Visualization
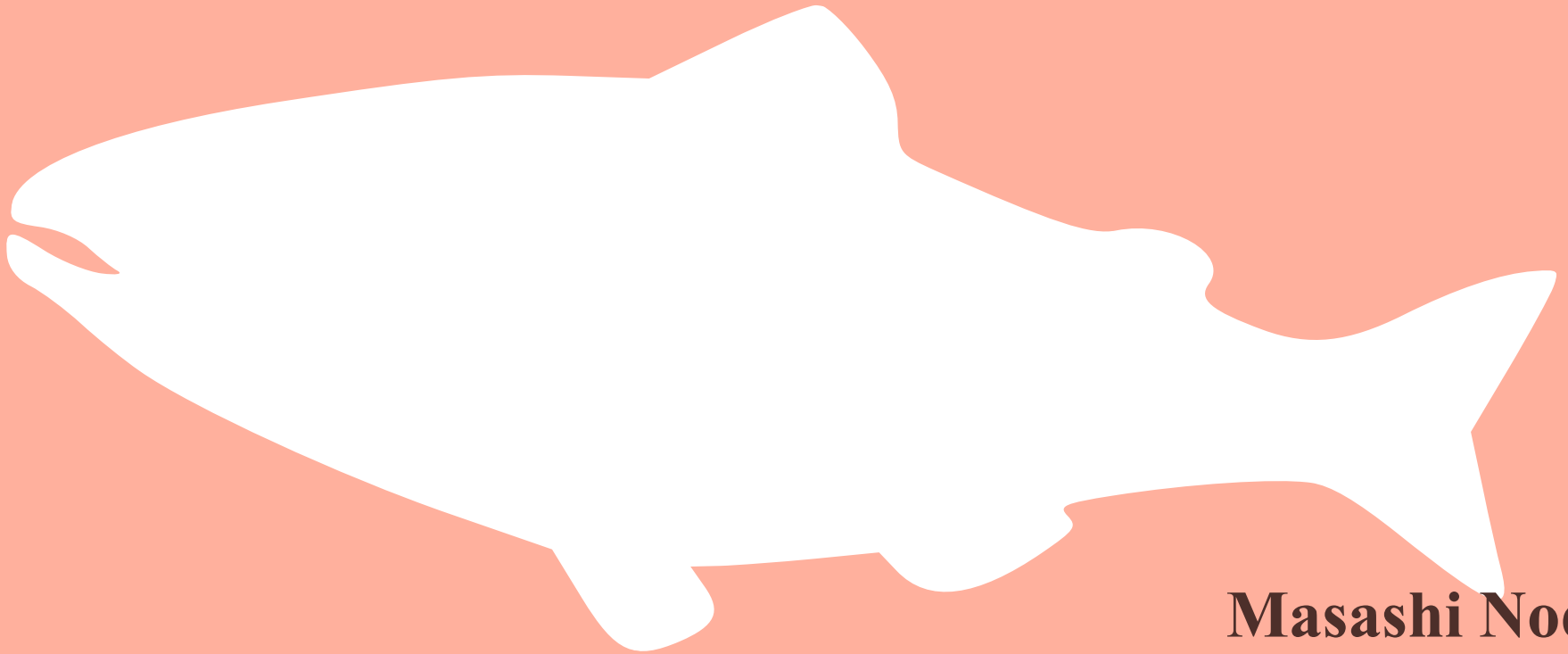
Exercise 4-1
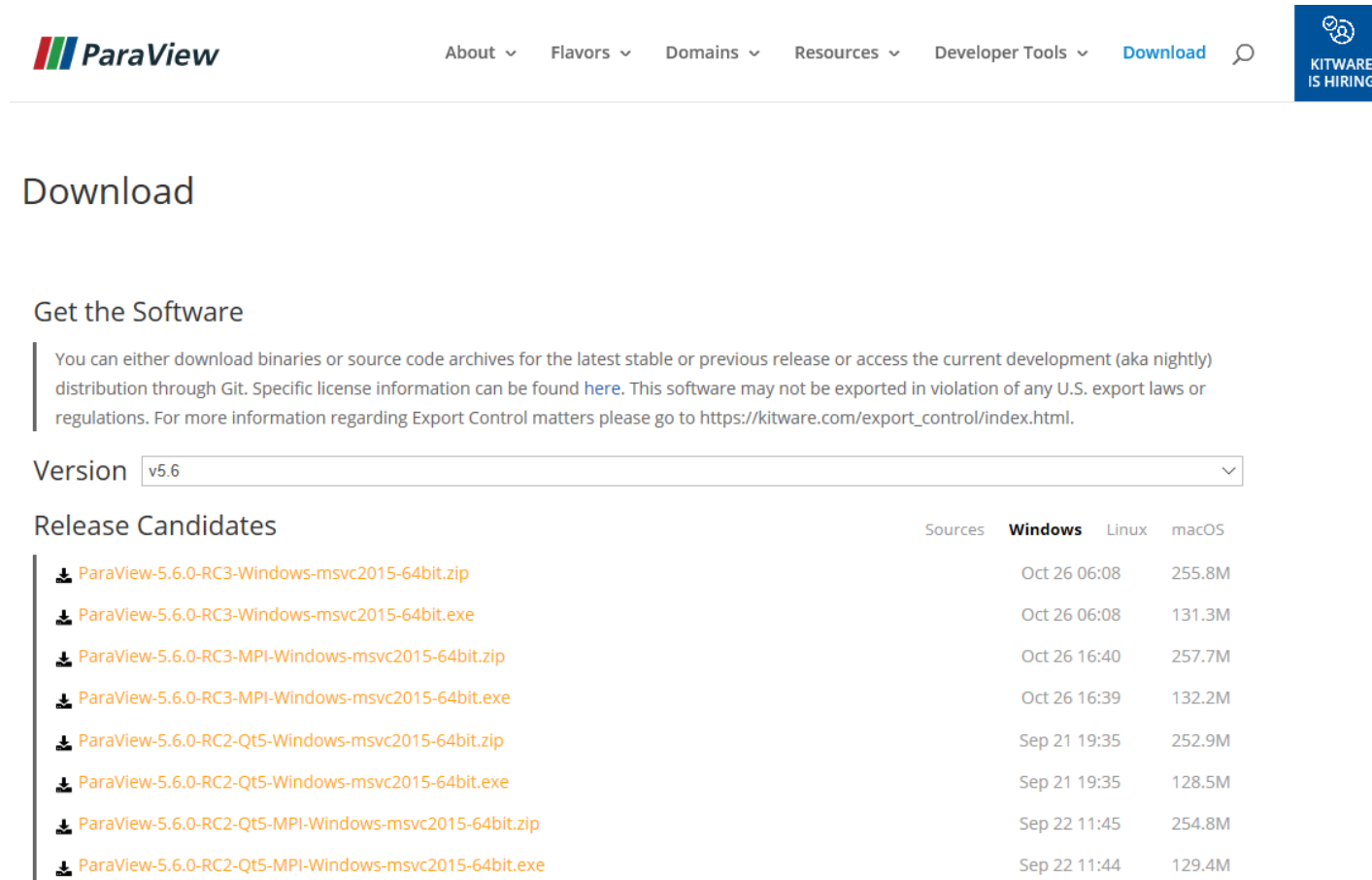
Masashi Noda

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Download of ParaView

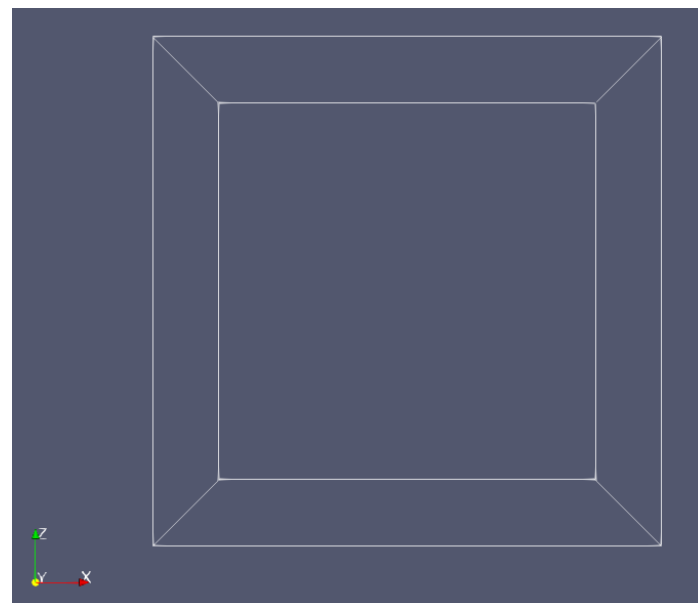- https://www.paraview.org/download/

Execution of SALMON

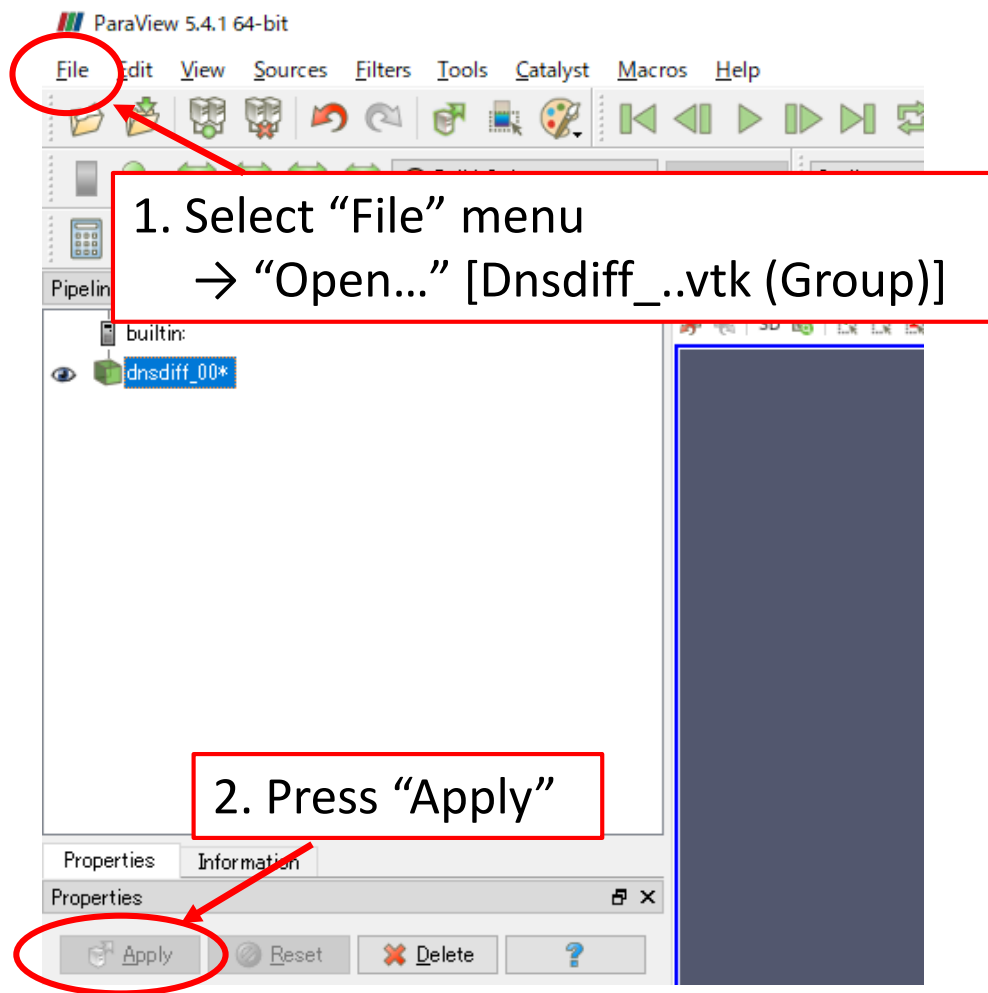- Addition of "analysis" parameters in C2H2_rt_pulse.inp

C2H2_rt_pulse.inp

```
…
&analysis
   out_dns_rt = 'y'
   format3d = 'vtk'
/
…
```
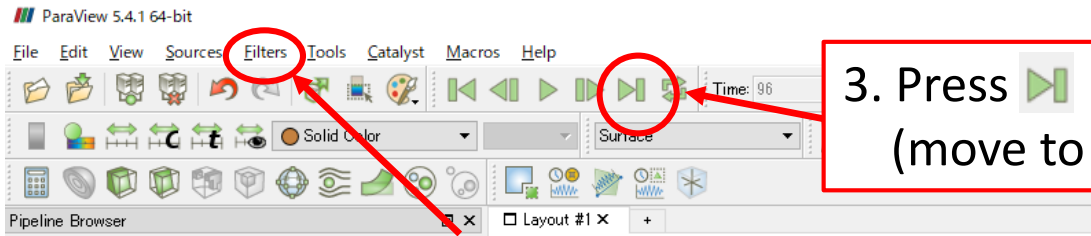
- Execution of SALMON.cpu to calculate electron dynamics under pulse

→ Genaration of "dns_00????.vtk" and "dnsdiff_00????.vtk"

Procedure to make movies by ParaView (1)

1. Select "File" menu
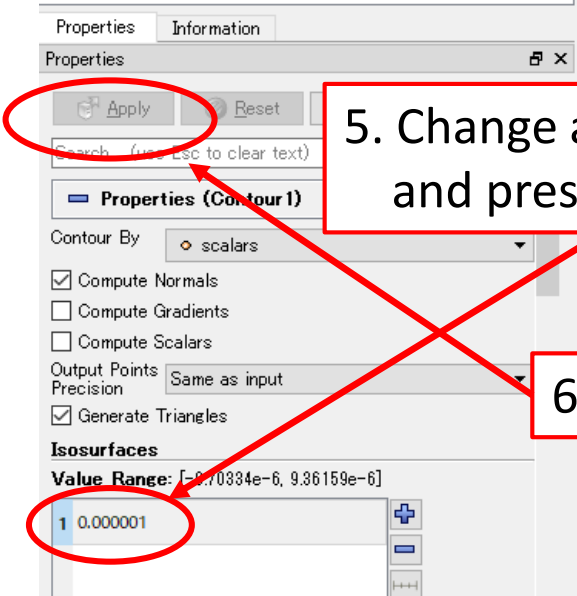   → "Open…" [Dnsdiff_..vtk (Group)]

2. Press "Apply"

A box appears in right window.

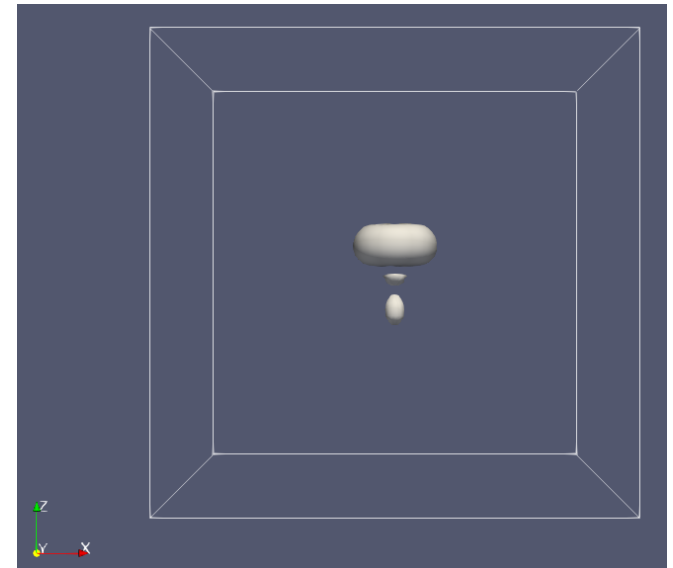# Procedure to make movies by ParaView (2)

3. Press ▷| (move to last frame)
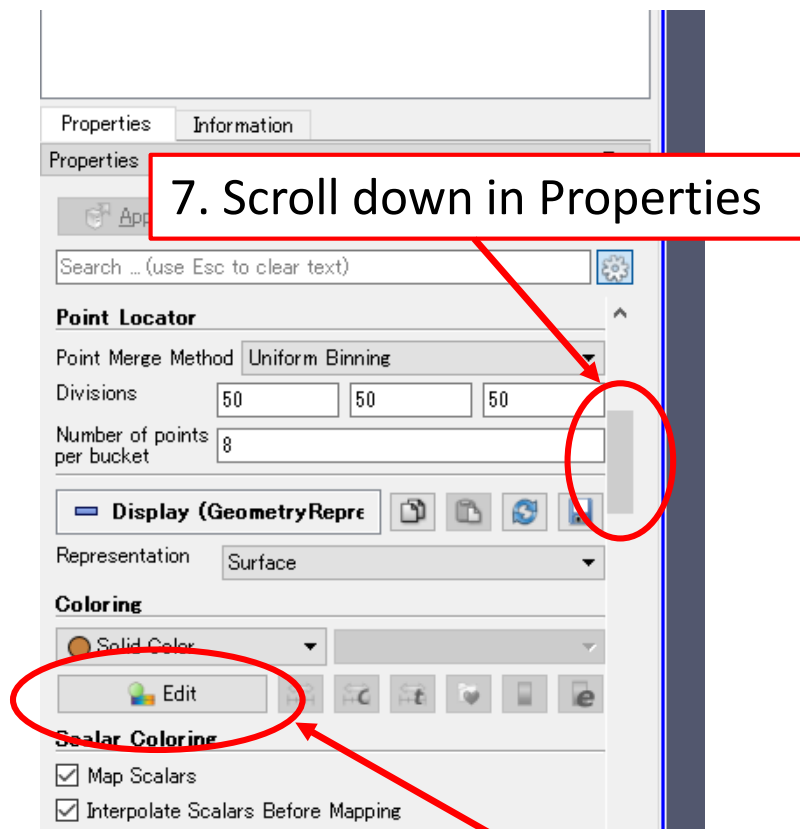
4. Select "Filters" → Common → Contour

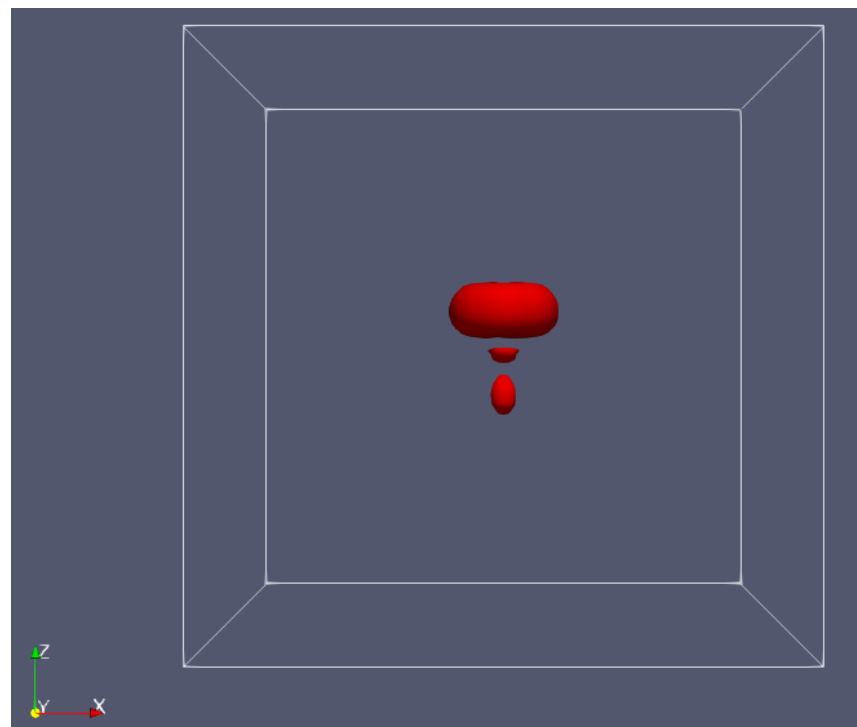5. Change a value to 0.000001 and press enter

6. Press "Apply"

Isosurface appears.

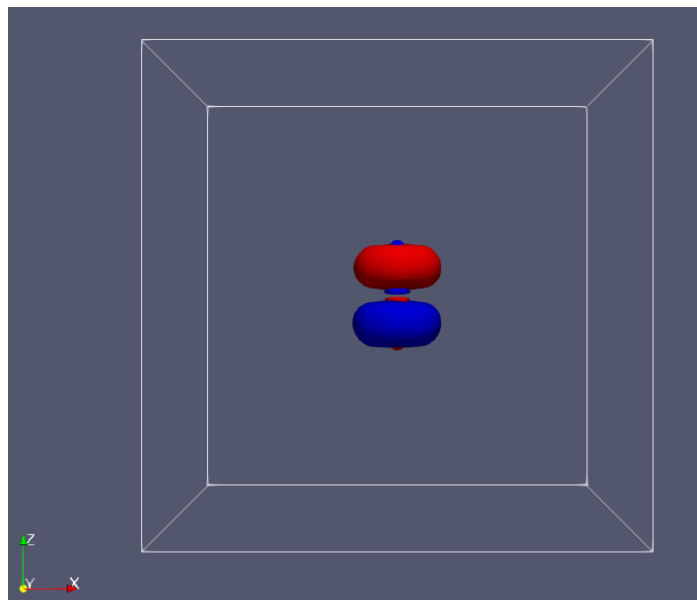# Procedure to make movies by ParaView (3)
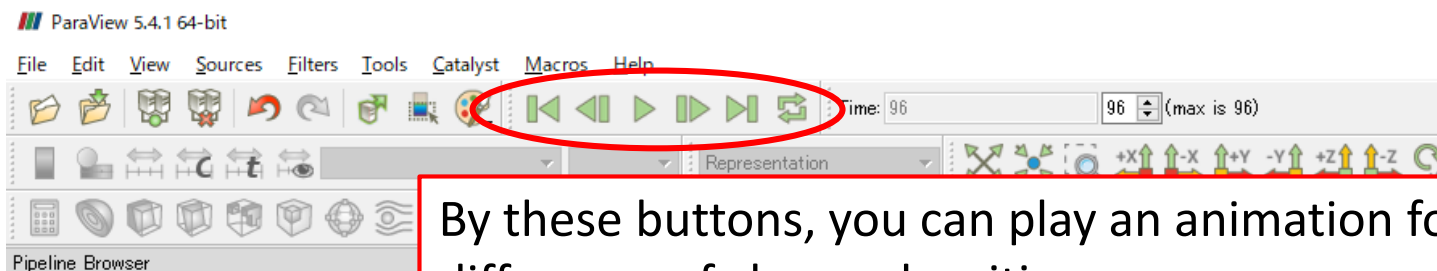

7. Scroll down in Properties

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

Color of isosurface is changed to red.

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.

SALMON

Scalable Ab-initio Light-Matter simulator for Optics and Nanoscience
http://salmon-tddft.jp/   SALMON TUTORIAL, TSUKUBA, 2018