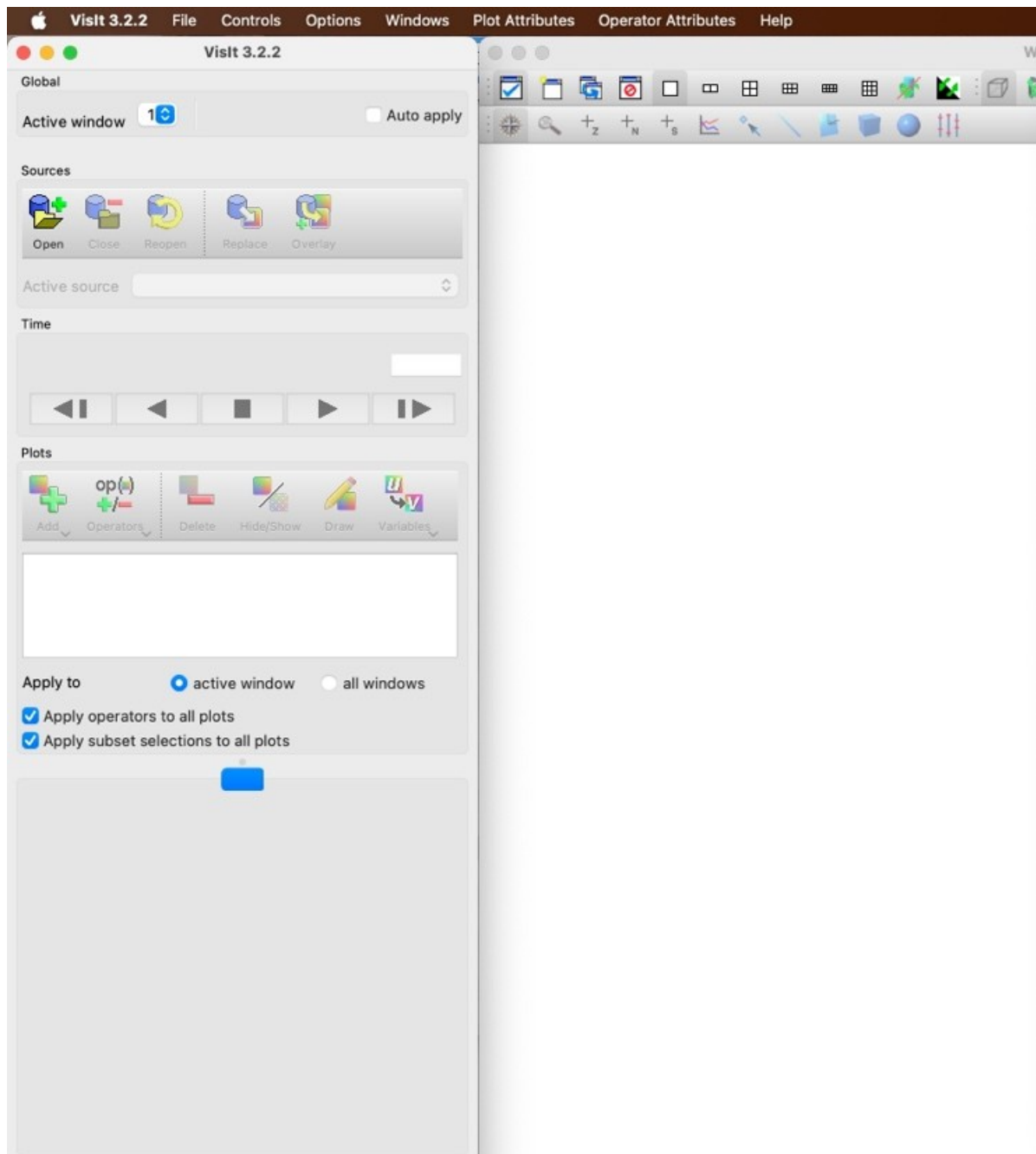


How to use VisIt

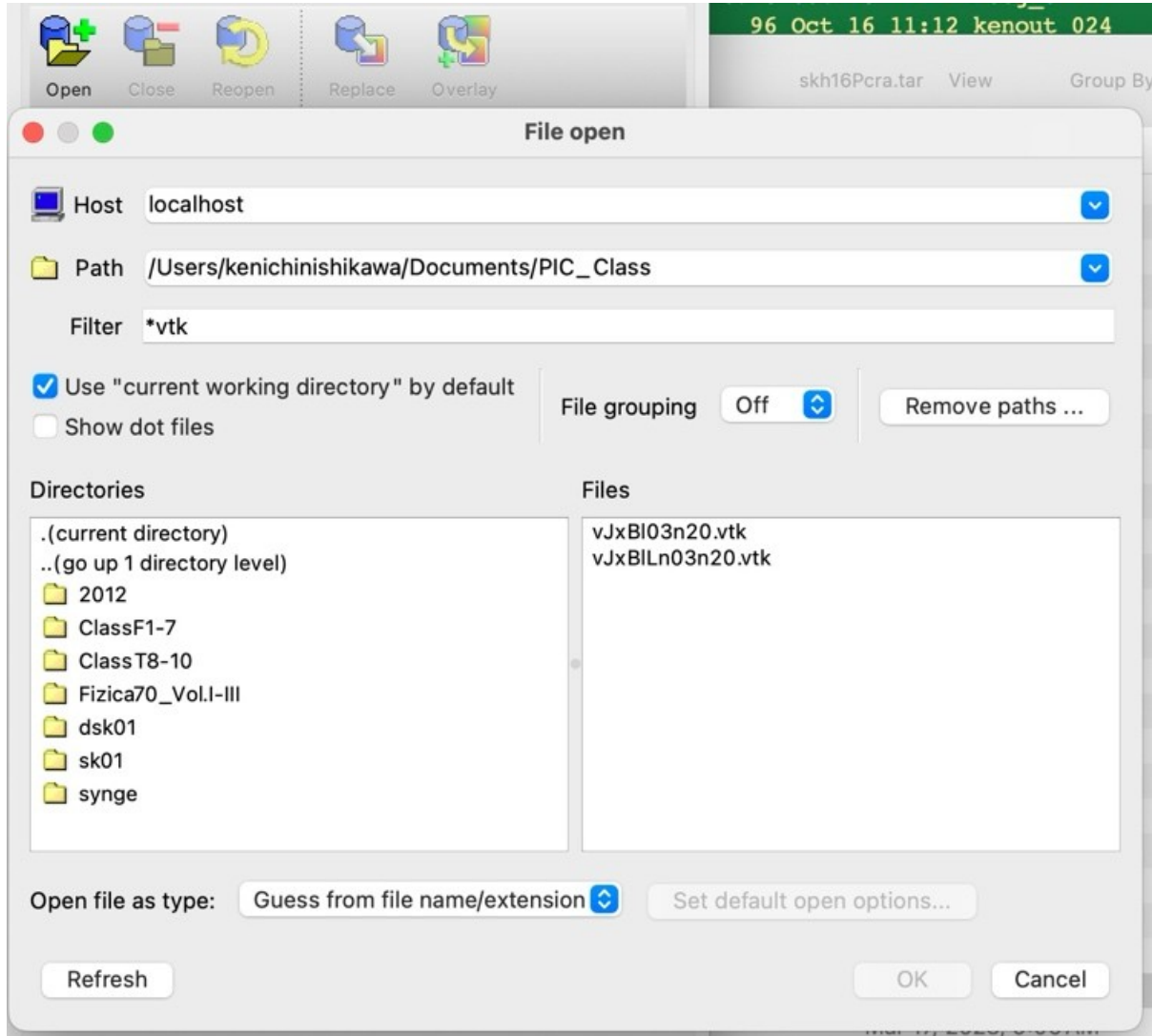
Open VisIt

then two windows appear



Then open file `***.vtk` with clicking Open

Click here and find the data **.vtk

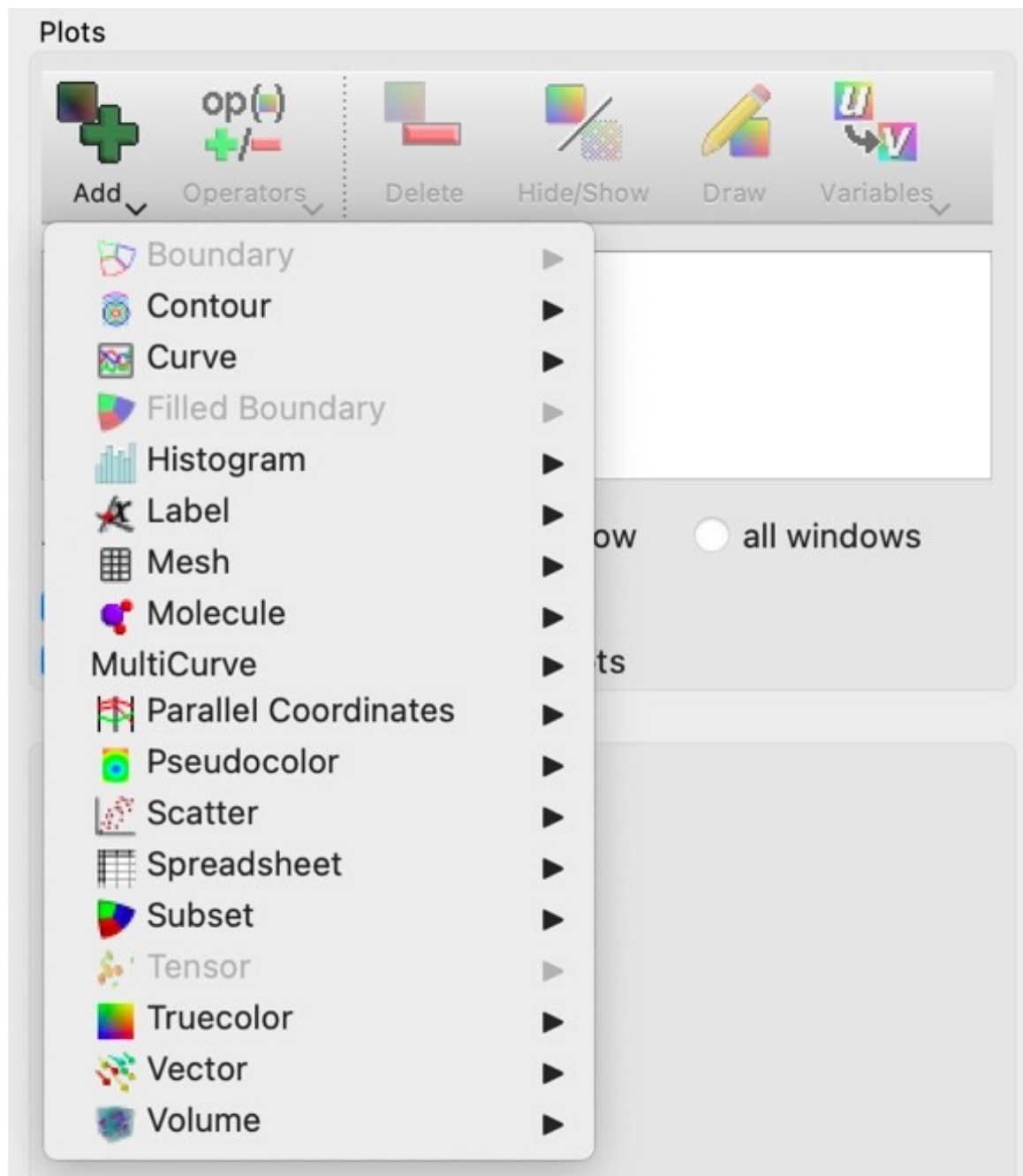


Click on the data and click on OK

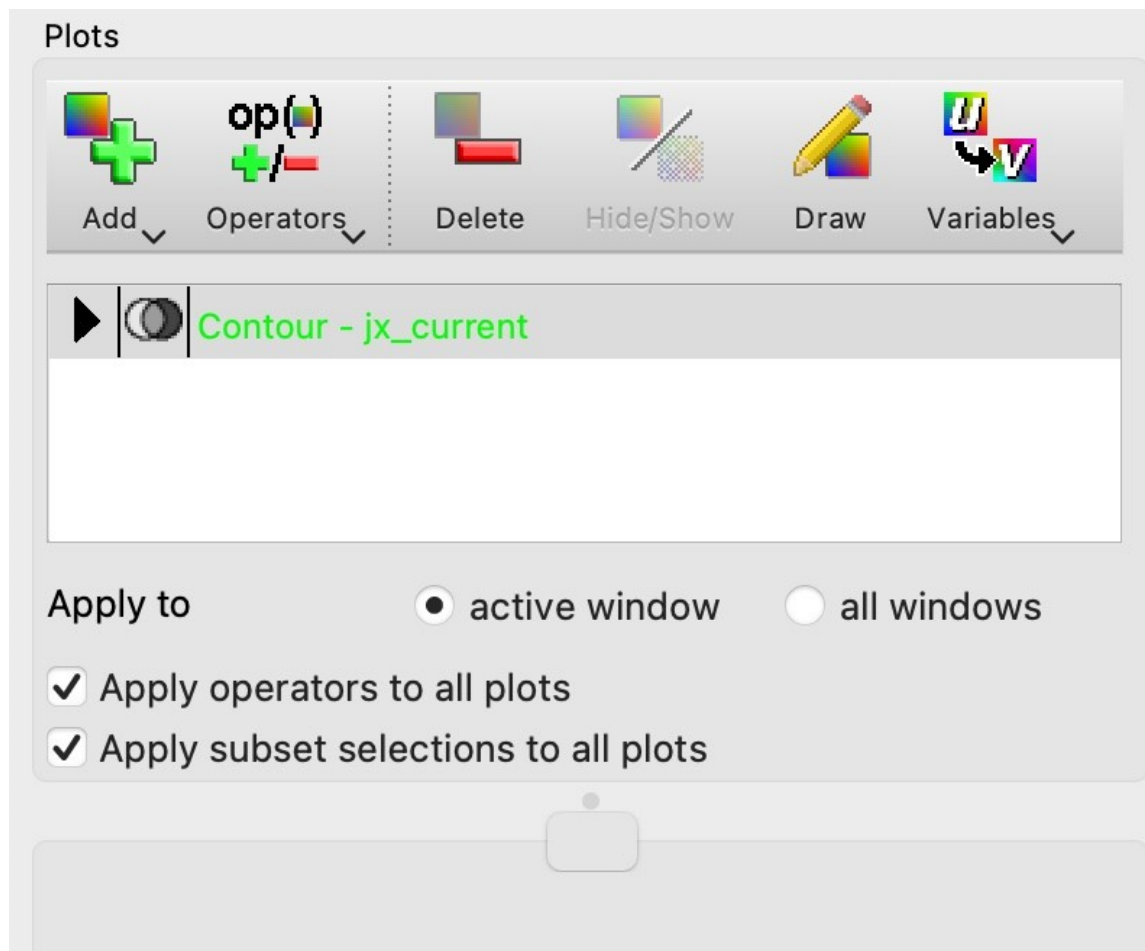
It takes time to read it.

Click plot

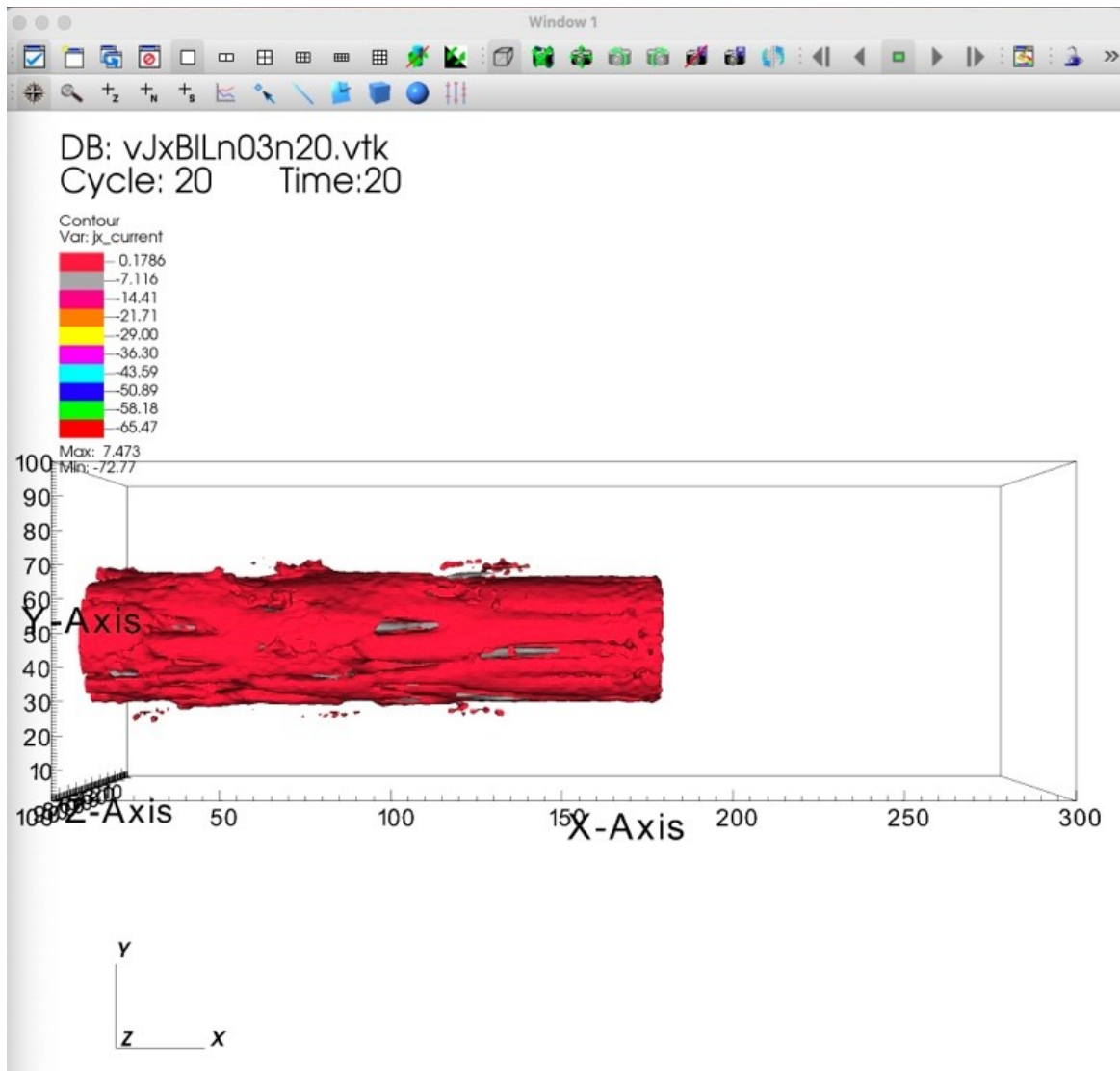
click on Contour then choose jx_current



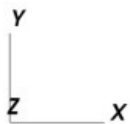
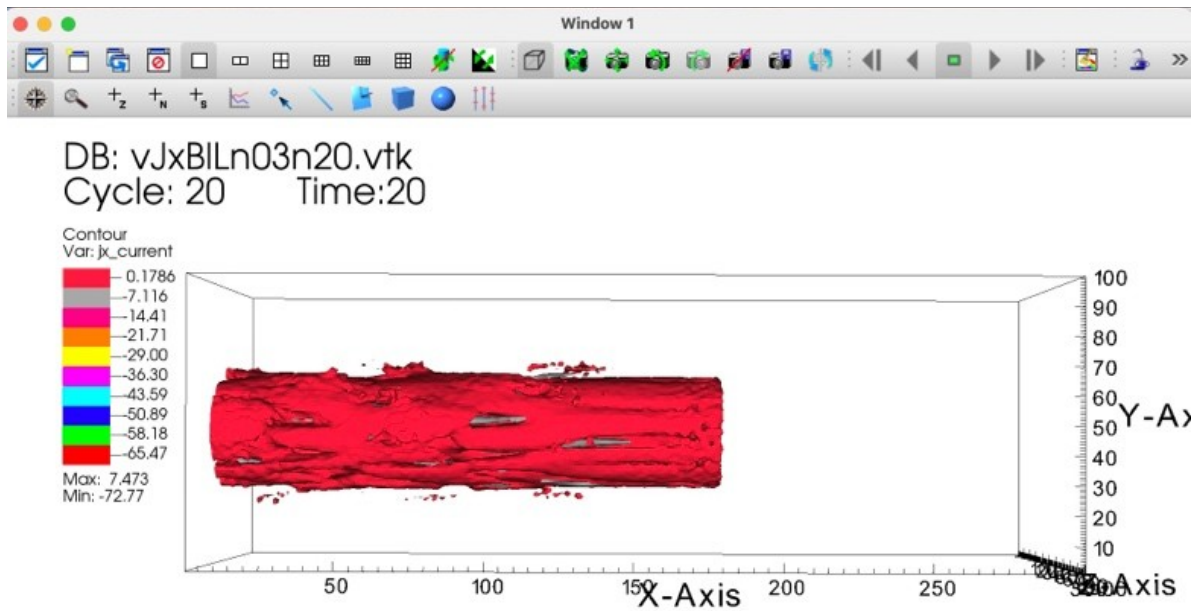
Then contour - jx_current is set



Then click on Draw
You get a plot



This plot is not well situated, therefore we need to modify.
First make it smaller: on Mac rolling down middle bottun
and move up left bpttun with commend key (Mac).

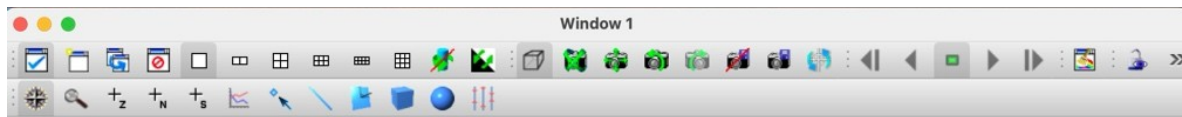


Then rotate the figure so that z- axis up and jet front go down slightly.
It is a matter of preference but I like this positioning.

Using Annotation on Controls (top left corner)

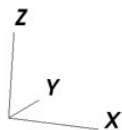
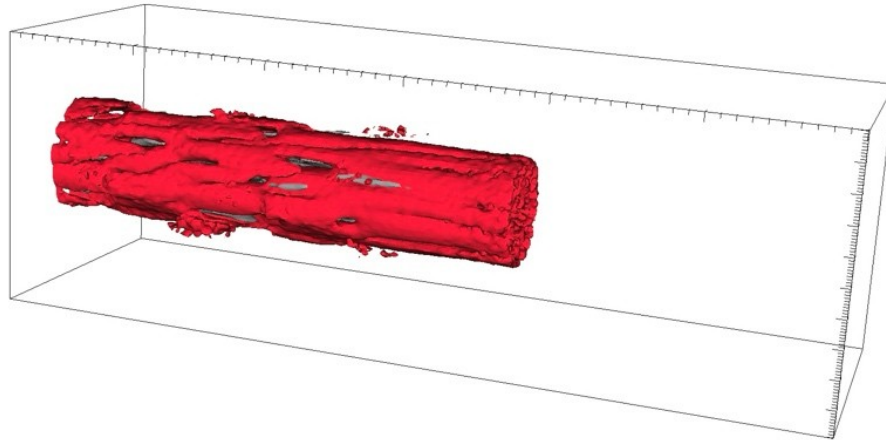
Remove some of title, labels and tick marks selecting X axis, Y axis and Z axis

Then Apply left bottom corner.



DB: vJxBILn03n20.vtk
Cycle: 20 Time:20

Contour
Var: jx_current



Since color bars are not good, we will use custommade version.

Click on Plot Attributes choose Contour

Contour plot attributes

Contour Levels

Scale

☒ Linear

☐ Log

☐ Minimum

0

☐ Maximum

1

Select by

N levels

10

Contour colors

☐ Color table

Default

☐ Invert

☐ Single





100%

☒ Multiple

Level	Color	Opacity
1		 100%
2		 100%
3		 100%
4		 100%
5		 100%
6		 100%

Lines

Line width

— 1

Misc

☒ Legend

☐ Wireframe

Make default

Load

Save

Reset

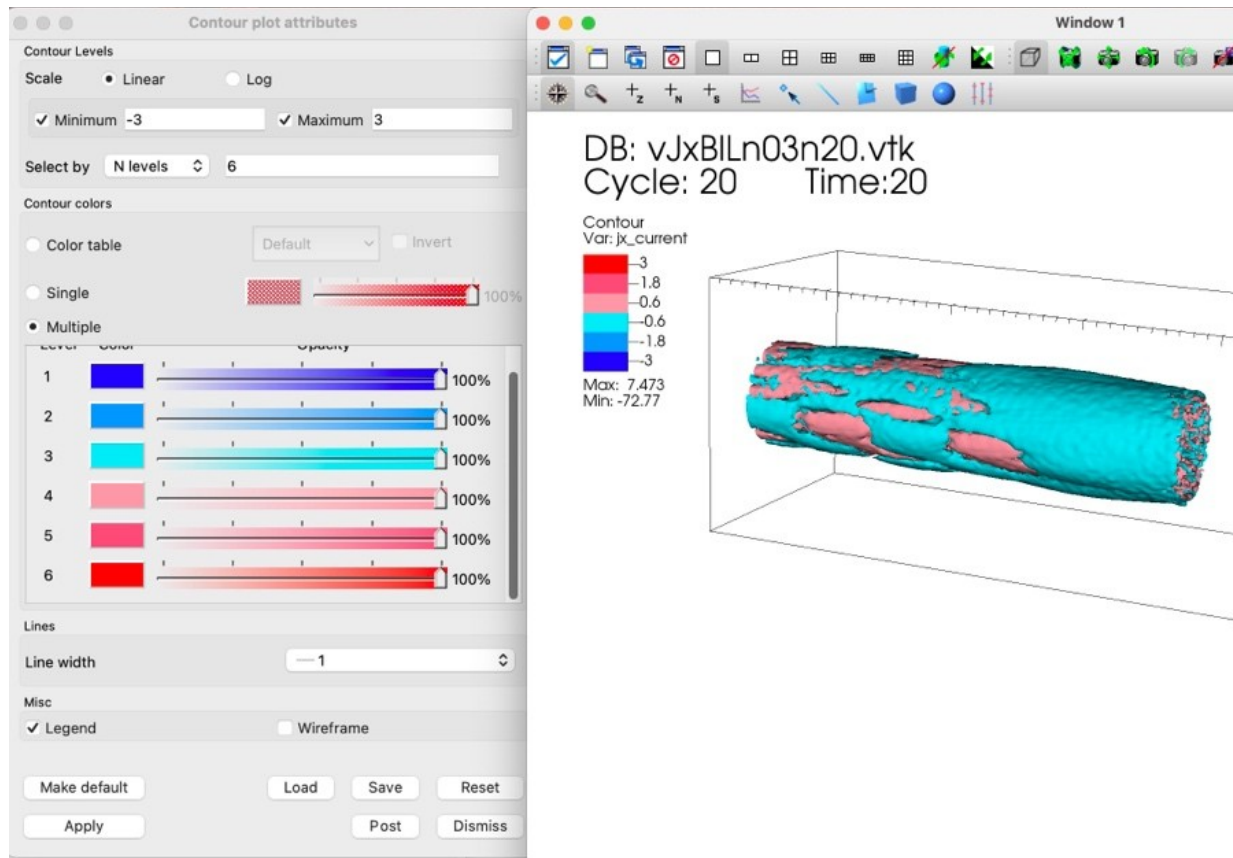
Apply

Post

Dismiss

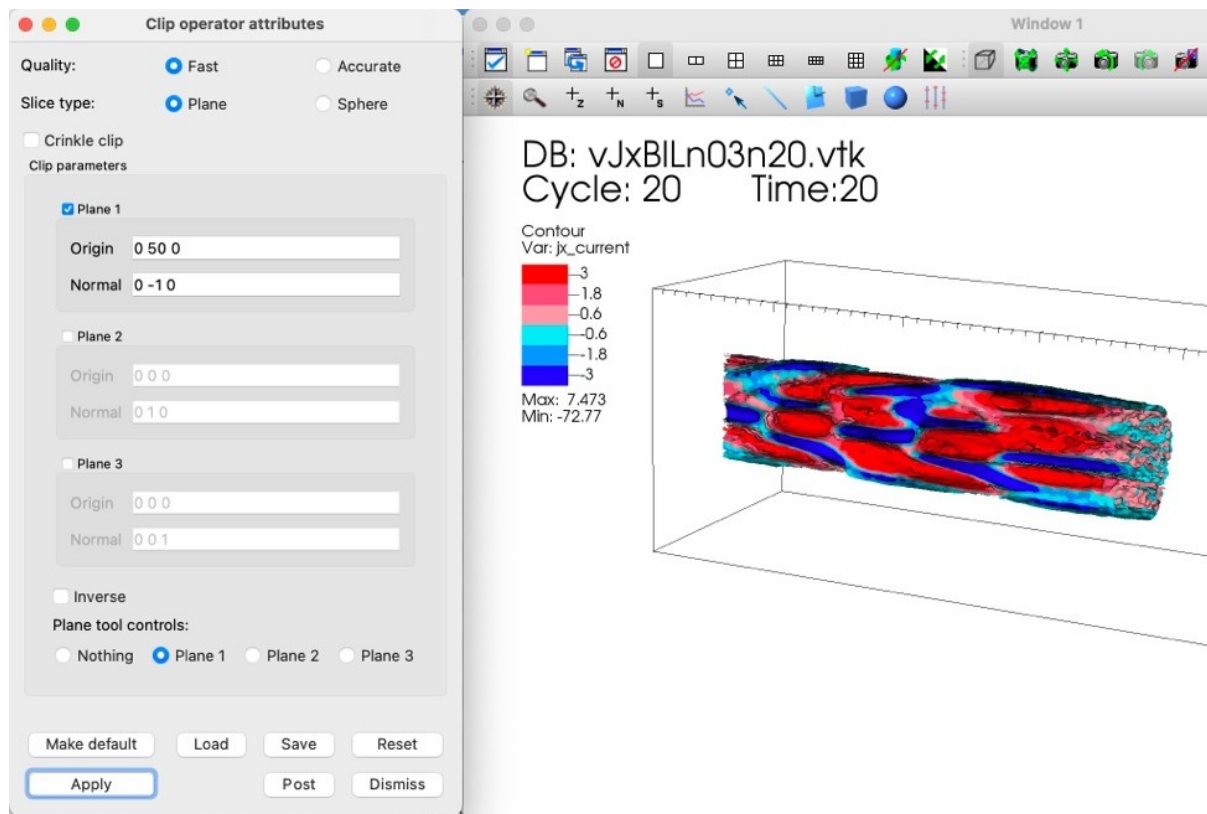
I set N levels 6 and maximum and minimum 3, -3 respectively.

We need to play with these numbers so that we can view the structure of Jx current. Save currentOct18.xml for later use.



It is good to view the structure of Jx current we clip at the center of jet.

Click on Operator Attributes -> Selection -> Clip

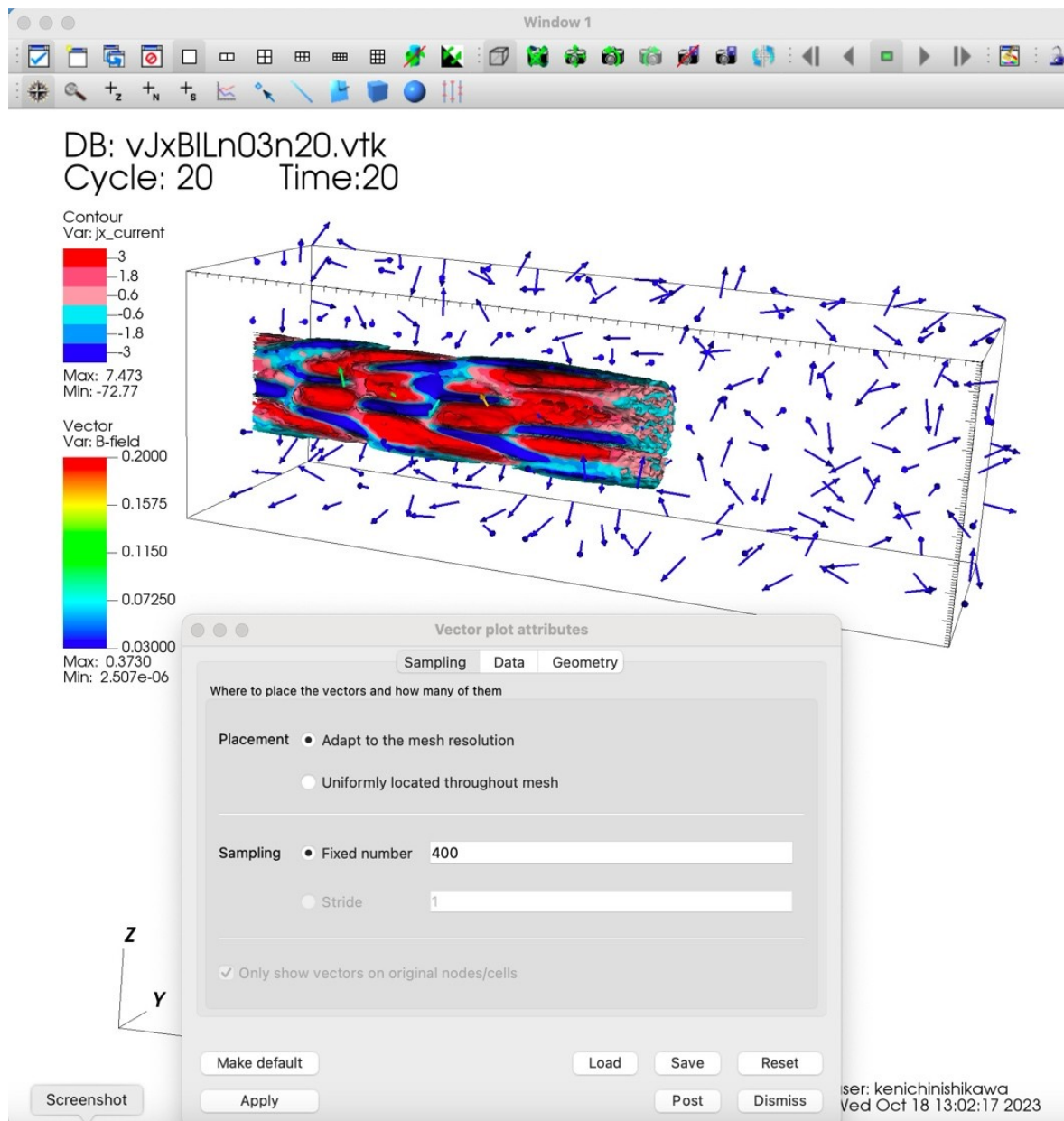


The cross section at the jet center is revealed. You can play with the maximum and minimum numbers such as 0.2 -0.2, 0.4 -0.4 etc.

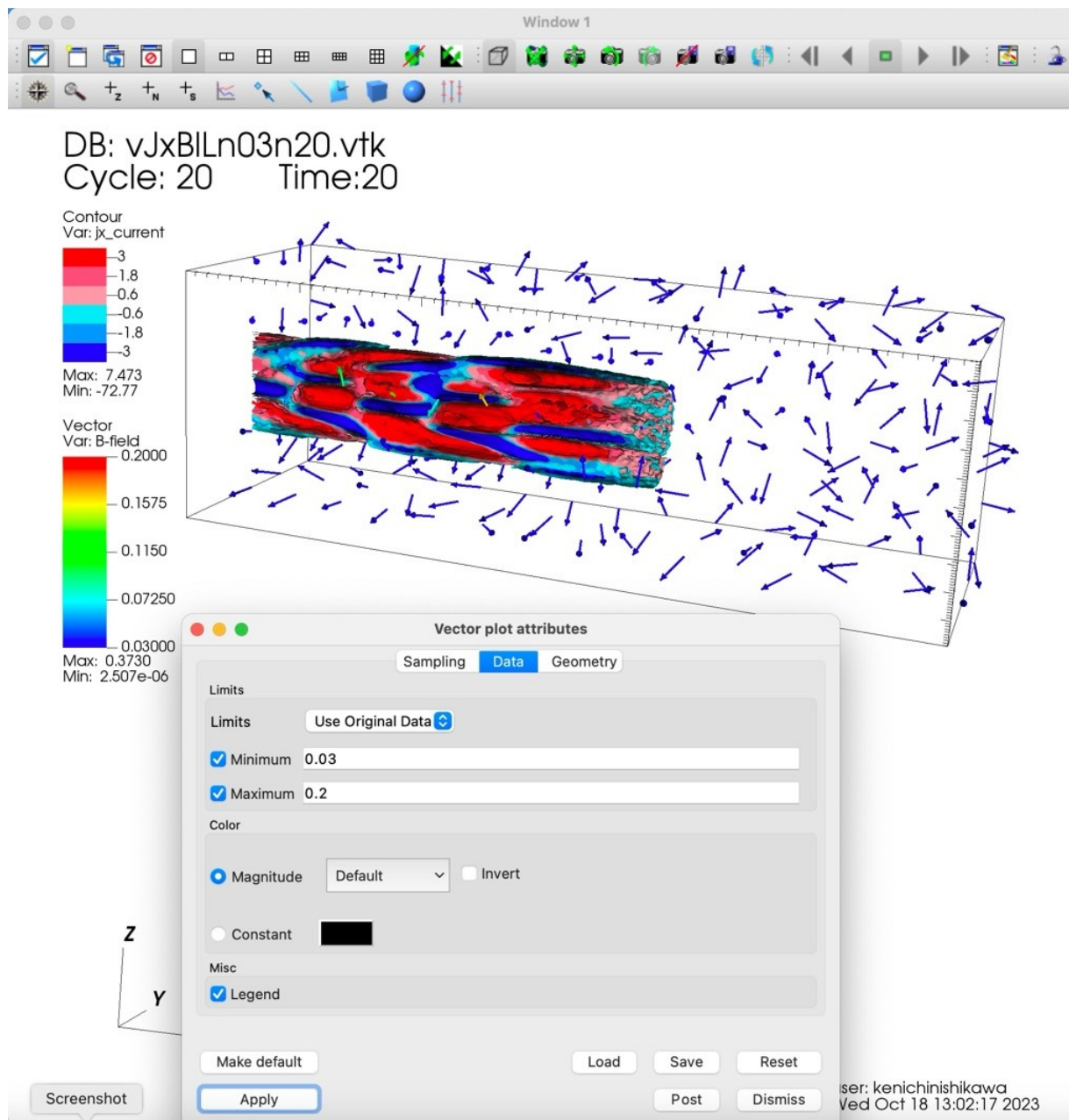
Now we add magnetic field vectors.

Plot Add -> Vector -> B field

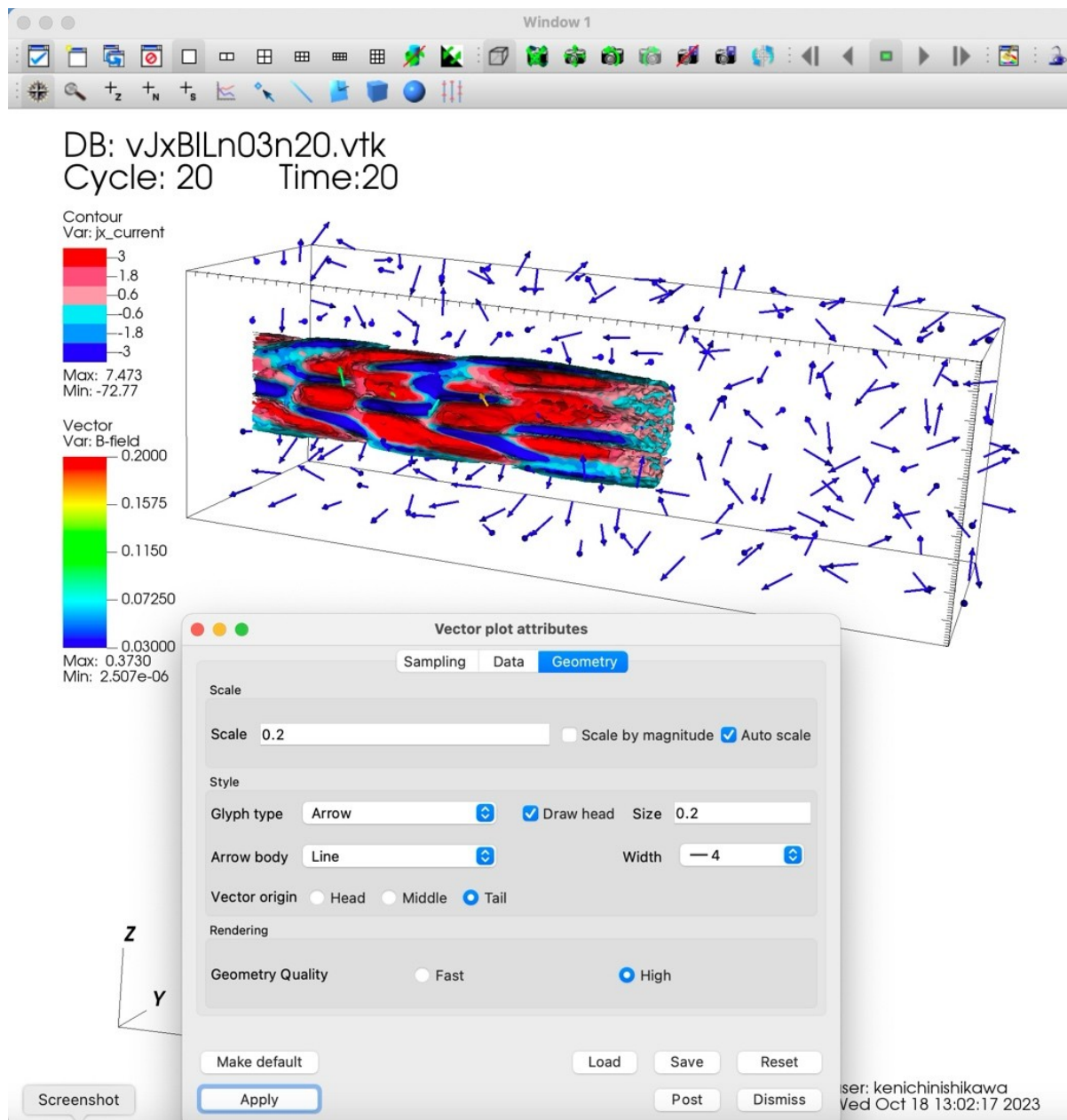
Plot Attributes -> Vector
(vectorOct16.xml)



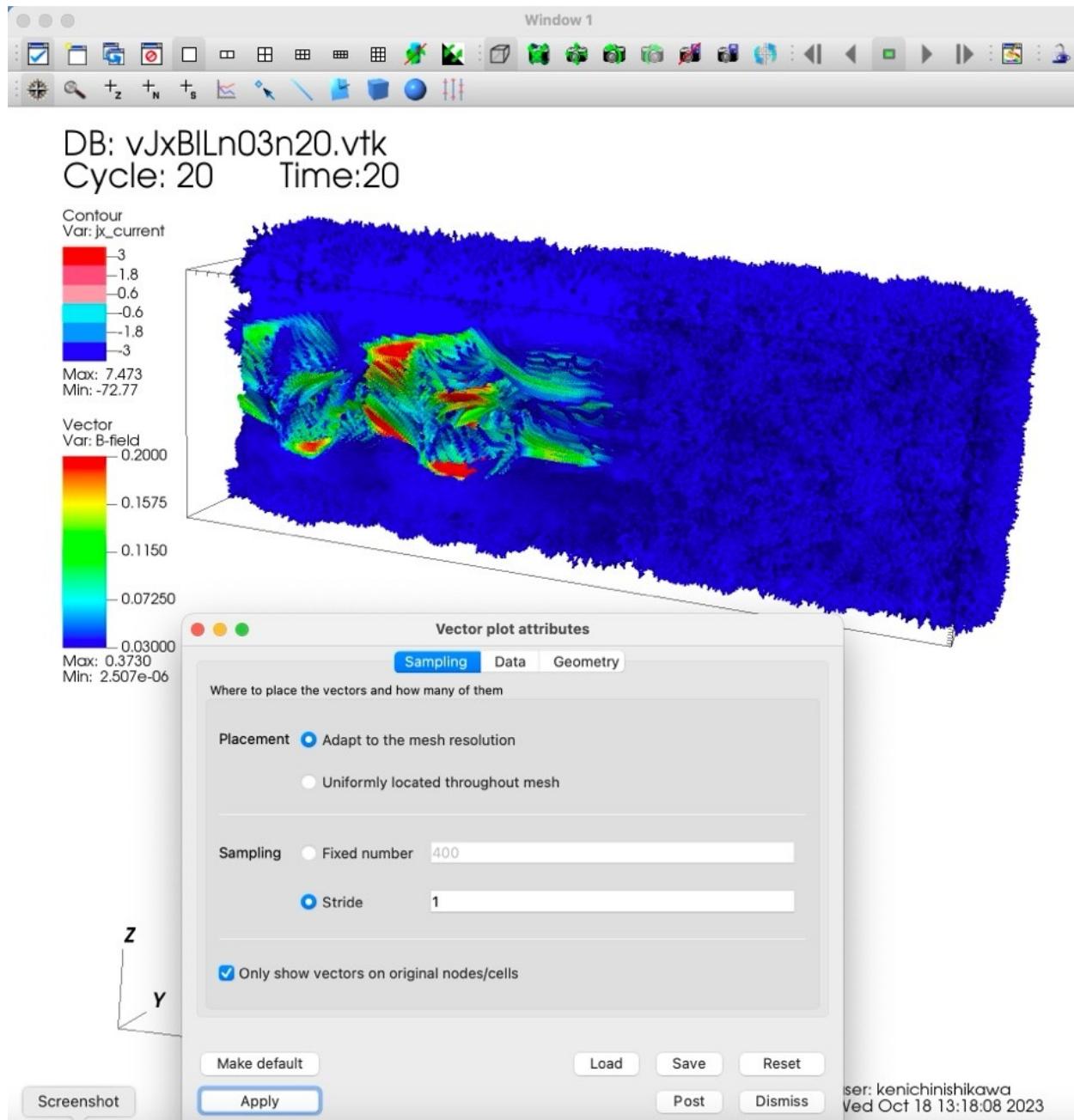
Fixed number 400



You can play with Minimum and Maximum numbers.



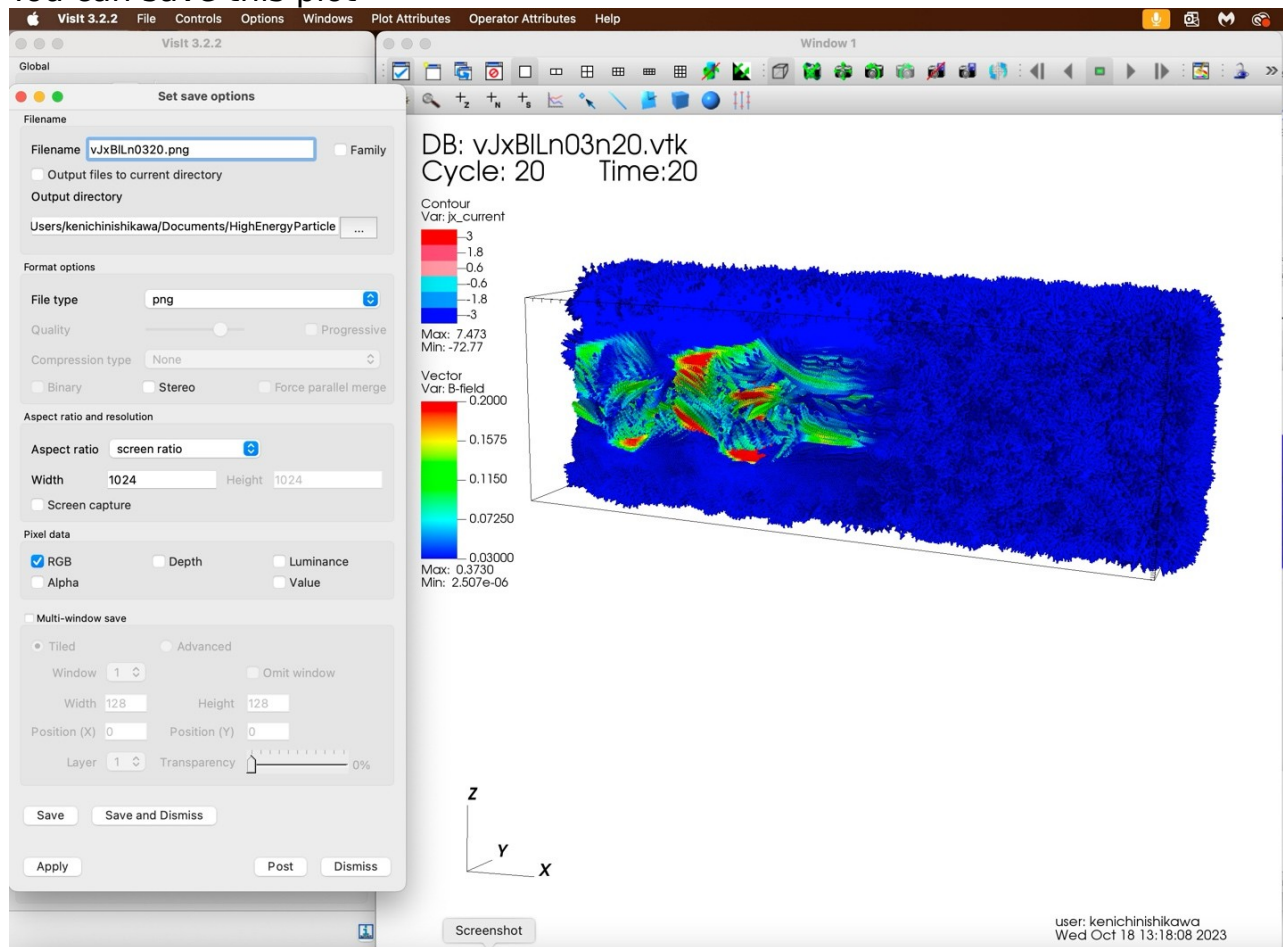
These numbers need to be adjusted.
If you choose Stride in Sampling you get fine structures in the jet.



We can plot many other physical quantities.

Click on File -> Save Option
then type as below

You can save this plot



Then click on Apply at the left bottom.
then save

You can create vJxBILn0320.png at the directory you selected.