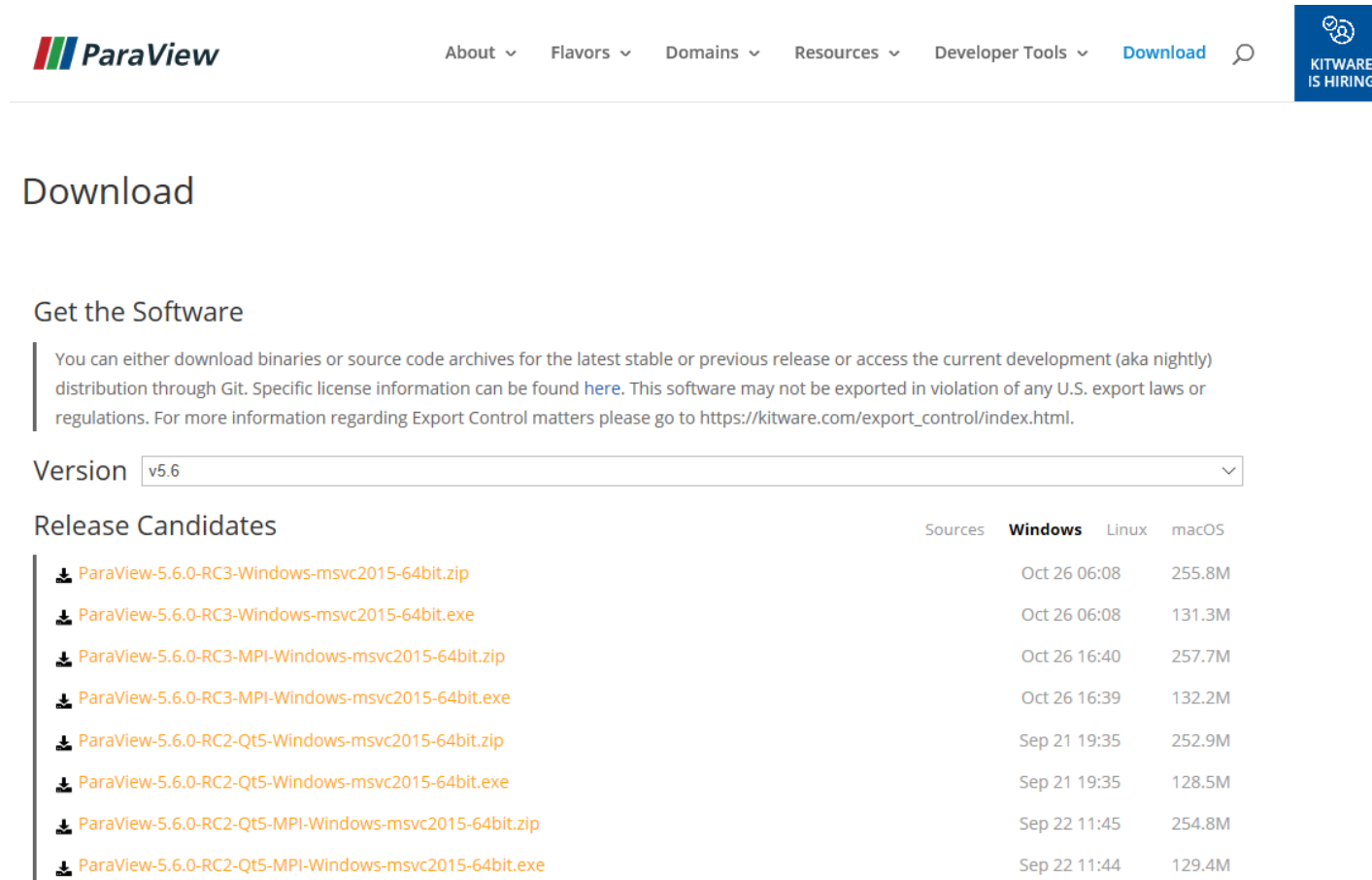


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Download of ParaView

- <https://www.paraview.org/download/>



The screenshot shows the ParaView website's download page. At the top, there is a navigation bar with the ParaView logo on the left and menu items: About, Flavors, Domains, Resources, Developer Tools, and Download. A search icon is also present. On the right side of the navigation bar, there is a blue button that says "KITWARE IS HIRING". Below the navigation bar, the main heading is "Download". Underneath, there is a section titled "Get the Software" with a paragraph of text explaining that users can download binaries or source code archives for the latest stable or previous release, or access the current development through Git. A "Version" dropdown menu is set to "v5.6". Below this is a table titled "Release Candidates" with columns for "Sources", "Windows", "Linux", and "macOS". The table lists eight different release candidates with their respective download links, dates, and sizes.

	Sources	Windows	Linux	macOS
ParaView-5.6.0-RC3-Windows-msvc2015-64bit.zip		Oct 26 06:08		255.8M
ParaView-5.6.0-RC3-Windows-msvc2015-64bit.exe		Oct 26 06:08		131.3M
ParaView-5.6.0-RC3-MPI-Windows-msvc2015-64bit.zip		Oct 26 16:40		257.7M
ParaView-5.6.0-RC3-MPI-Windows-msvc2015-64bit.exe		Oct 26 16:39		132.2M
ParaView-5.6.0-RC2-Qt5-Windows-msvc2015-64bit.zip		Sep 21 19:35		252.9M
ParaView-5.6.0-RC2-Qt5-Windows-msvc2015-64bit.exe		Sep 21 19:35		128.5M
ParaView-5.6.0-RC2-Qt5-MPI-Windows-msvc2015-64bit.zip		Sep 22 11:45		254.8M
ParaView-5.6.0-RC2-Qt5-MPI-Windows-msvc2015-64bit.exe		Sep 22 11:44		129.4M

Execution of SALMON

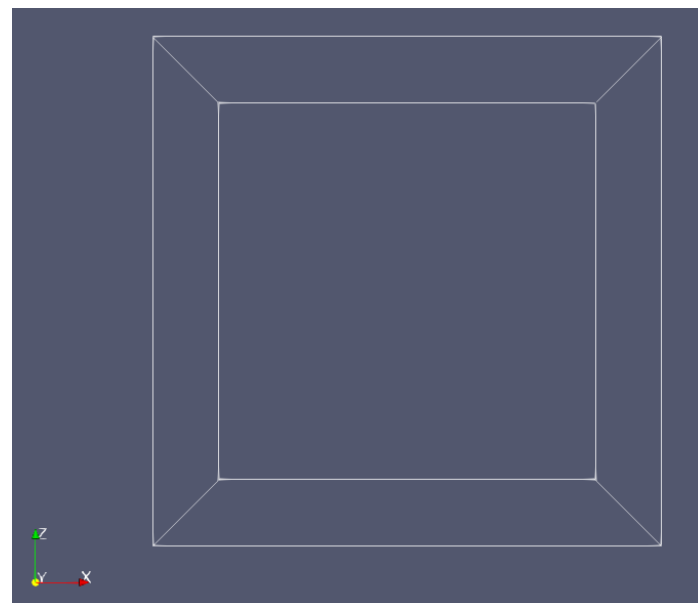
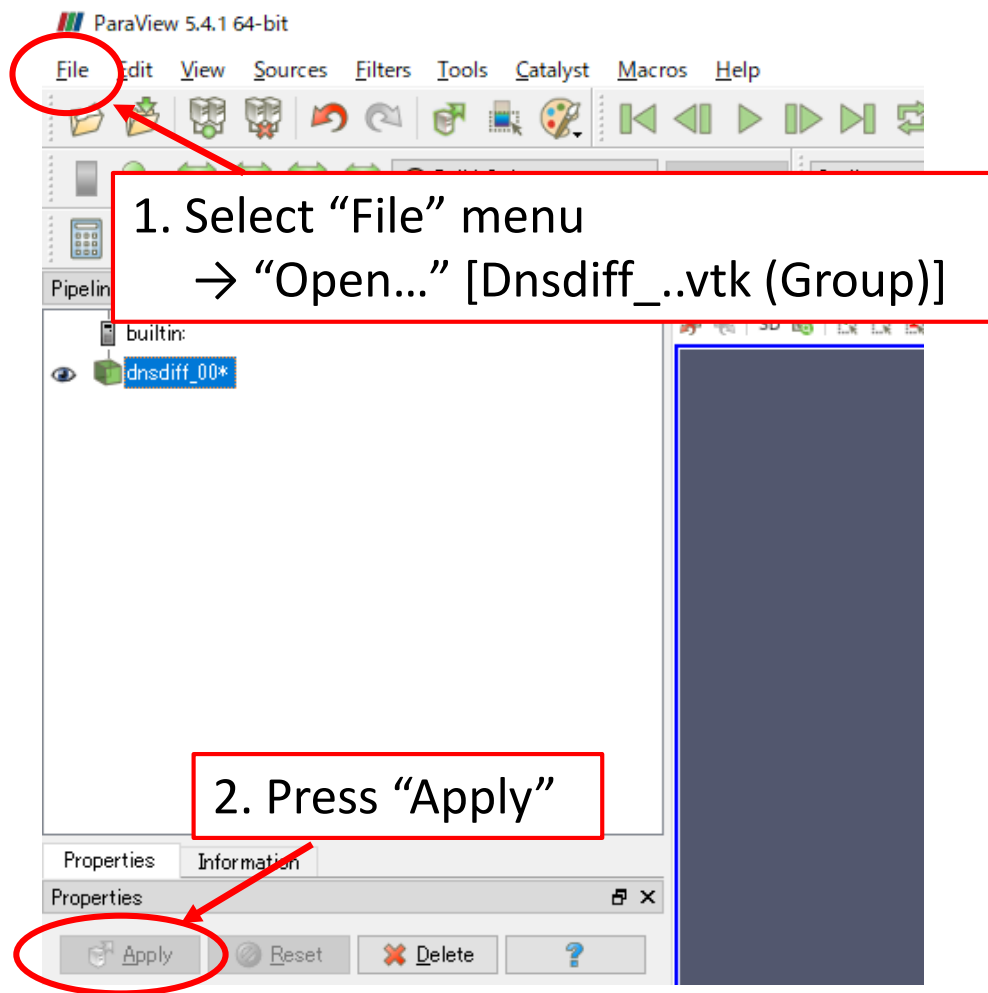
- Addition of “analysis” parameters in C2H2_rt_pulse.inp

C2H2_rt_pulse.inp

```
...
&analysis
  out_dns_rt = 'y'
  format3d = 'vtk'
/
...
```

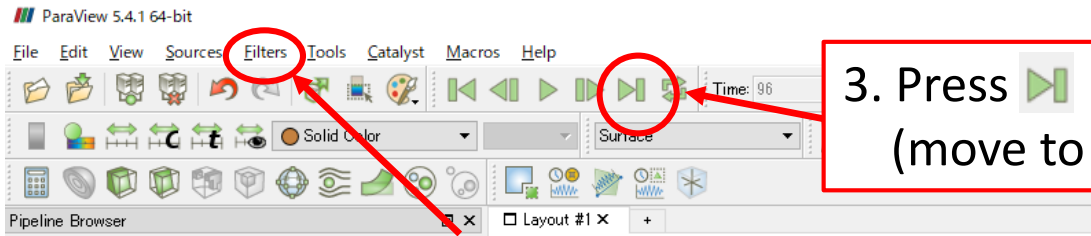
- Execution of SALMON.cpu to calculate electron dynamics under pulse
→ Generation of “dns_00?????.vtk” and “dnsdiff_00?????.vtk”

Procedure to make movies by ParaView (1)



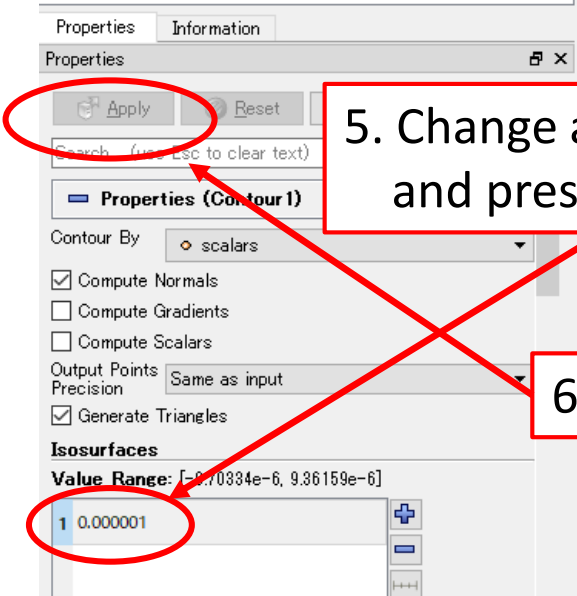
A box appears in right window.

Procedure to make movies by ParaView (2)



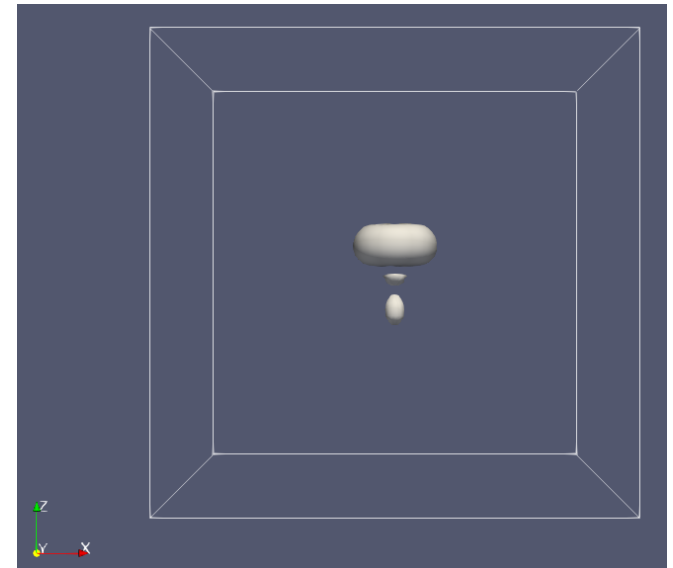
3. Press 
(move to last frame)

4. Select "Filters"
→ Common → Contour



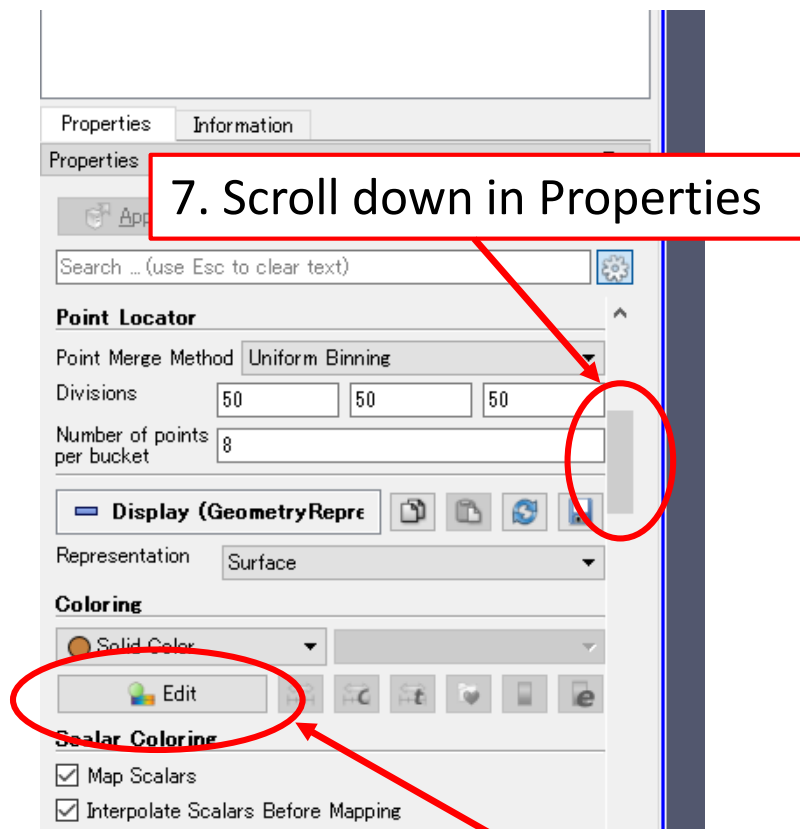
5. Change a value to 0.000001
and press enter

6. Press "Apply"

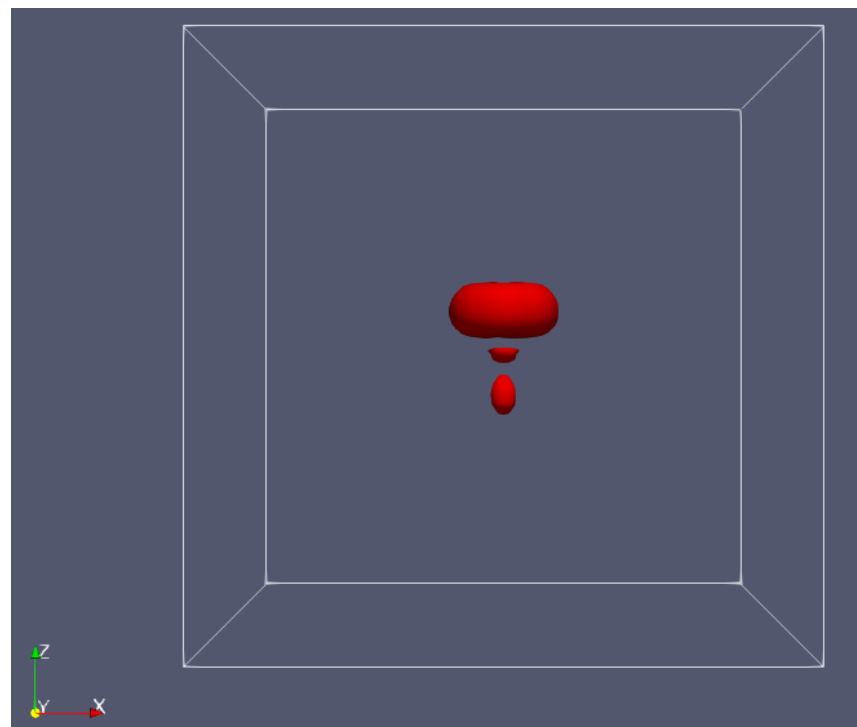


Isosurface appears.

Procedure to make movies by ParaView (3)



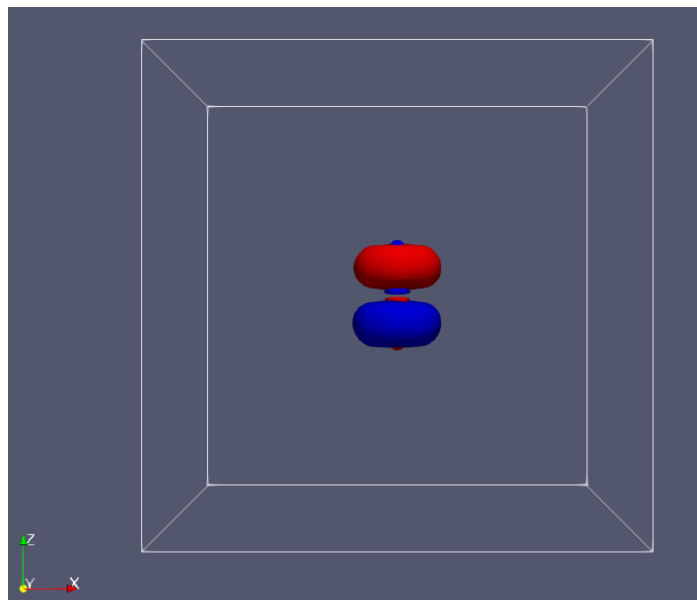
7. Scroll down in Properties



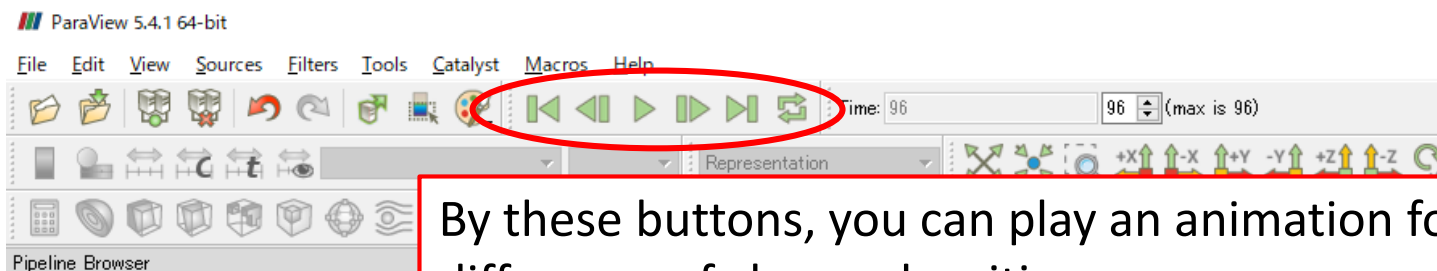
Color of isosurface is changed to red.

8. Press "Edit" to change color
(Choose red color)

Procedure to make movies by ParaView (4)



By adding isosurface level of -0.000001 , the other contour appears.



By these buttons, you can play an animation for difference of charge densities.