Title: The VisIt Visualization Toolkit

Speakers: Hung-Yi Pu
Date: November 19, 2019 - 1:00 PM

URL: http://pirsa.org/19110124

Abstract: VisIt (https://wci.llnl.gov/simulation/computer-codes/visit/) is an interactive, powerful visualization, animation, and analysis tool.

VisIt is an open source and available for Unix, Windows or Mac users.

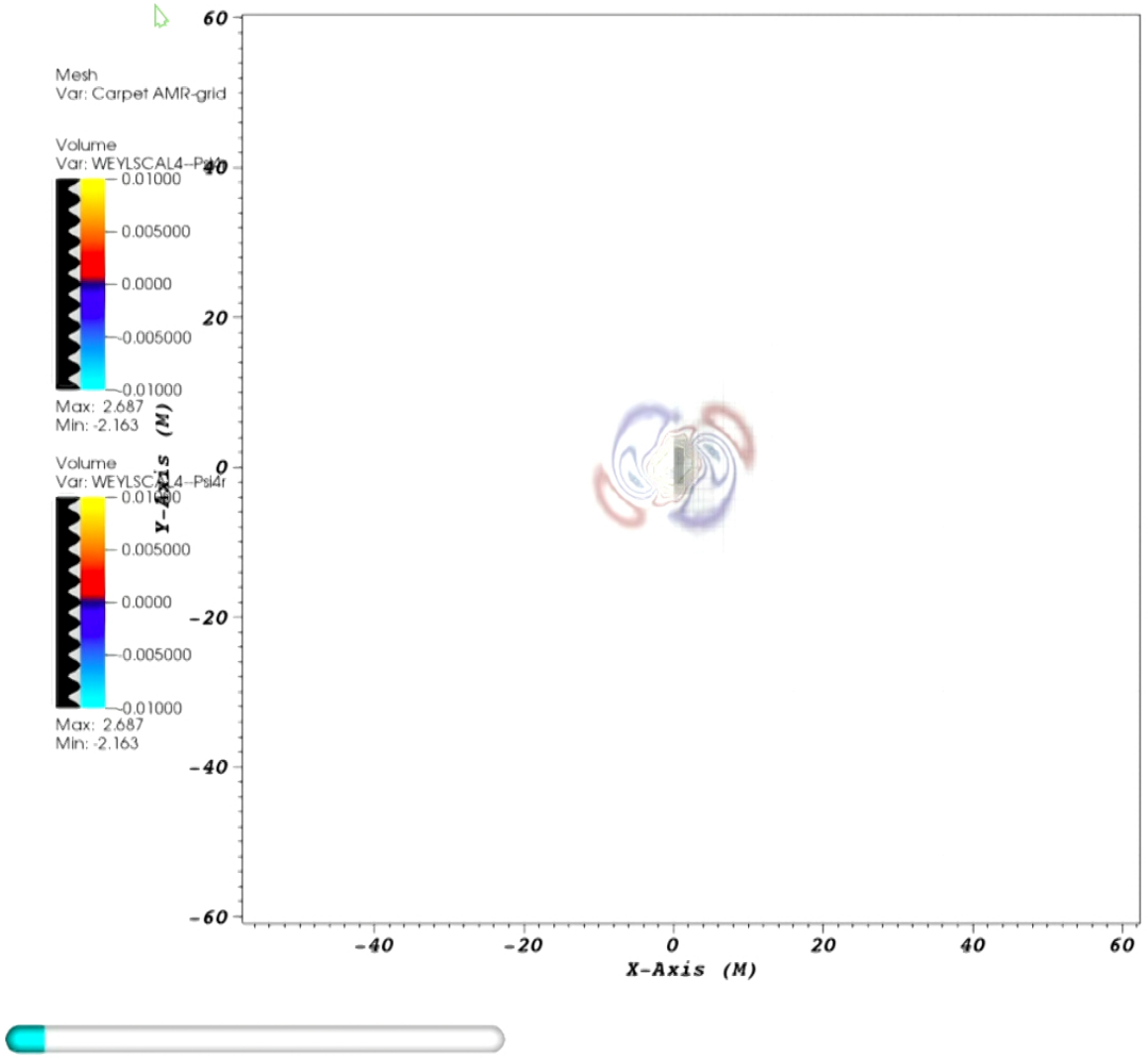
In this tutorial, after a brief introduction of VisIt, we will walk through several basic plotting/animation functions by using some toy data.

# Introduction to VisIt

this file is available on symmetry:
/gpfs/hpu/VisIt_tutorial/

prepared by Hung-Yi Pu
Computational Physics Tutorial, 2019 Nov 19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Volume
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0.01000
0.005000
0.0000
-0.005000
-0.01000
Max: 2.687
Min: -2.163
Volume
Var: WEYLSCAL4--Psi4r
0.01000
0.005000
0.0000
-0.005000
-0.01000
Max: 2.687
Min: -2.163
60
40
20
0
-20
-40
-60
Y-Axis (M)
-40
-20
0
20
40
60
X-Axis (M)

# VisIt

VisIt was originally developed by the Department of Energy (DOE) Advanced Simulation and Computing Initiative (ASCI) to visualize and analyze the results of terascale simulations.

- Visit homepage

https://wci.llnl.gov/simulation/computer-codes/visit/

  - open source
  - interactive
  - visualization!

- supported format

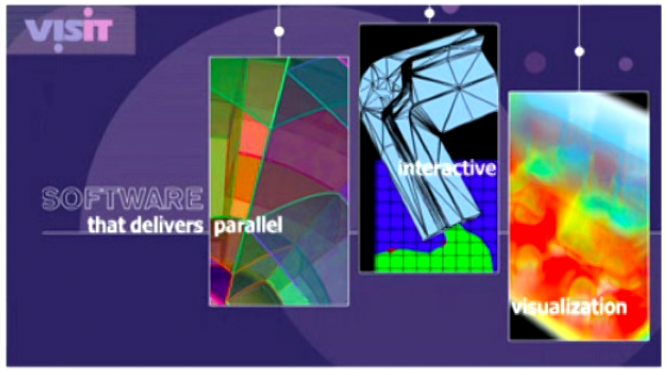
https://www.visitusers.org/index.php?title=Detailed_list_of_file_formats_VisIt_supports

- Visit homepage https://wci.llnl.gov/simulation/computer-codes/visit/



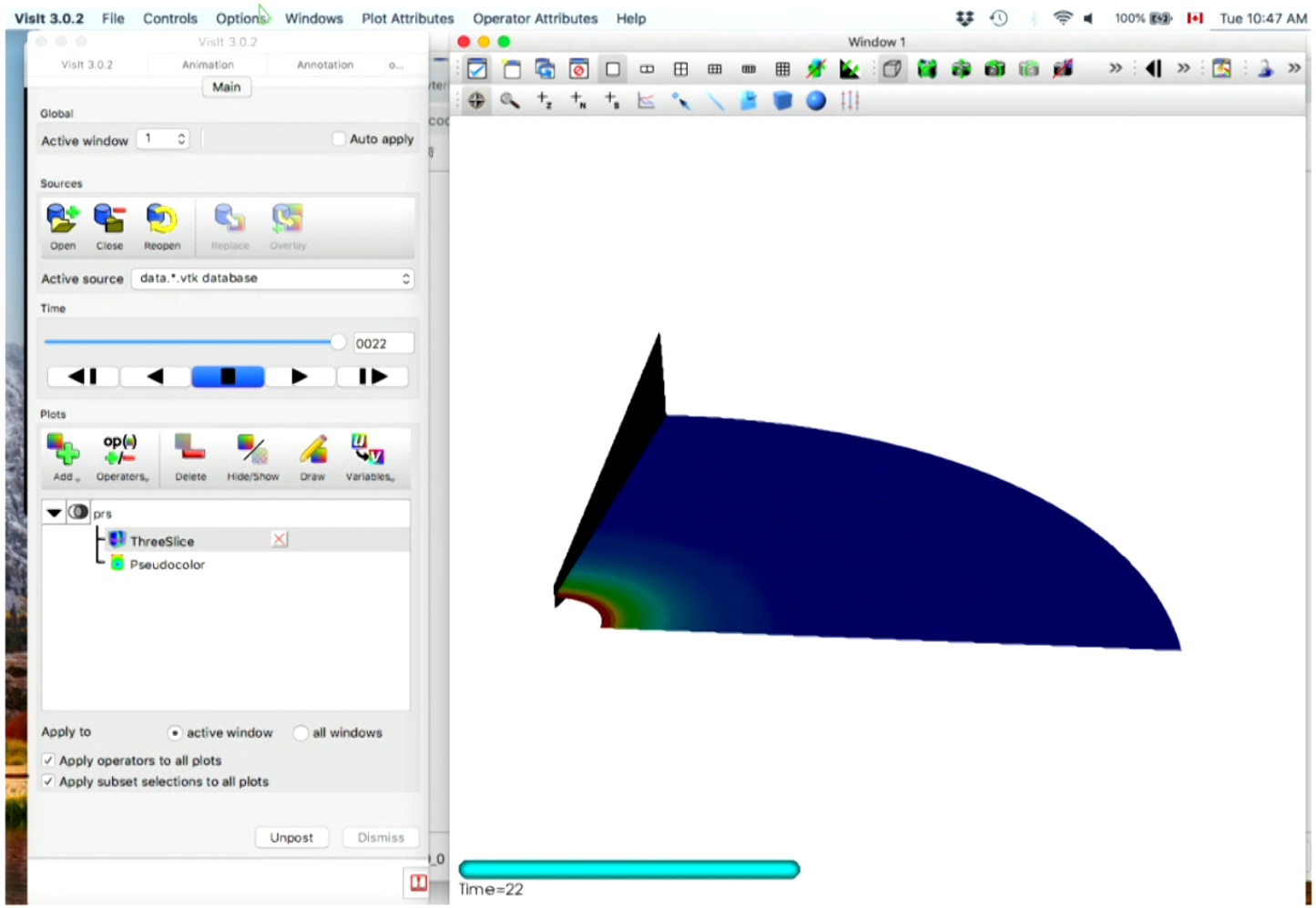
# VisIt






## About VisIt

VisIt is an **Open Source**, interactive, scalable, visualization, animation and analysis tool. From Unix, Windows or Mac workstations, users can interactively visualize and analyze data ranging in scale from small (<$10^1$ core) desktop-sized projects to large (>$10^5$ core) leadership-class computing facility simulation campaigns. Users can quickly generate visualizations, animate them through time, manipulate them with a variety of operators and mathematical expressions, and save the resulting images and animations for presentations. VisIt contains a rich set of visualization features to enable users to view a wide variety of data including scalar and vector fields defined on two- and three-dimensional (2D and 3D) structured, adaptive and unstructured meshes. Owing to its customizeable plugin design, VisIt is capabable of visualizing data from over 120 different scientific data formats (see this partial list). [See a table of key features and a complete table of the tool's features.]


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 10:47 AM
VisIt 3.0.2
Animation
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0022
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
prs
ThreeSlice
Pseudocolor
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Time=22

# installation

- on Mac OSX

http://macappstore.org/visit/

- on Windows

https://wci.llnl.gov/simulation/computer-codes/visit/executables

- on symmetry
  - step 1: ssh -Y user@symmetry
  - step 2: $module load visti/3.0.2
  - step 3: $visit

# installation

- on Mac OSX

http://macappstore.org/visit/

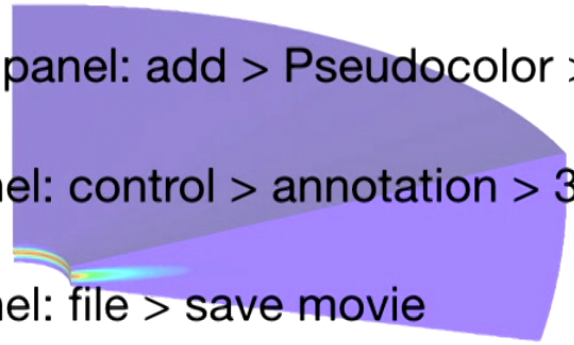
- on Windows

https://wci.llnl.gov/simulation/computer-codes/visit/executables

- on symmetry
  - step 1: ssh -Y user@symmetry, or use vnc (faster)
  - step 2: $module load visti/3.0.2
  - step 3: $visit

# tutorial (basic)

- run VisIt and load data (copy data from /hpu/VisIt_tutorial/data or /gpfs/eschnetter/simulations/hydro-sphericalshock/output-0000/hydro-sphericalshock/*.visit **to your local folder**)
- control panel: add > Pseudocolor > rho > Draw
- top panel: control > annotation > 3D , Objects, General
- top panel: file > save movie



# VisIt

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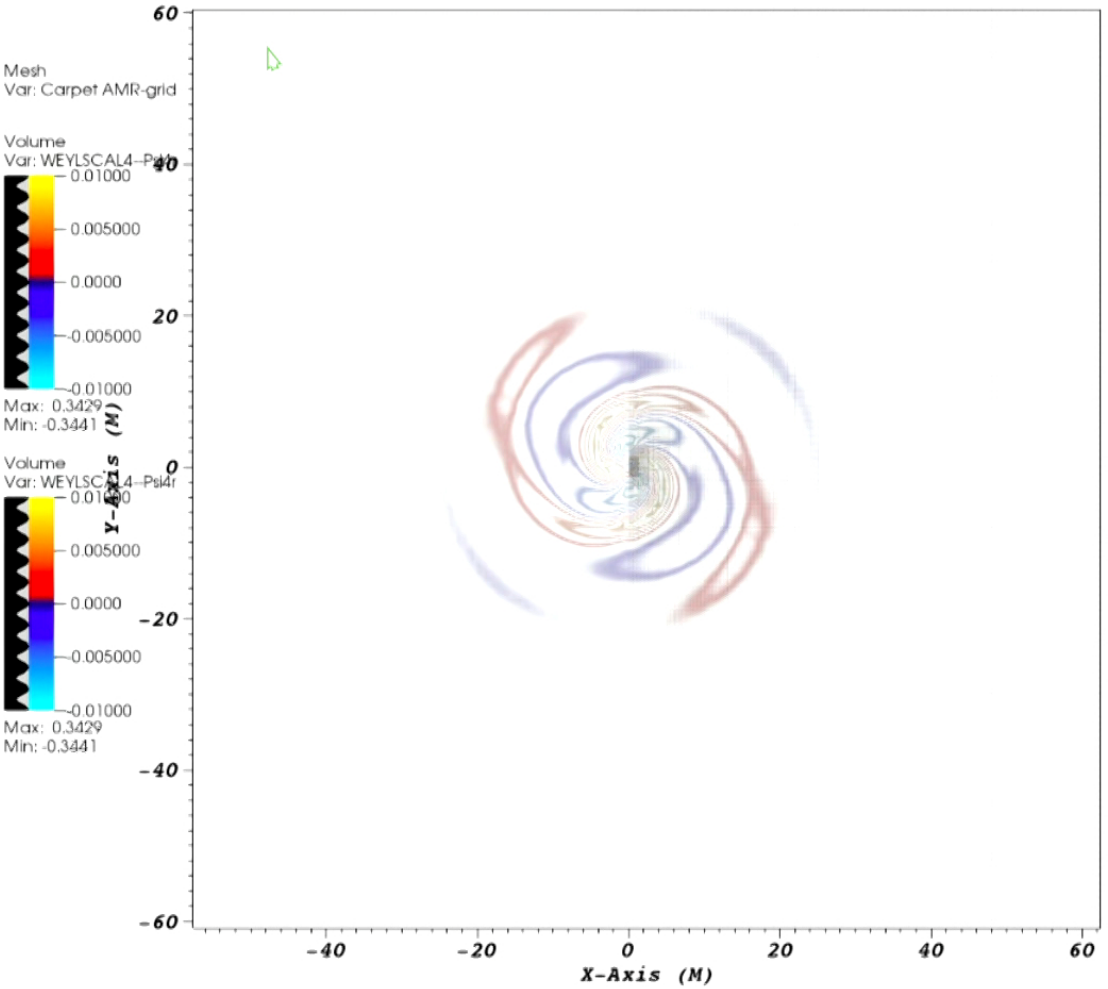
- Visit homepage

https://wci.llnl.gov/simulation/computer-codes/visit/

  - open source
  - interactive
  - visualization!

- supported format

https://www.visitusers.org/index.php?title=Detailed_list_of_file_formats_VisIt_supports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0.005000
0.0000
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-0.01000
Max: 0.3429
Min: -0.3441
Volume
Var: WEYLSCAL4--Psi4r
0.01000
0.005000
0.0000
-0.005000
-0.01000
Max: 0.3429
Min: -0.3441
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Y-Axis (M)
-40
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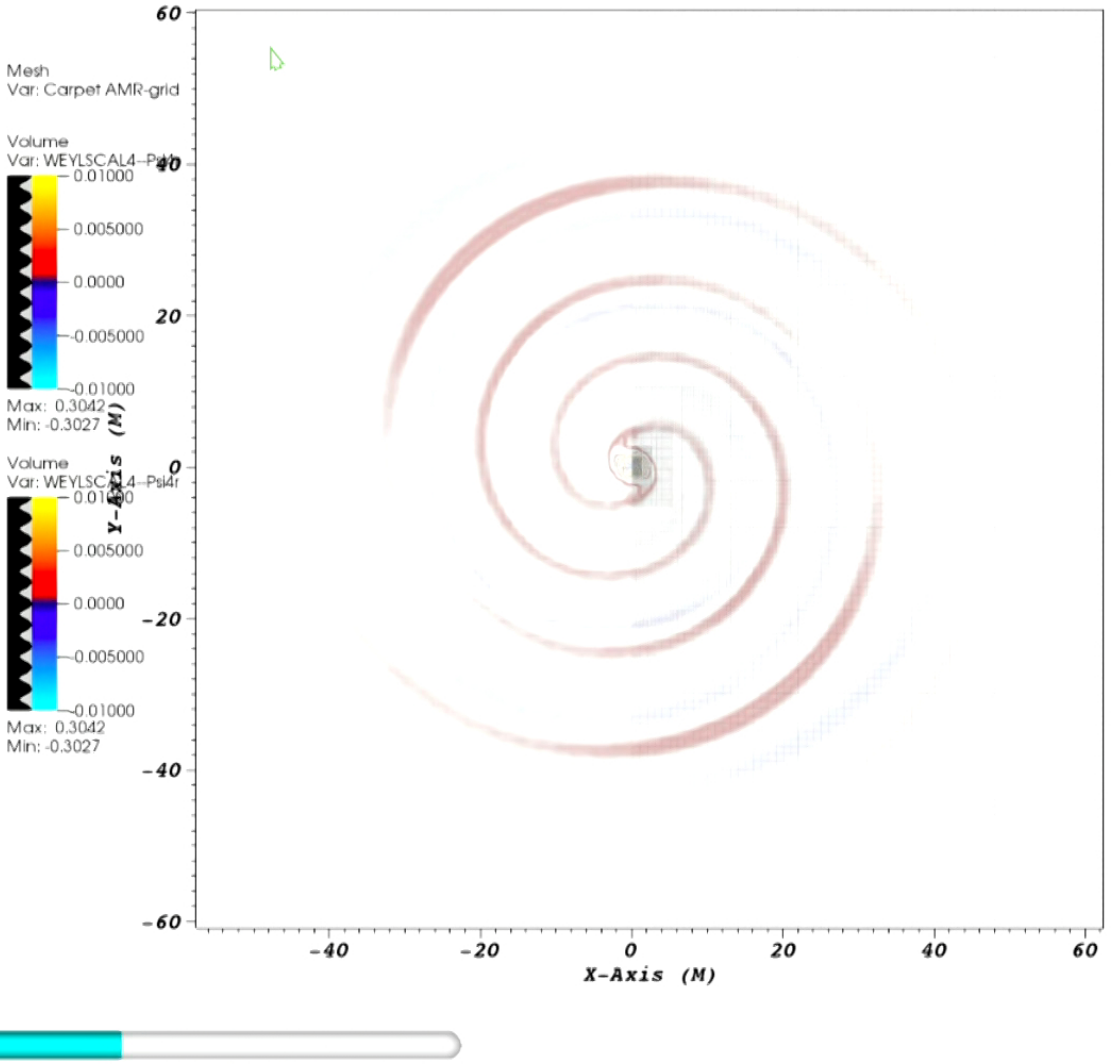
X-Axis (M)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Min: -0.3027
Volume
Var: WEYLSCAL4--Psi4r
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-0.01000
Max: 0.3042
Min: -0.3027
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Y-Axis (M)
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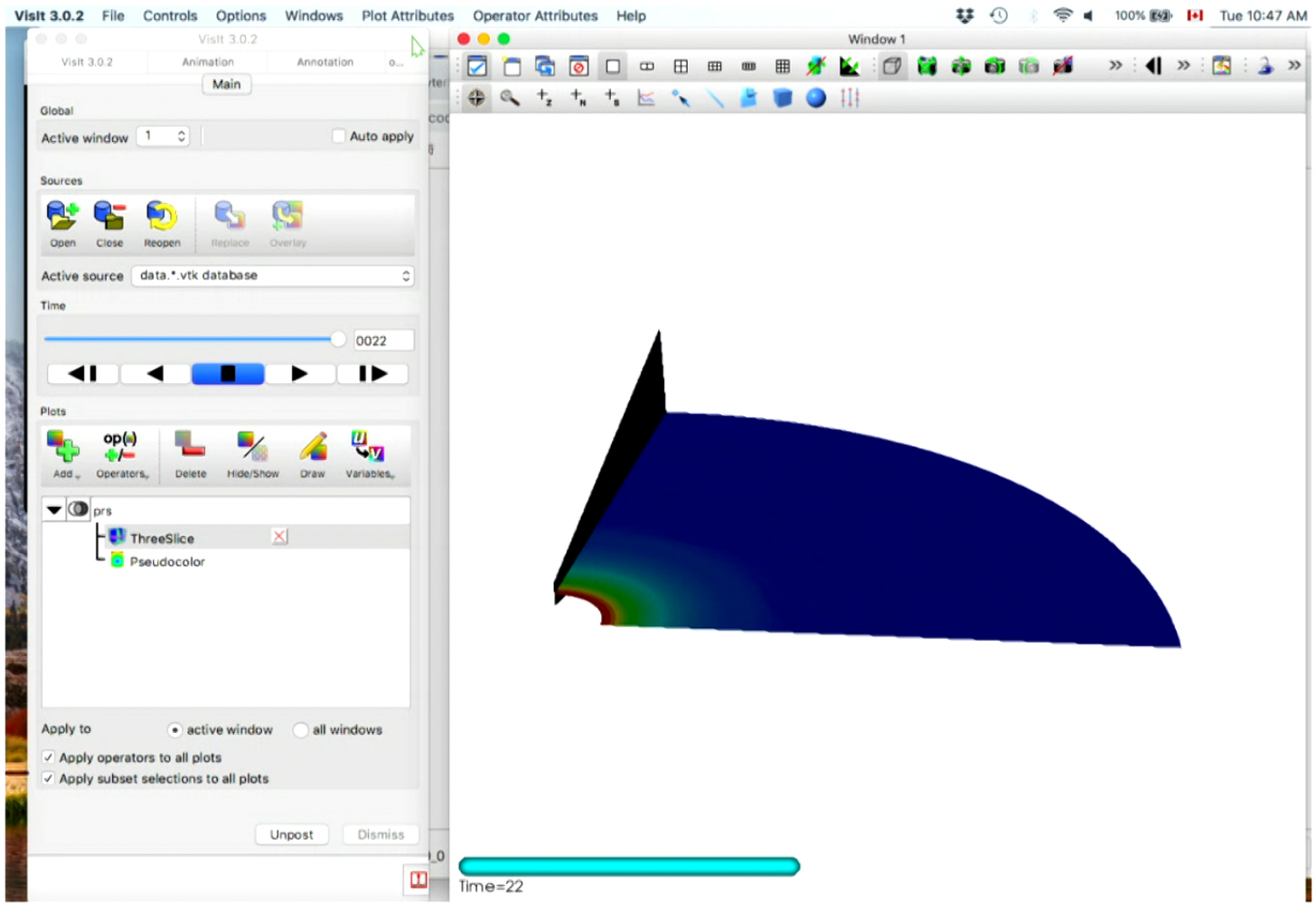
60
X-Axis (M)


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
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Animation
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Operators
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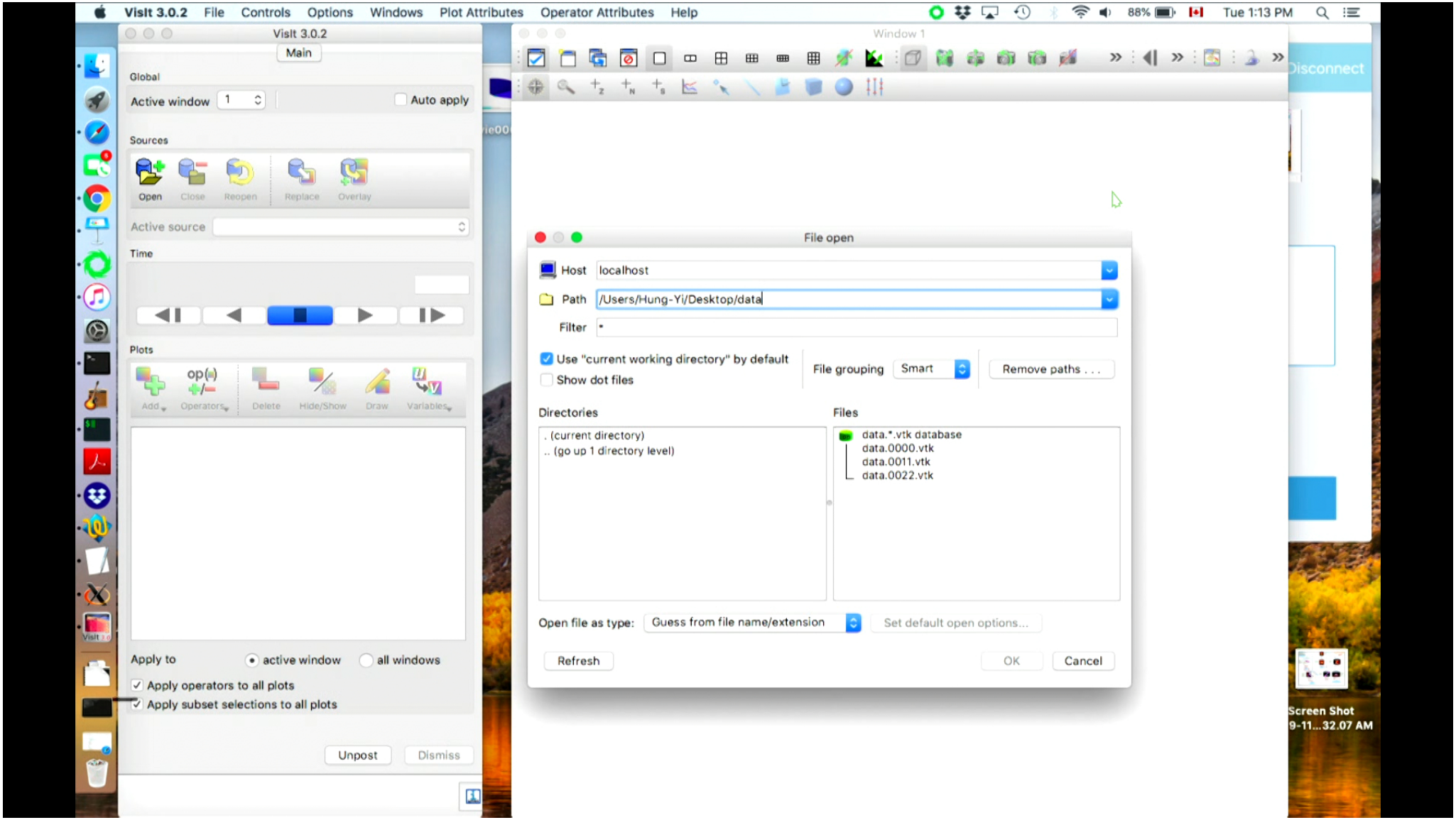
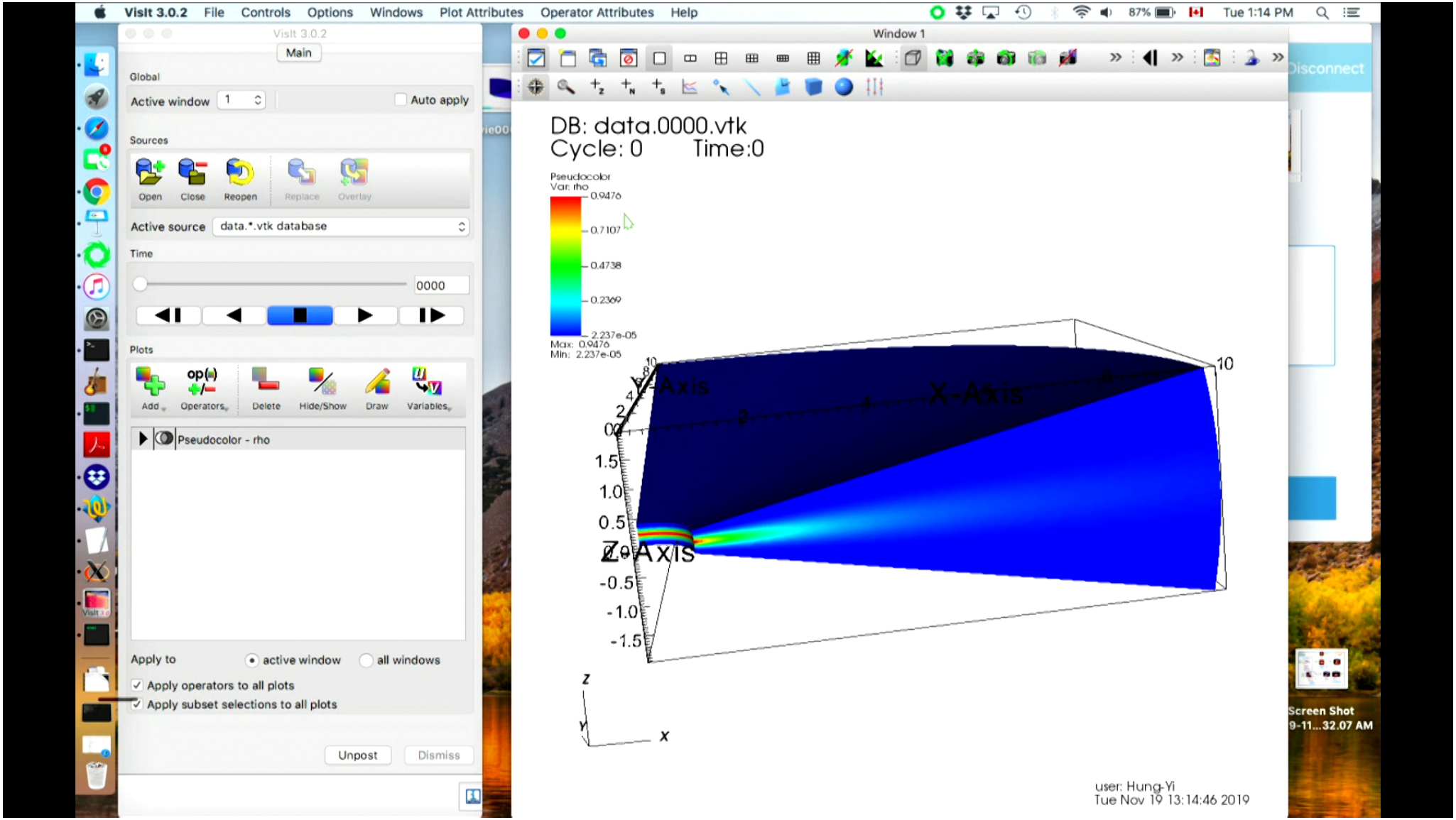
Hide/Show
Draw
Variables
prs
ThreeSlice
Pseudocolor
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Time=22


Visit 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:13 PM
Visit 3.0.2
Main
Global
Active window 1
Auto apply
Sources
Open Close Reopen Replace Overlay
Active source
Time
Plots
Add Operators Delete Hide/Show Draw Variables
Apply to active window all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost Dismiss
Window 1
File open
Host localhost
Path /Users/Hung-Yi/Desktop/data
Filter *
Use "current working directory" by default
Show dot files
File grouping Smart
Remove paths . . .
Directories
. (current directory)
.. (go up 1 directory level)
Files
data.*.vtk database
data.0000.vtk
data.0011.vtk
data.0022.vtk
Open file as type: Guess from file name/extension
Set default open options...
Refresh
OK
Cancel
Disconnect
Screen Shot
9-11...32.07 AM


Visit 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
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Visit 3.0.2
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Active source data.*.vtk database
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Apply to active window all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost Dismiss
Window 1
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Cycle: 0 Time:0
Pseudocolor
Var: rho
0.9476
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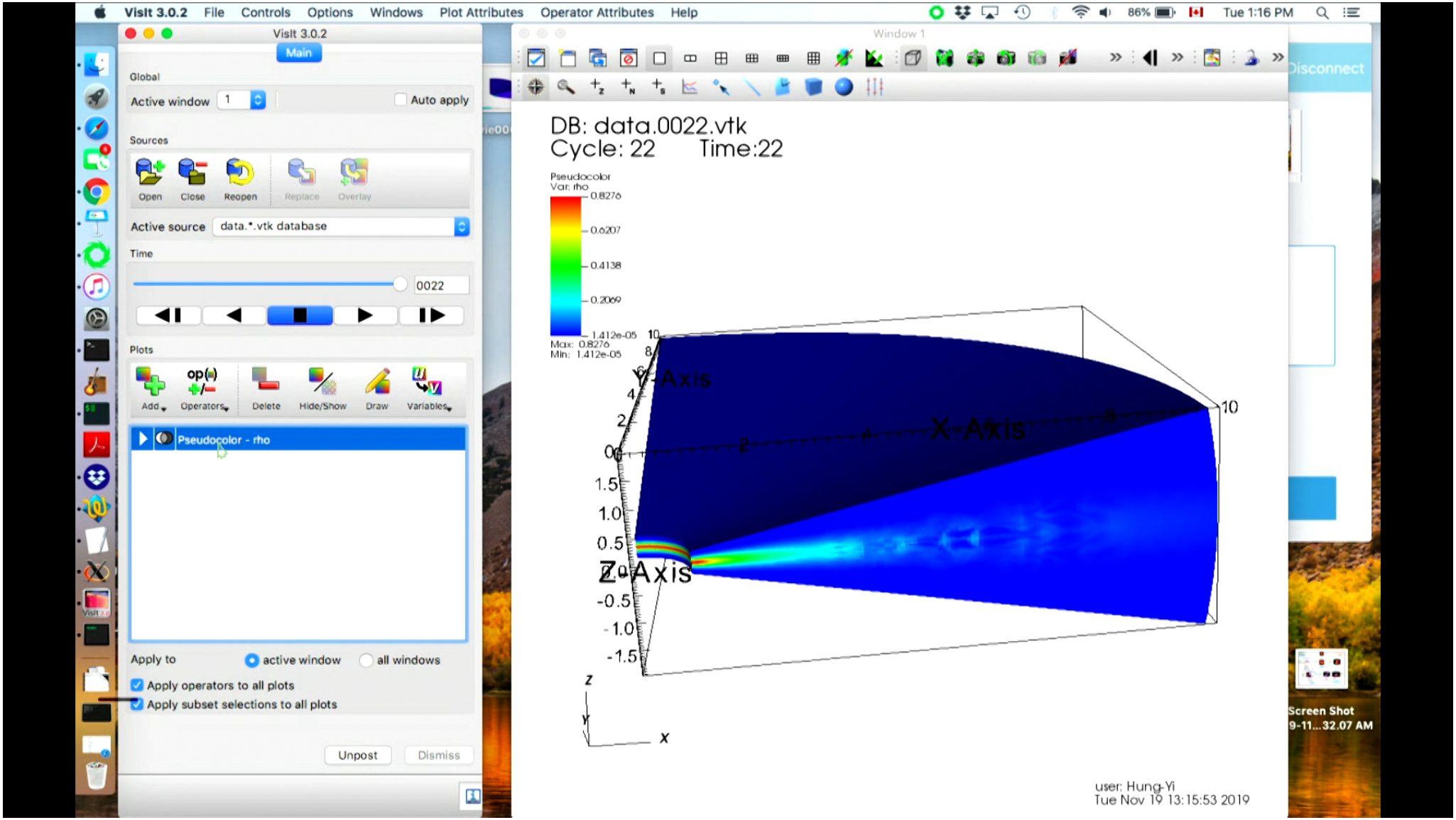
2.237e-05
Max: 0.9476
Min: 2.237e-05
Y-Axis
X-Axis
Z-Axis
user: Hung-Yi
Tue Nov 19 13:14:46 2019
Disconnect
Screen Shot
9-11...32.07 AM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VisIt 3.0.2
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Apply to
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all windows
Apply operators to all plots
Apply subset selections to all plots
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Window 1
DB: data.0022.vtk
Cycle: 22 Time:22
Pseudocolor
Var: rho
0.8276
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0.4138
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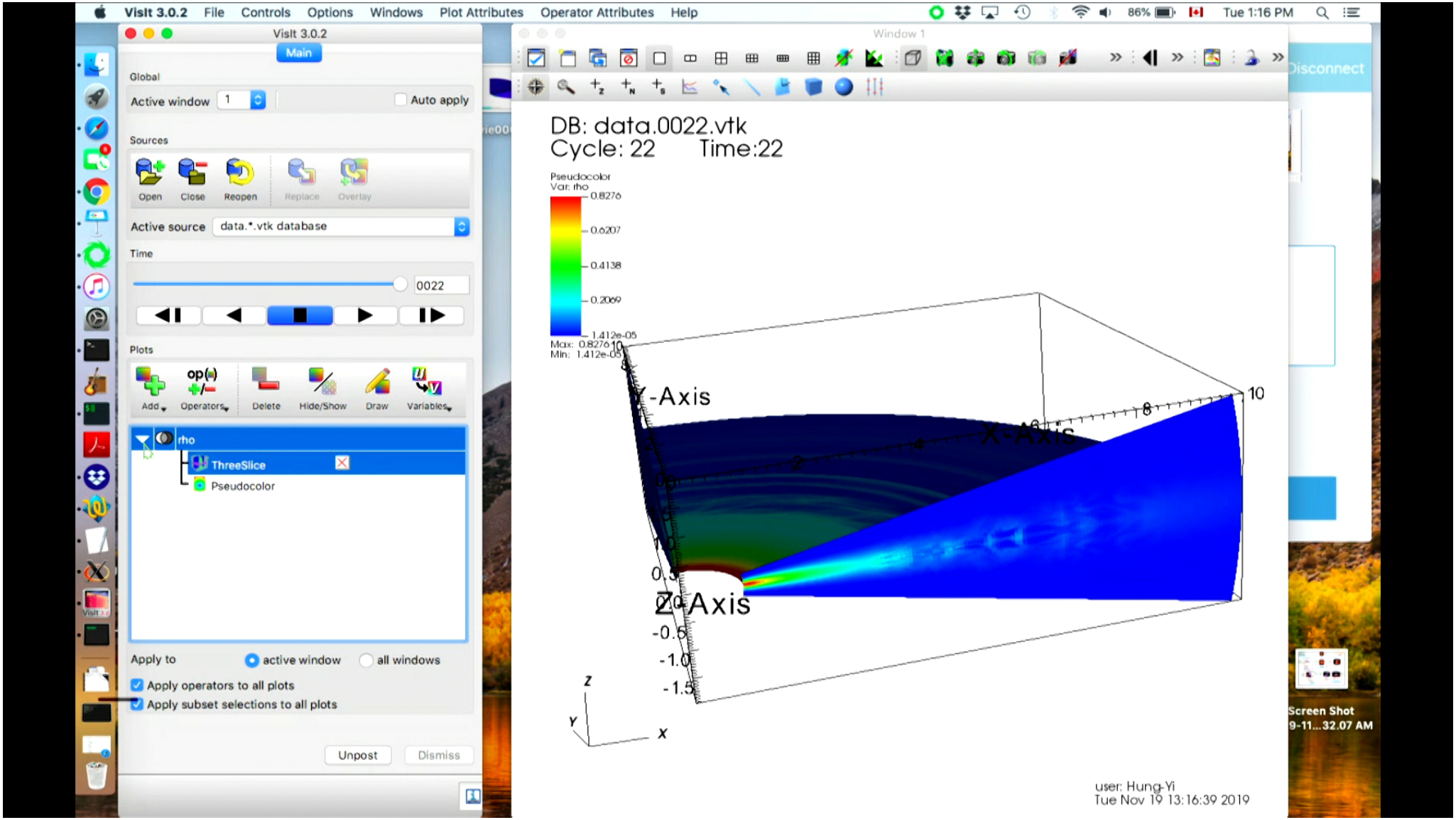
1.412e-05
Max: 0.8276
Min: 1.412e-05
Y-Axis
X-Axis
Z-Axis
user: Hung-Yi
Tue Nov 19 13:15:53 2019
Disconnect
Screen Shot
9-11...32.07 AM


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
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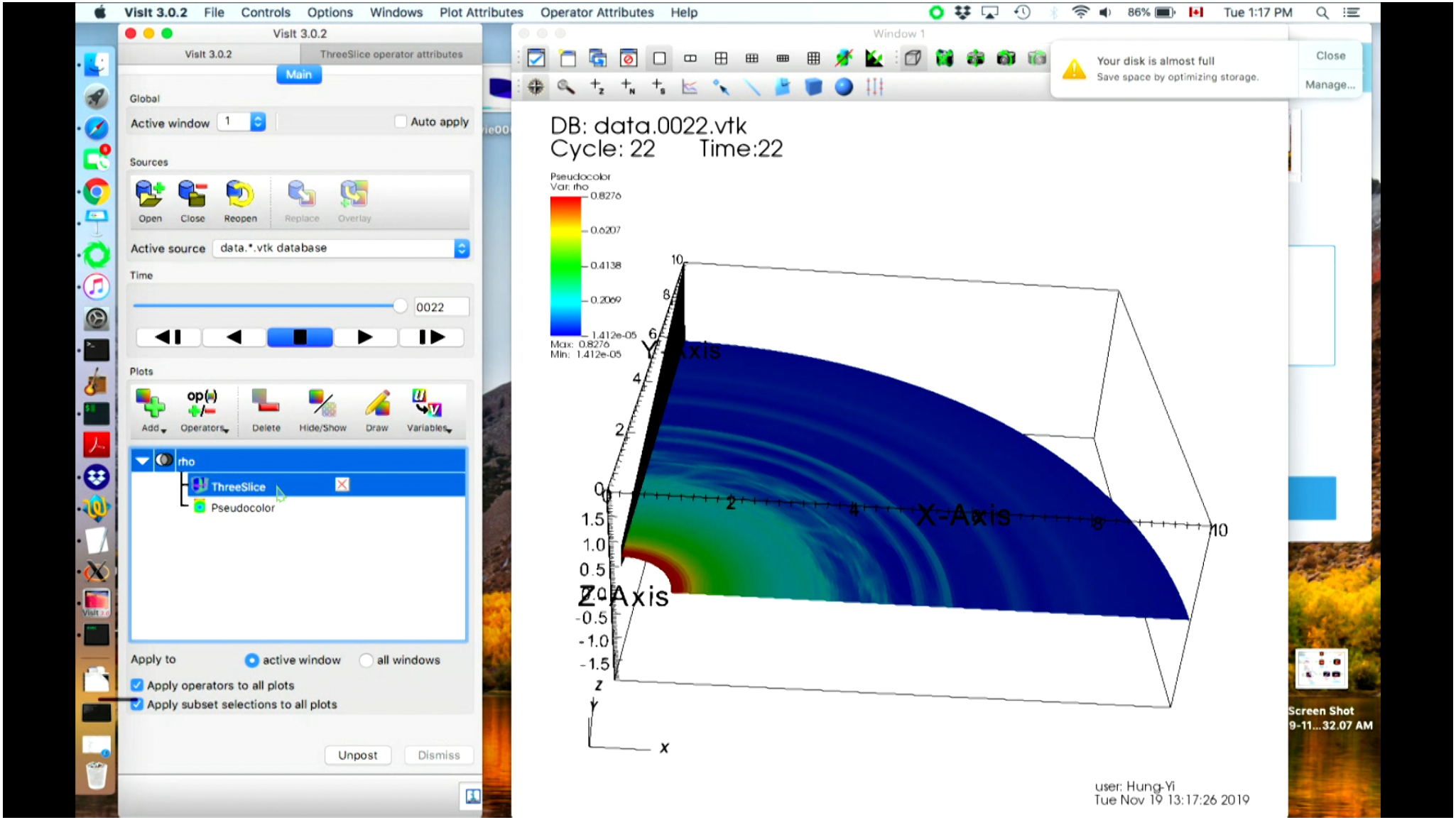
user: Hung-Yi
Tue Nov 19 13:16:39 2019
Disconnect
Screen Shot
9-11...32.07 AM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ThreeSlice
Pseudocolor
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all windows
Apply operators to all plots
Apply subset selections to all plots
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Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
DB: data.0022.vtk
Cycle: 22 Time:22
Pseudocolor
Var: rho
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1.412e-05
Max: 0.8276
Min: 1.412e-05
Y-Axis
X-Axis
Z-Axis
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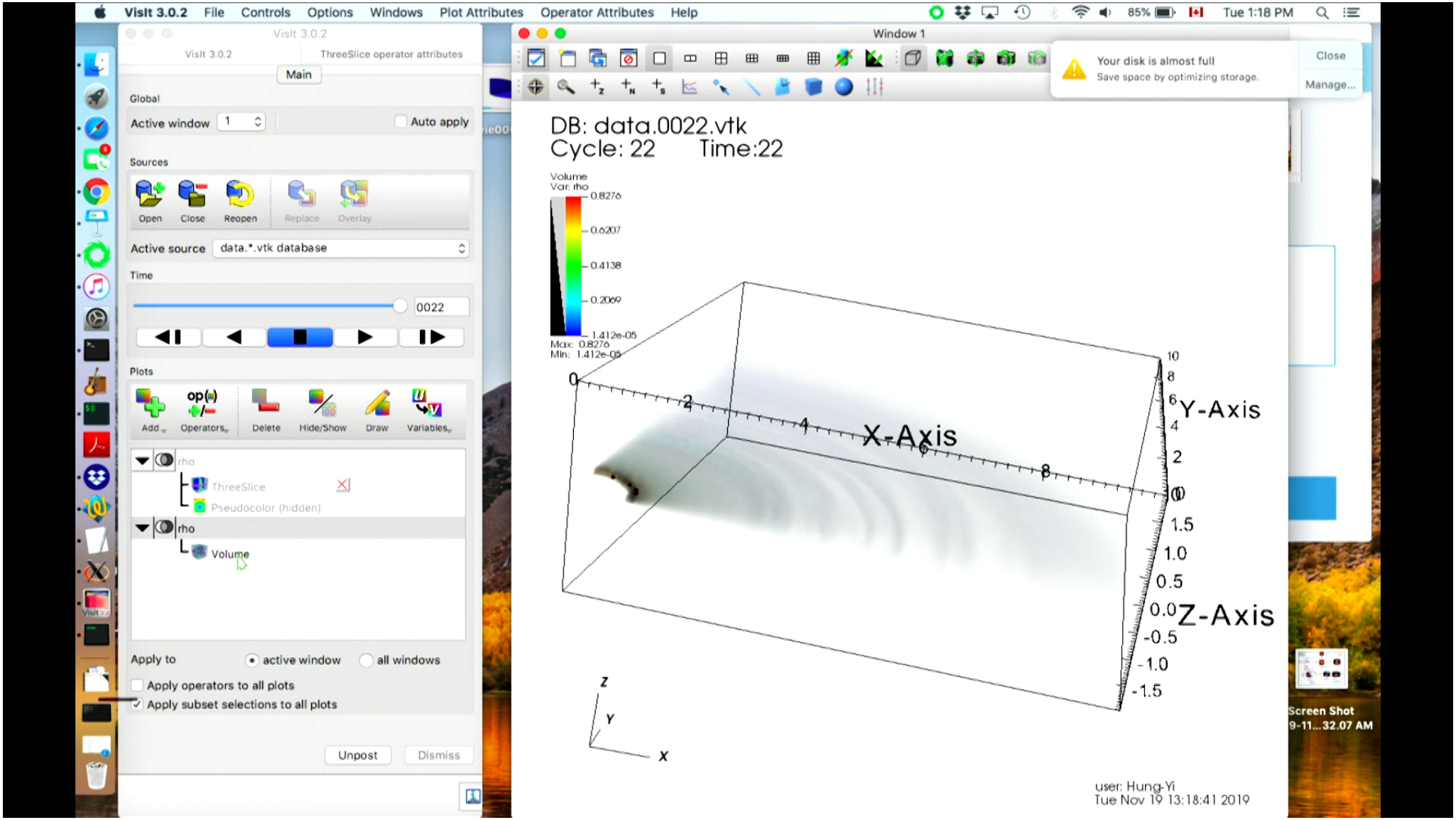
Screen Shot
9-11...32.07 AM


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:18 PM
VisIt 3.0.2
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Active window 1
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all windows
Apply operators to all plots
Apply subset selections to all plots
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Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
DB: data.0022.vtk
Cycle: 22 Time:22
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Var: rho
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Max: 0.8276
Min: 1.412e-05
X-Axis
Y-Axis
Z-Axis
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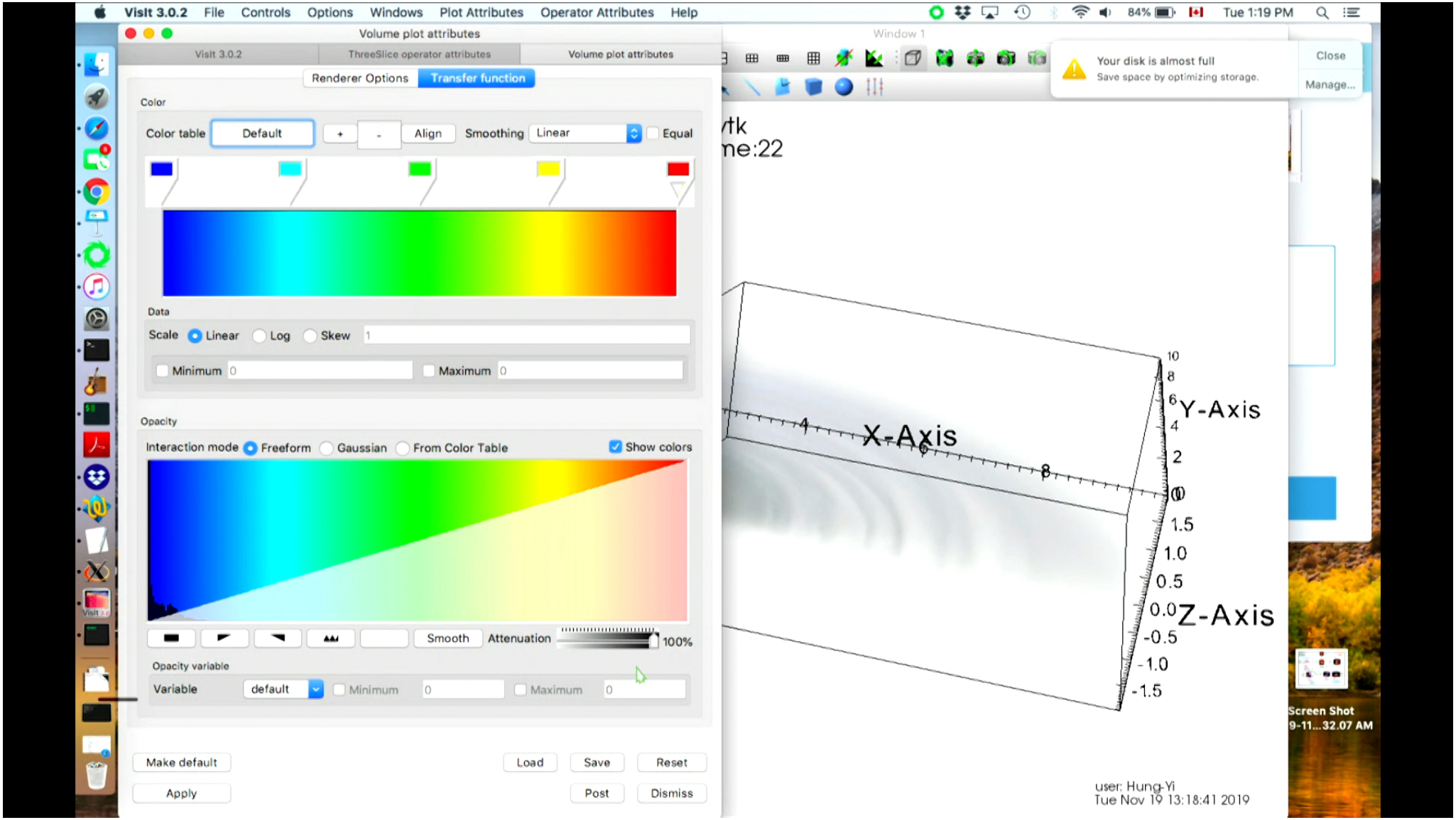
user: Hung-Yi
Tue Nov 19 13:18:41 2019
Screen Shot
9-11...32.07 AM


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
84% Tue 1:19 PM
Volume plot attributes
VisIt 3.0.2
ThreeSlice operator attributes
Volume plot attributes
Renderer Options
Transfer function
Color
Color table
Default
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Align
Smoothing
Linear
Equal
Data
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Linear
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Skew
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Maximum
Opacity
Interaction mode
Freeform
Gaussian
From Color Table
Show colors
Smooth
Attenuation
100%
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Load
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Reset
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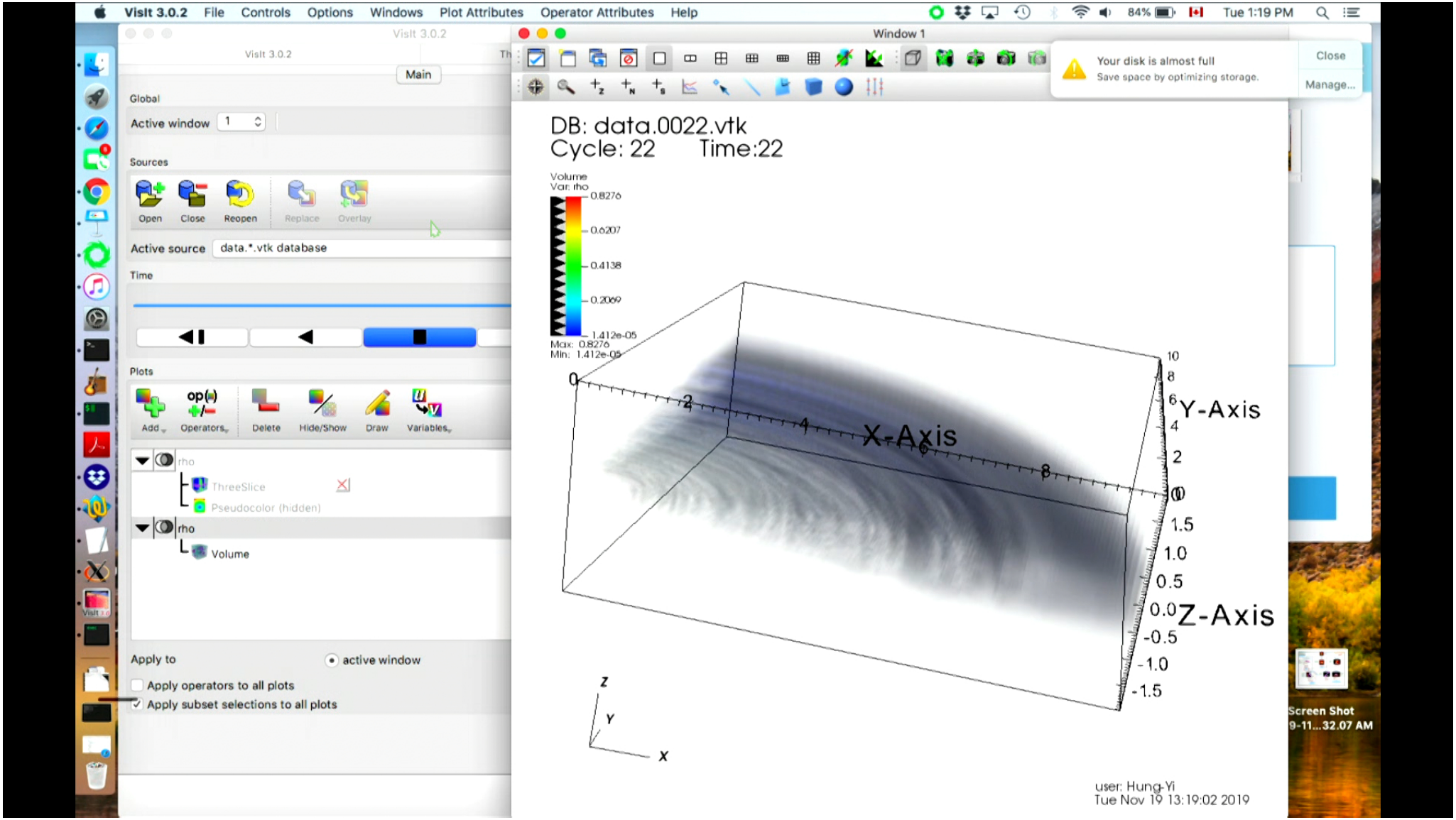
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
X-Axis
Y-Axis
Z-Axis
user: Hung-Yi
Tue Nov 19 13:18:41 2019
Screen Shot


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
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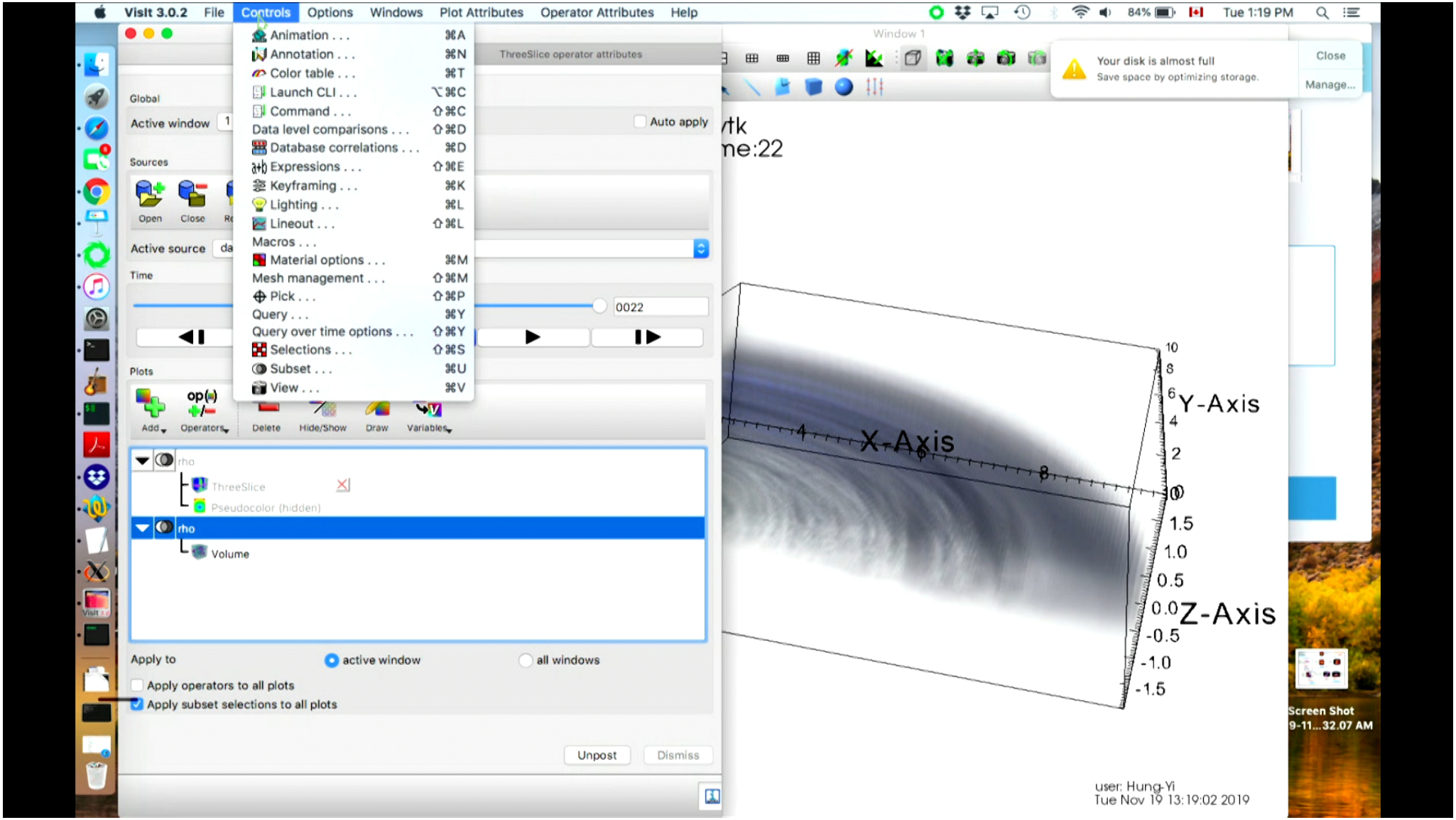
Apply to active window
Apply operators to all plots
Apply subset selections to all plots
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
DB: data.0022.vtk
Cycle: 22 Time:22
Volume
Var: rho
0.8276
0.6207
0.4138
0.2069
1.412e-05
Max: 0.8276
Min: 1.412e-05
X-Axis
Y-Axis
Z-Axis
Z
Y
X
user: Hung-Yi
Tue Nov 19 13:19:02 2019
Screen Shot
9-11...32.07 AM


Visit 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Animation . . . ⌘A
Annotation . . . ⌘N
Color table . . . ⌘T
Launch CLI . . . ⌥⌘C
Command . . . ⇧⌘C
Data level comparisons . . . ⇧⌘D
Database correlations . . . ⌘D
Expressions . . . ⇧⌘E
Keyframing . . . ⌘K
Lighting . . . ⌘L
Lineout . . . ⇧⌘L
Macros . . .
Material options . . . ⌘M
Mesh management . . . ⇧⌘M
Pick . . . ⇧⌘P
Query . . . ⌘Y
Query over time options . . . ⇧⌘Y
Selections . . . ⇧⌘S
Subset . . . ⌘U
View . . . ⌘V
ThreeSlice operator attributes
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all windows
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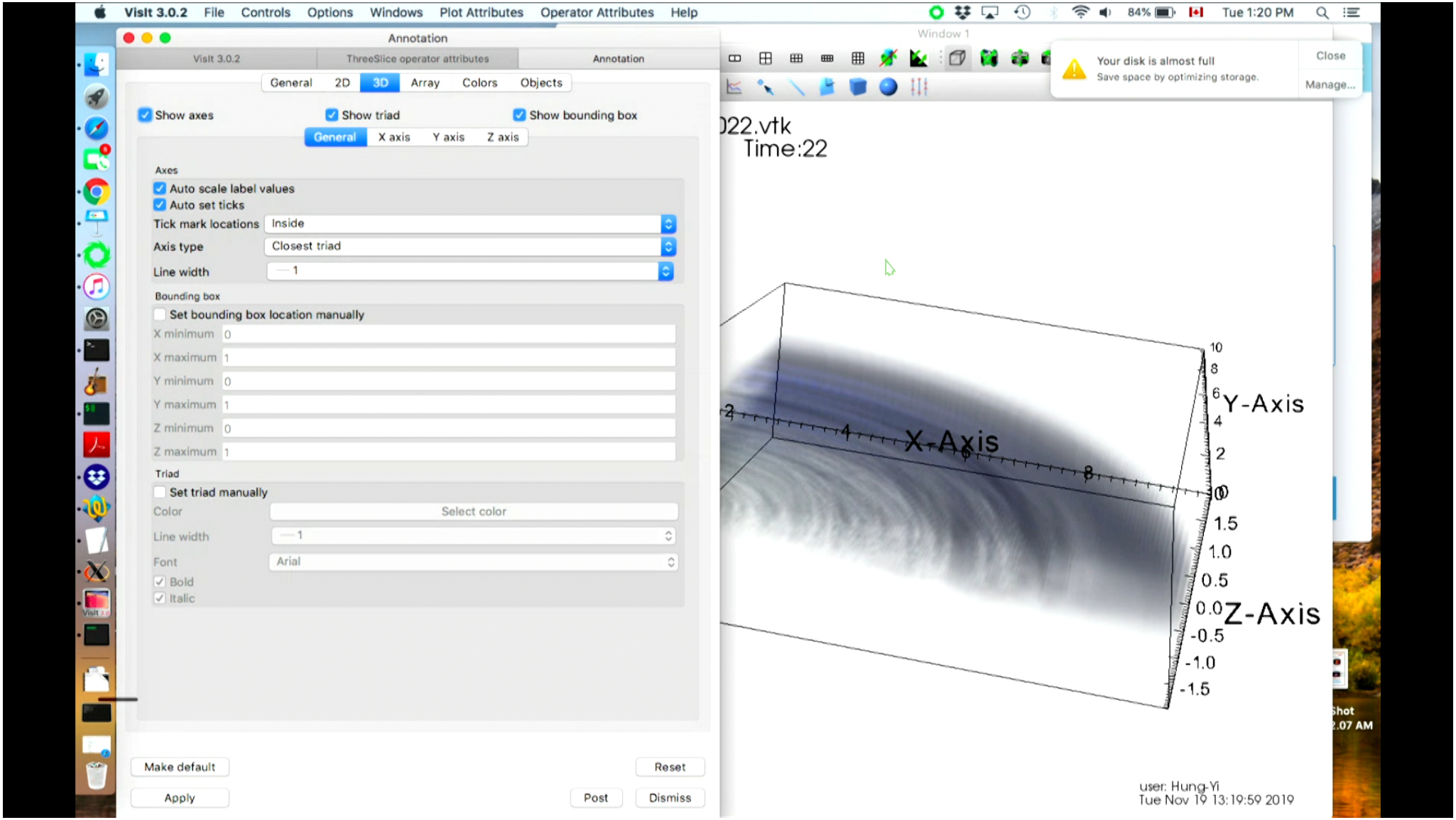
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
X-Axis
Y-Axis
Z-Axis
user: Hung-Yi
Tue Nov 19 13:19:02 2019
Screen Shot
9-11...32.07 AM


Visit 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:20 PM
Annotation
Visit 3.0.2
ThreeSlice operator attributes
Annotation
General 2D 3D Array Colors Objects
Show axes
Show triad
Show bounding box
General X axis Y axis Z axis
Axes
Auto scale label values
Auto set ticks
Tick mark locations Inside
Axis type Closest triad
Line width 1
Bounding box
Set bounding box location manually
X minimum 0
X maximum 1
Y minimum 0
Y maximum 1
Z minimum 0
Z maximum 1
Triad
Set triad manually
Color Select color
Line width 1
Font Arial
Bold
Italic
Make default
Reset
Apply
Post
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
022.vtk
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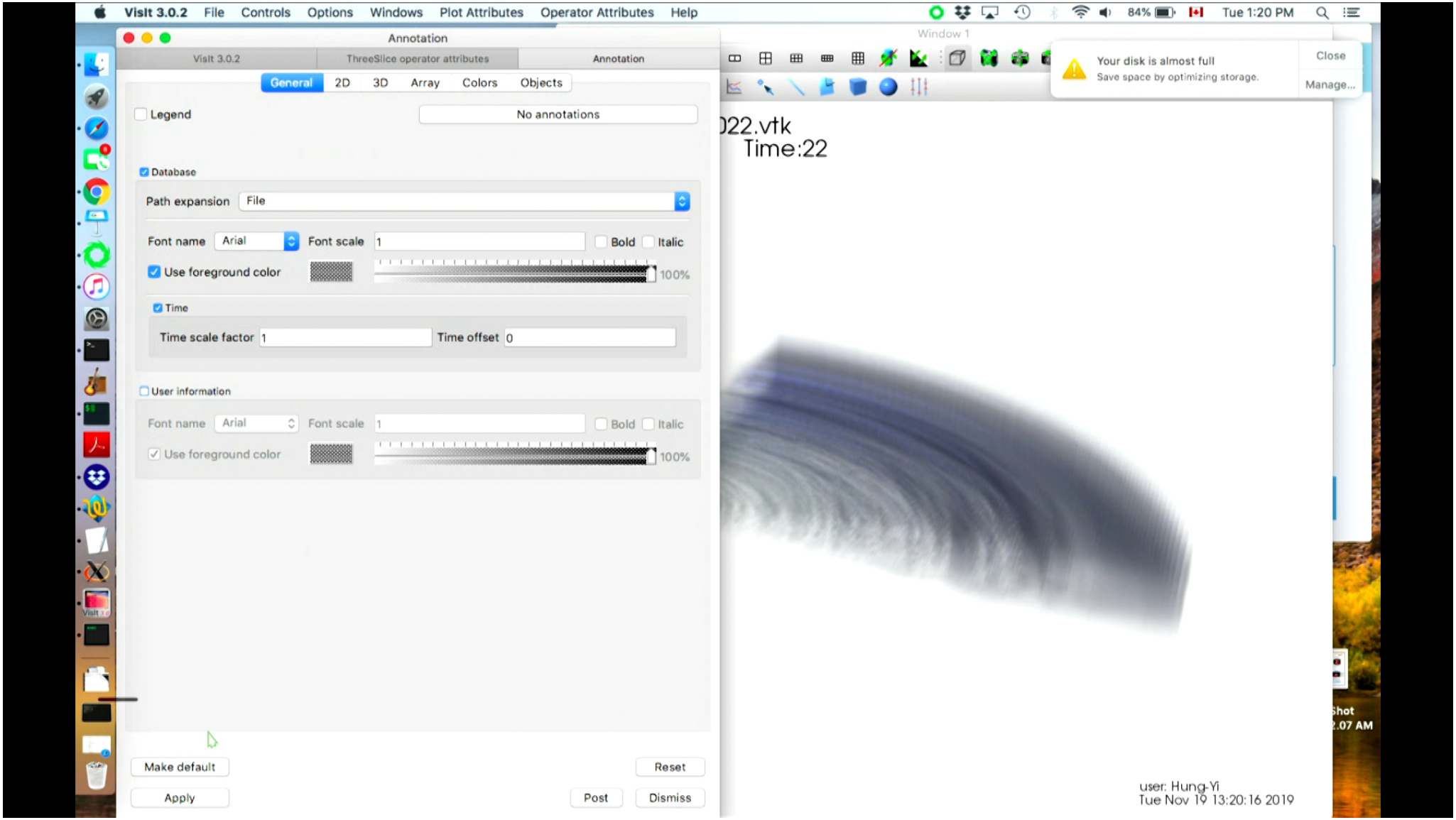
X-Axis
Y-Axis
Z-Axis
user: Hung-Yi
Tue Nov 19 13:19:59 2019


Visit 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
84% Tue 1:20 PM
Annotation
Visit 3.0.2
ThreeSlice operator attributes
Annotation
General 2D 3D Array Colors Objects
Legend
No annotations
Database
Path expansion File
Font name Arial Font scale 1 Bold Italic
Use foreground color 100%
Time
Time scale factor 1 Time offset 0
User information
Font name Arial Font scale 1 Bold Italic
Use foreground color 100%
Make default
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Your disk is almost full
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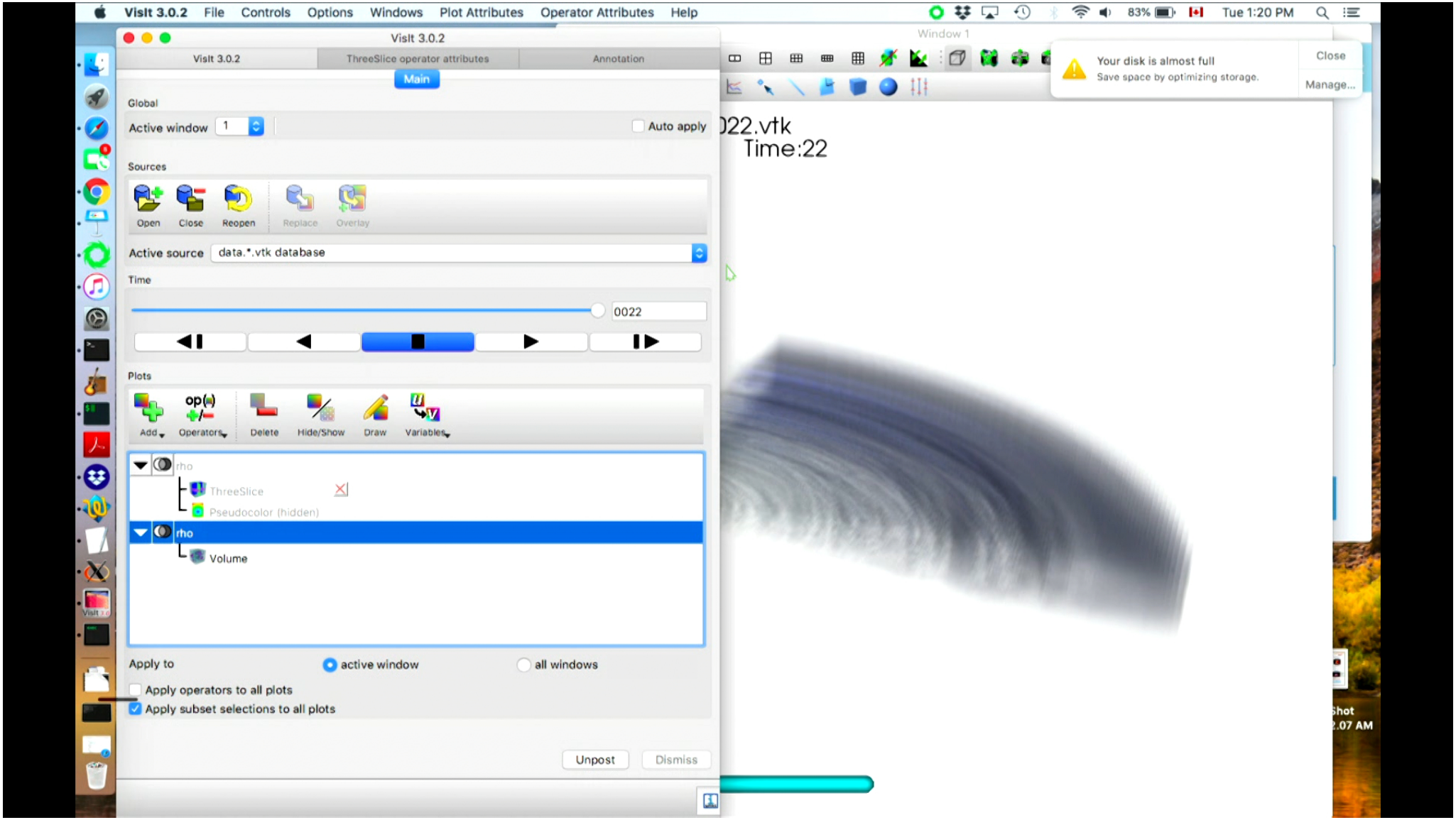
Close
Manage...
022.vtk
Time:22
user: Hung-Yi
Tue Nov 19 13:20:16 2019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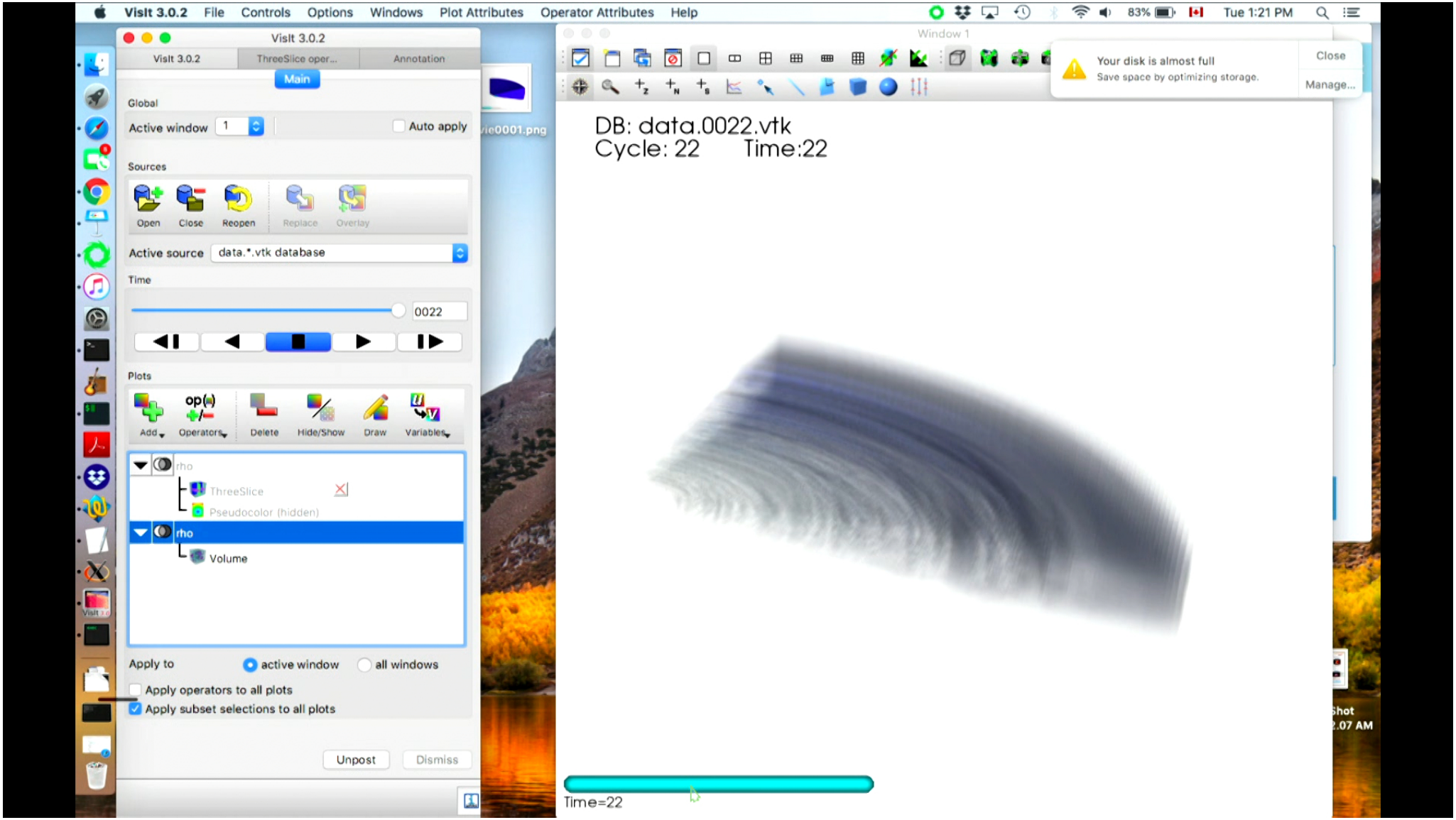
Close
Manage...
022.vtk
Time:22


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:21 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice oper...
Annotation
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Apply subset selections to all plots
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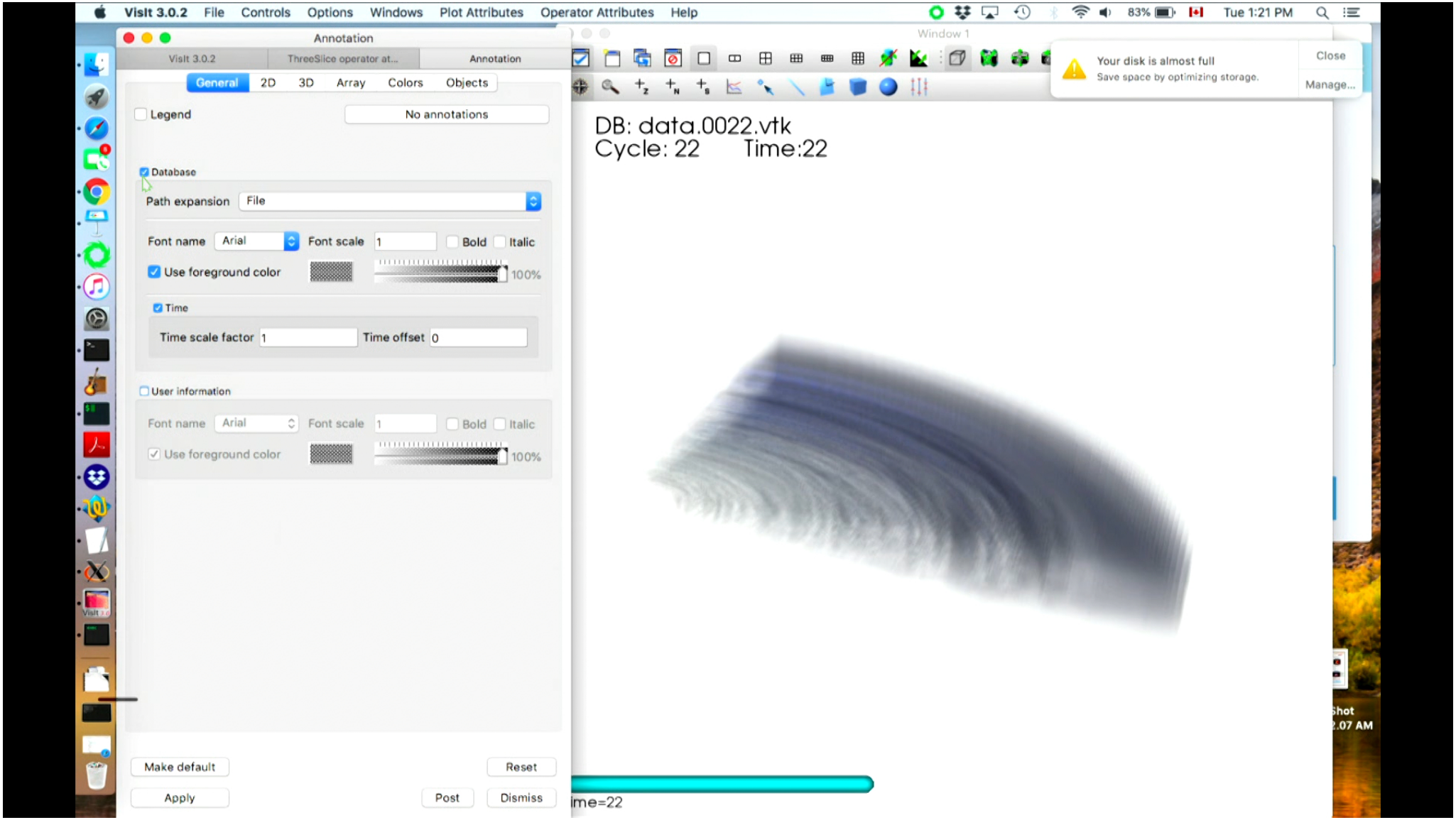
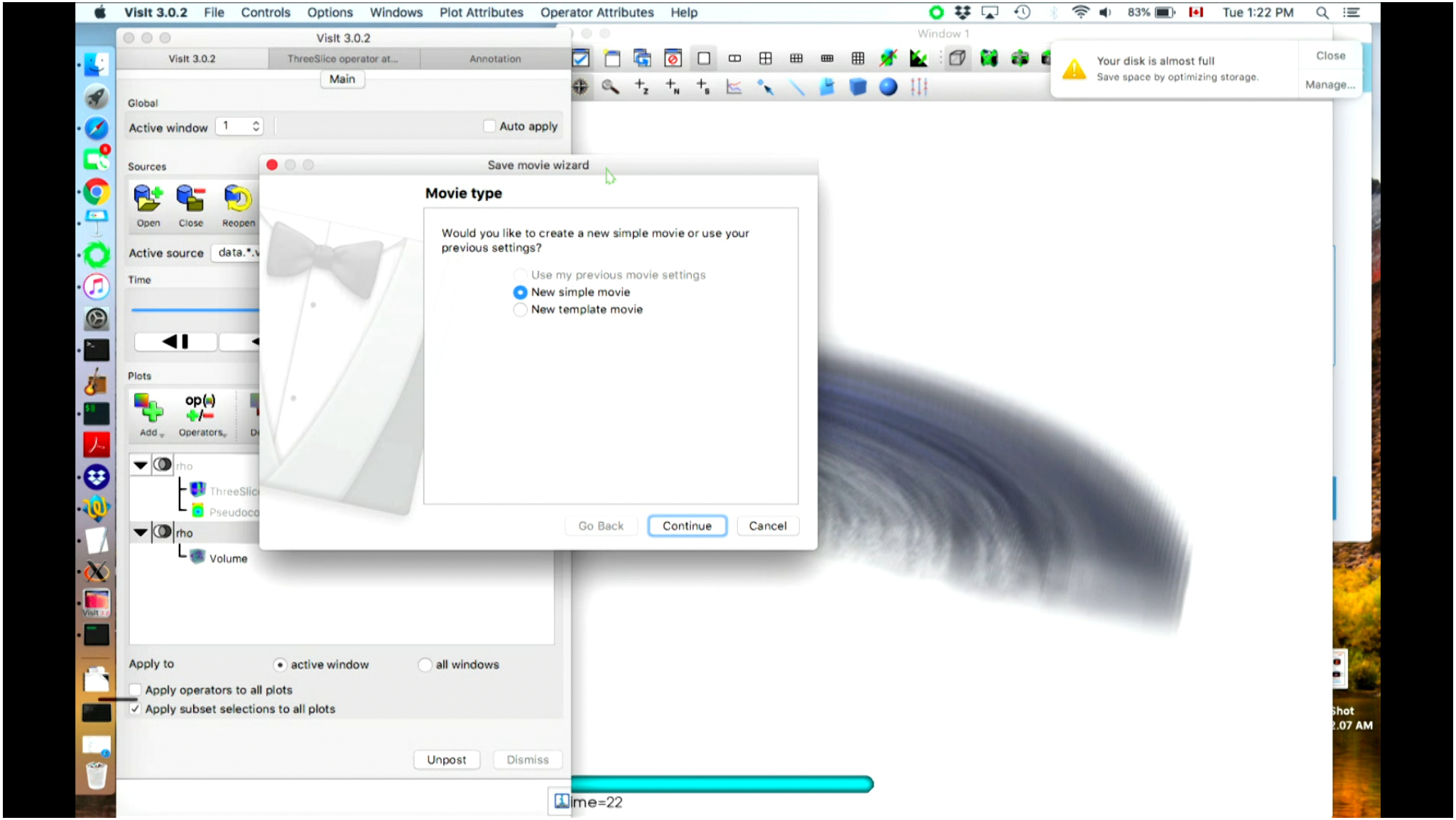
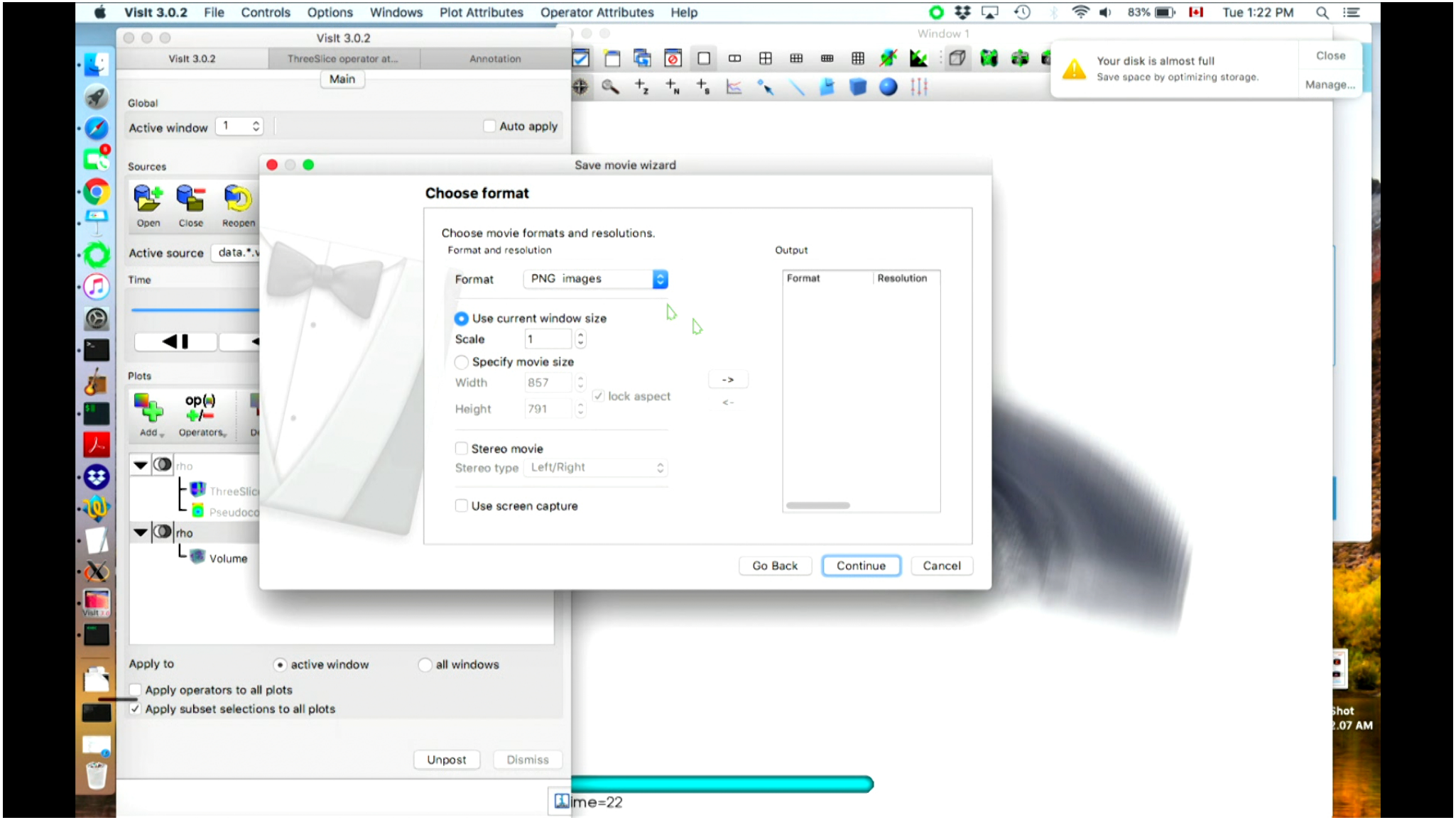
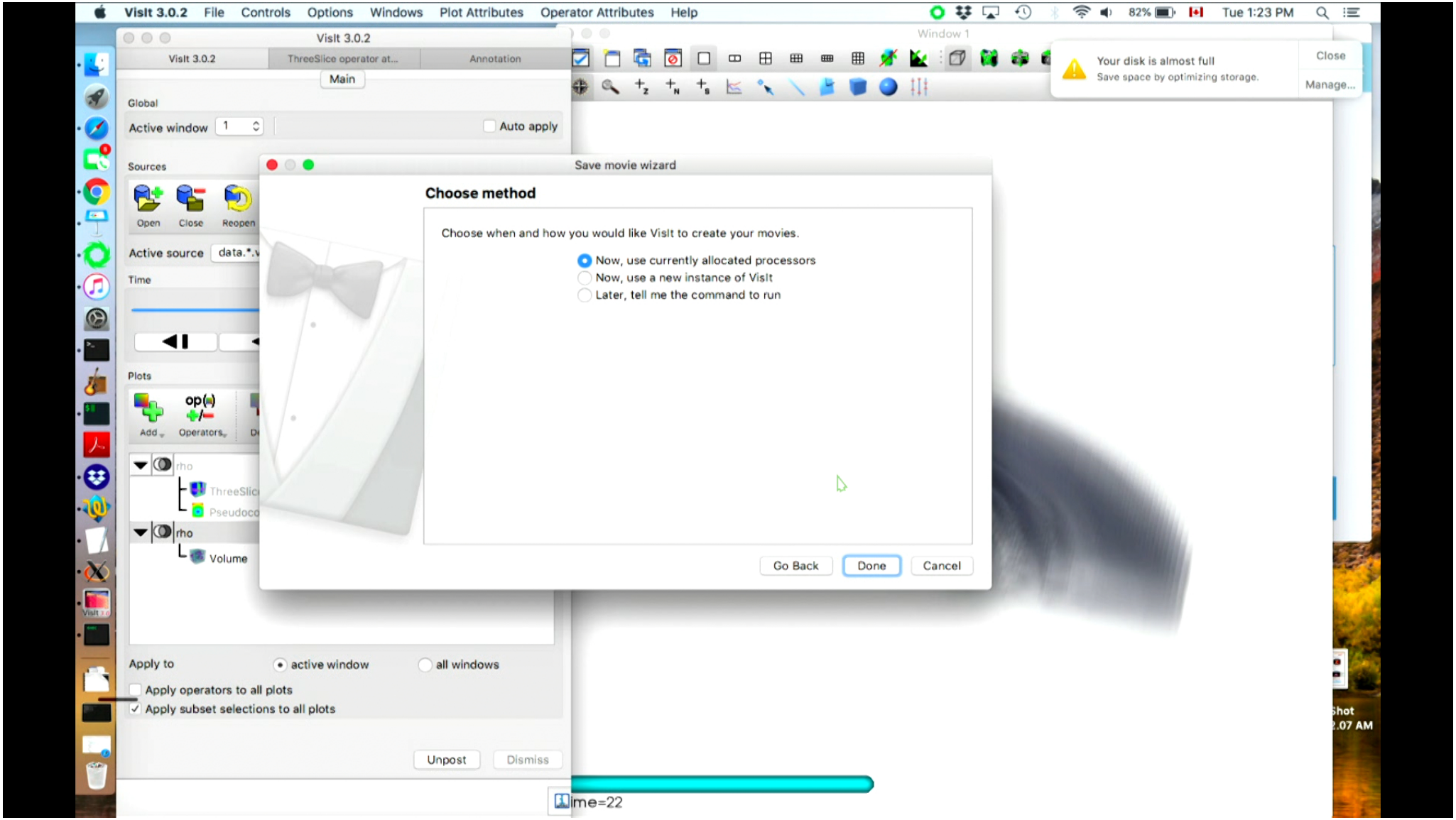
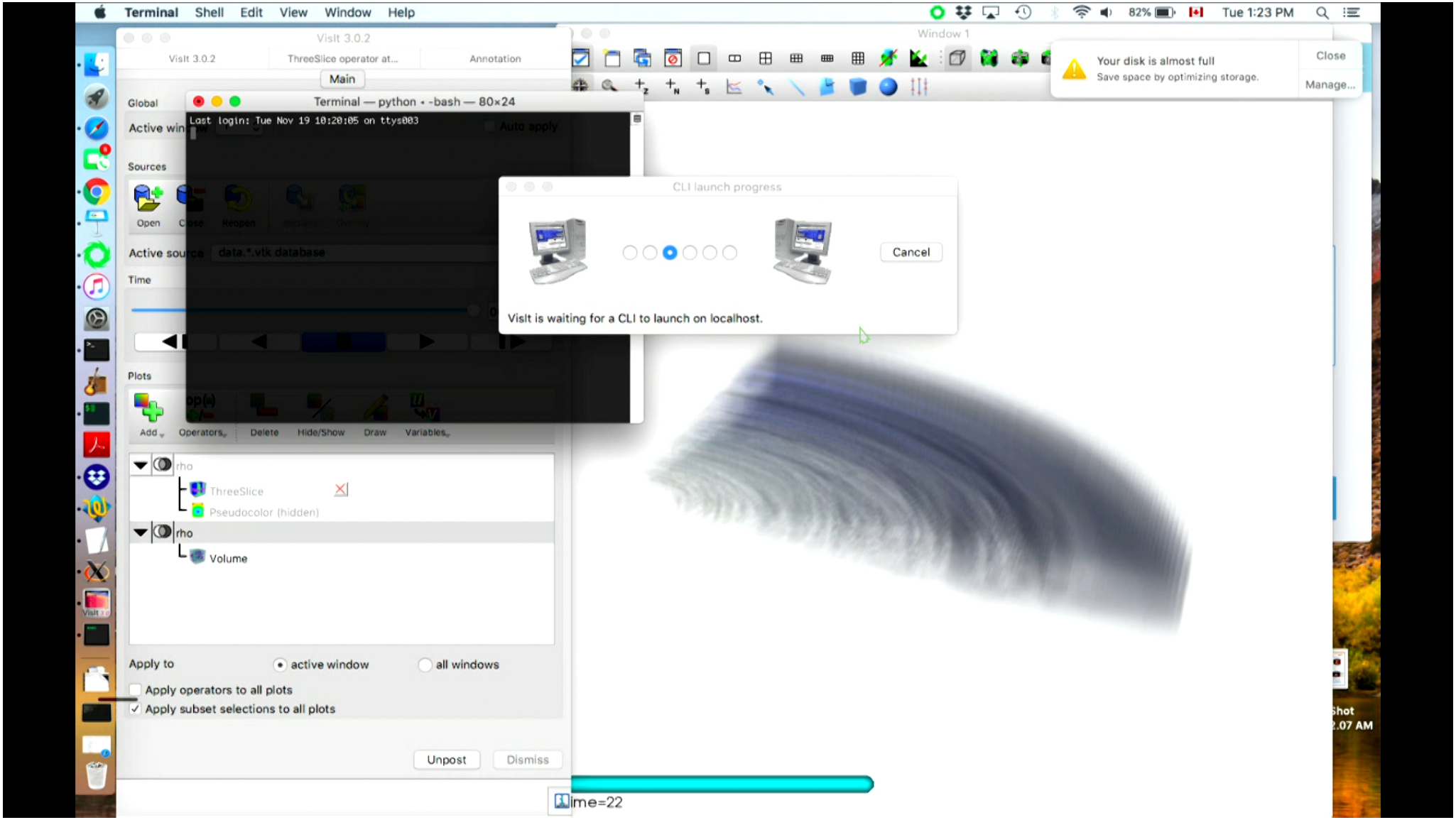
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
DB: data.0022.vtk
Cycle: 22 Time:22
Time=22

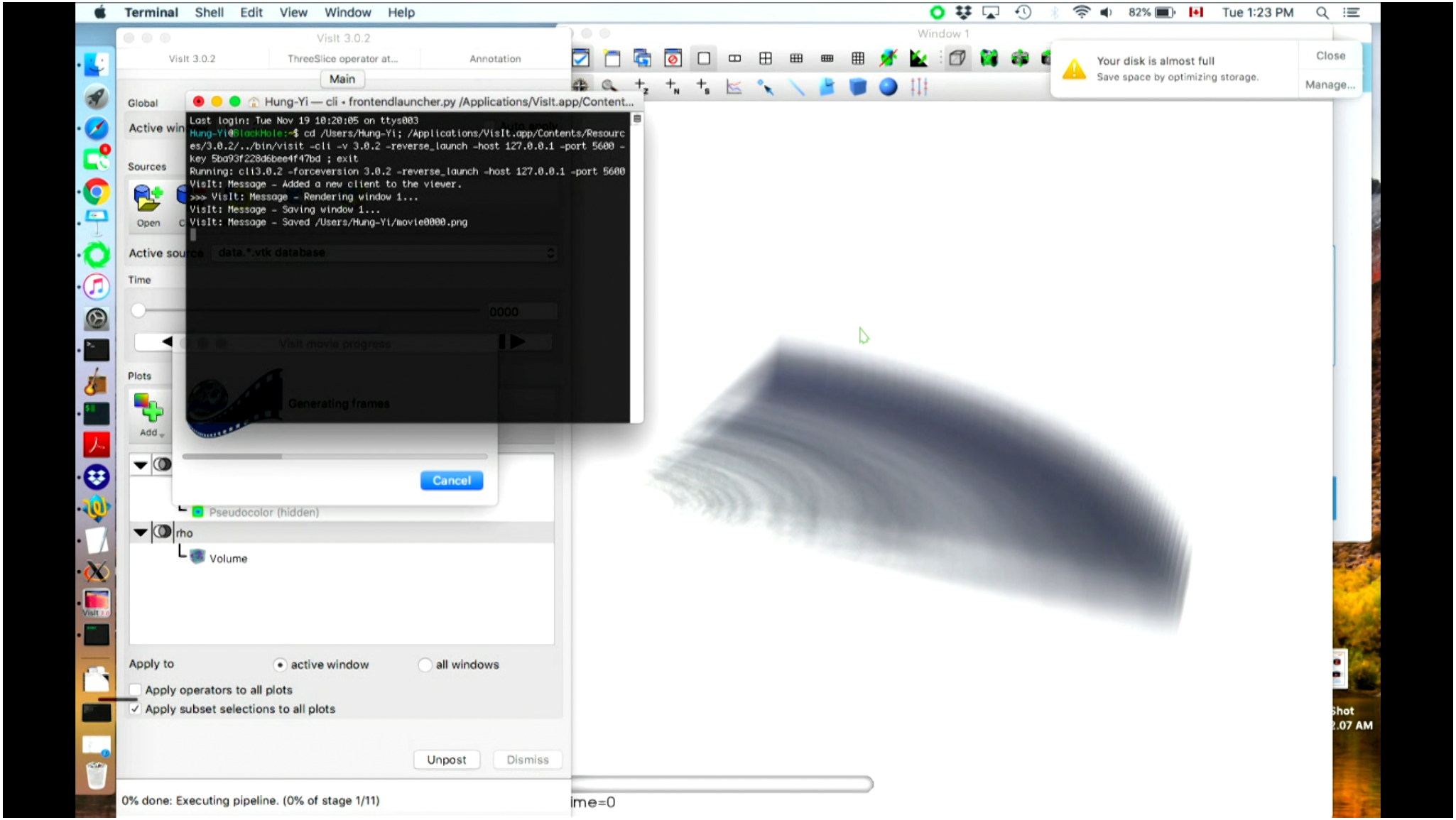

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
83% Tue 1:21 PM
Annotation
VisIt 3.0.2
ThreeSlice operator at...
Annotation
General 2D 3D Array Colors Objects
Legend
No annotations
Database
Path expansion File
Font name Arial Font scale 1 Bold Italic
Use foreground color 100%
Time
Time scale factor 1 Time offset 0
User information
Font name Arial Font scale 1 Bold Italic
Use foreground color 100%
Make default
Reset
Apply
Post
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
DB: data.0022.vtk
Cycle: 22 Time:22
ime=22

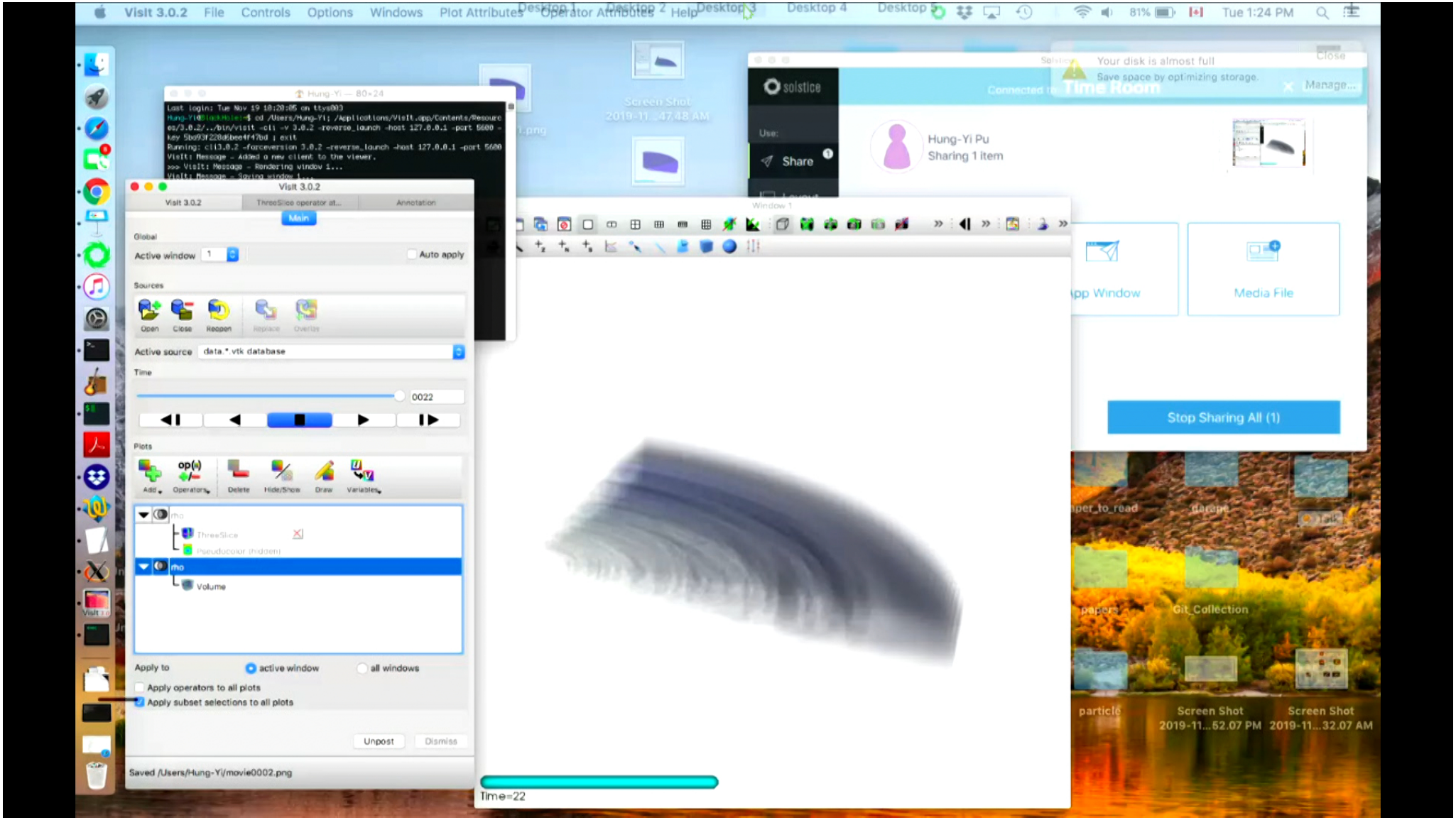

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:22 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator at...
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Active source
Time
Plots
Add
Operators
rho
ThreeSlic
Pseudoco
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Save movie wizard
Movie type
Would you like to create a new simple movie or use your previous settings?
Use my previous movie settings
New simple movie
New template movie
Go Back
Continue
Cancel
me=22

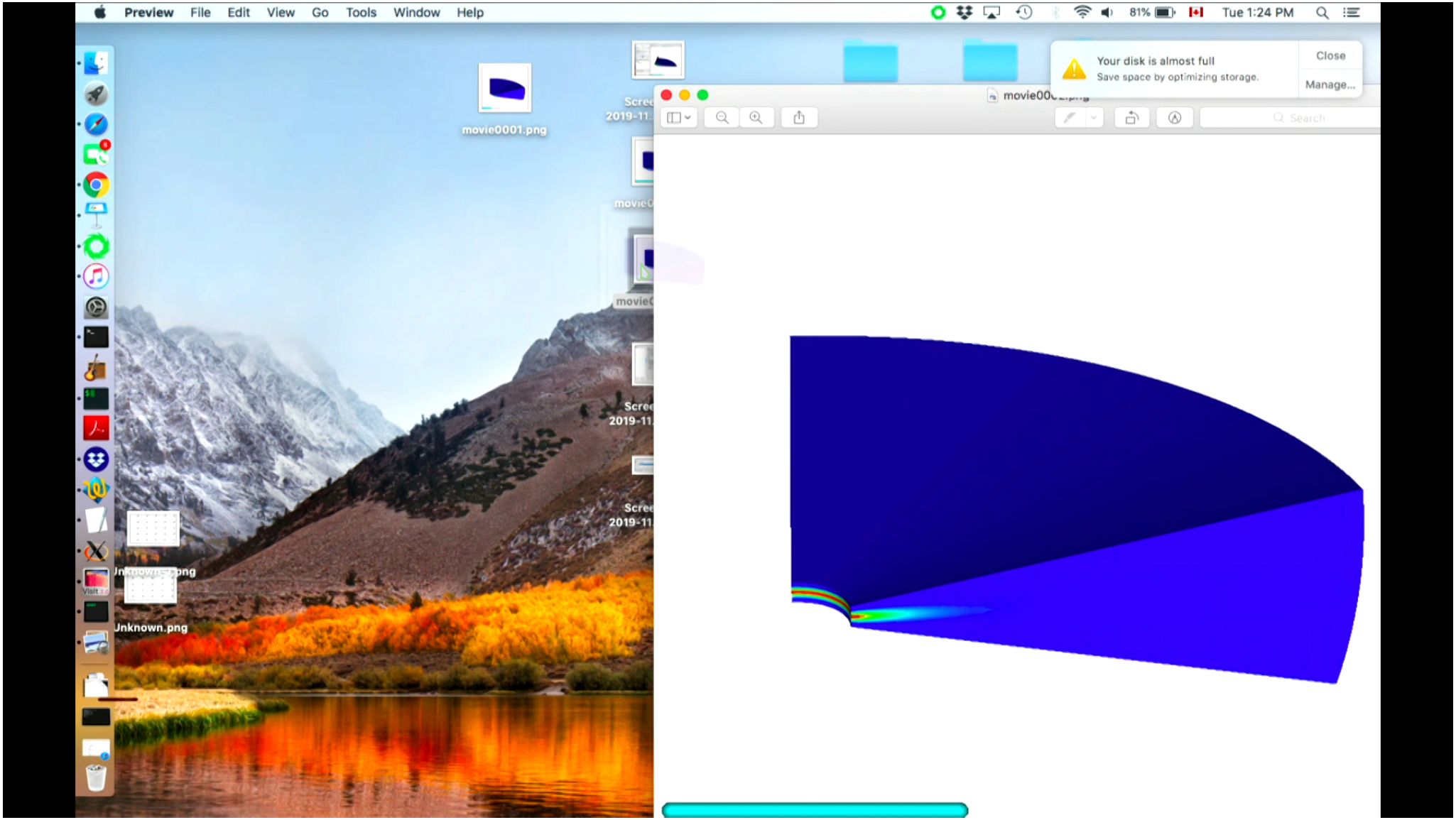

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:22 PM
VisIt 3.0.2
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Active source
Time
Plots
Add
Operators
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Save movie wizard
Choose format
Choose movie formats and resolutions.
Format and resolution
Output
Format
PNG images
Use current window size
Scale
Specify movie size
Width
857
Height
791
lock aspect
Stereo movie
Stereo type
Left/Right
Use screen capture
Resolution
Go Back
Continue
Cancel
me=22

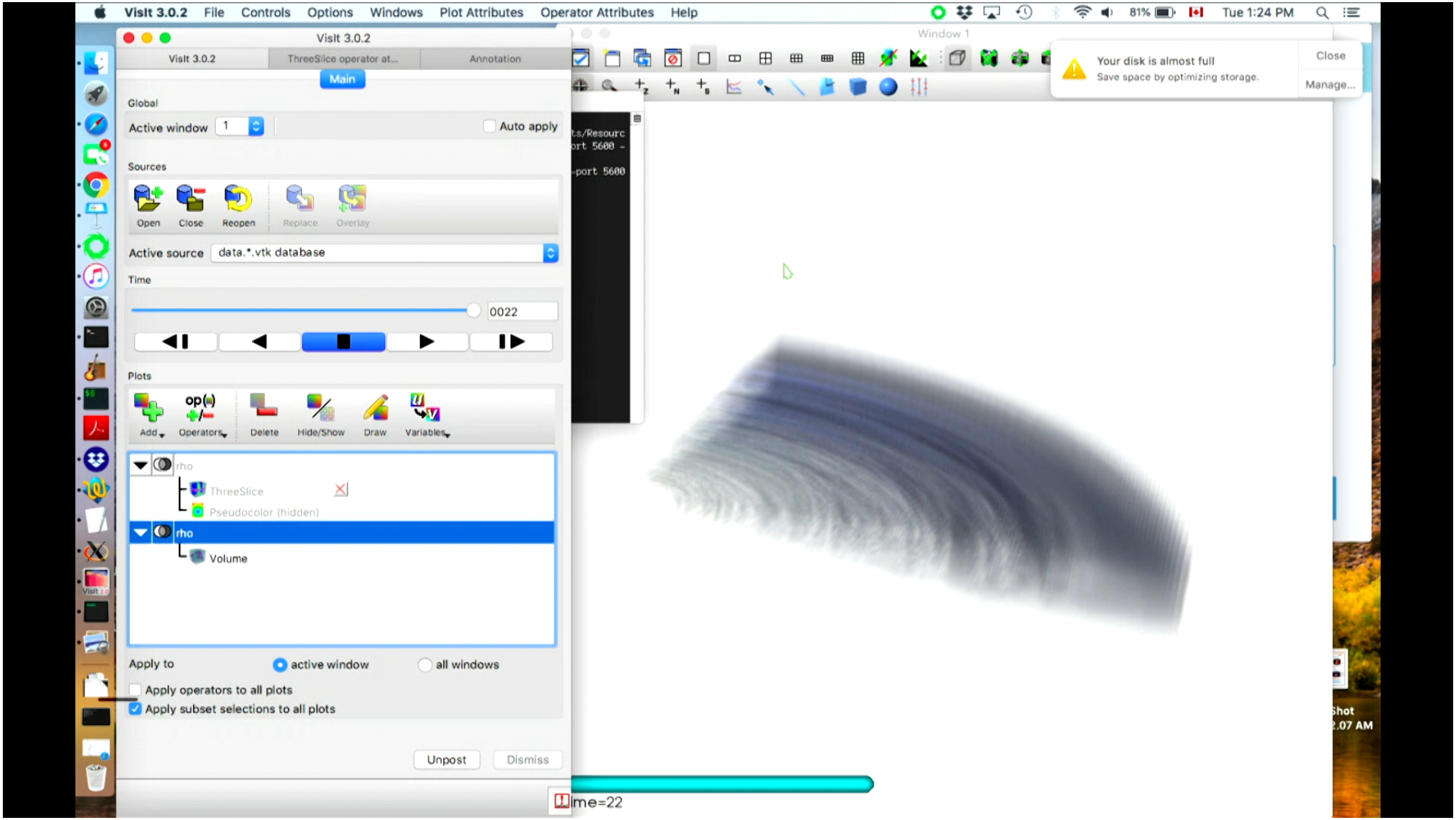

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:23 PM
VisIt 3.0.2
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Active source
Time
Plots
Add
Operators
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Save movie wizard
Choose method
Choose when and how you would like VisIt to create your movies.
Now, use currently allocated processors
Now, use a new instance of VisIt
Later, tell me the command to run
Go Back
Done
Cancel

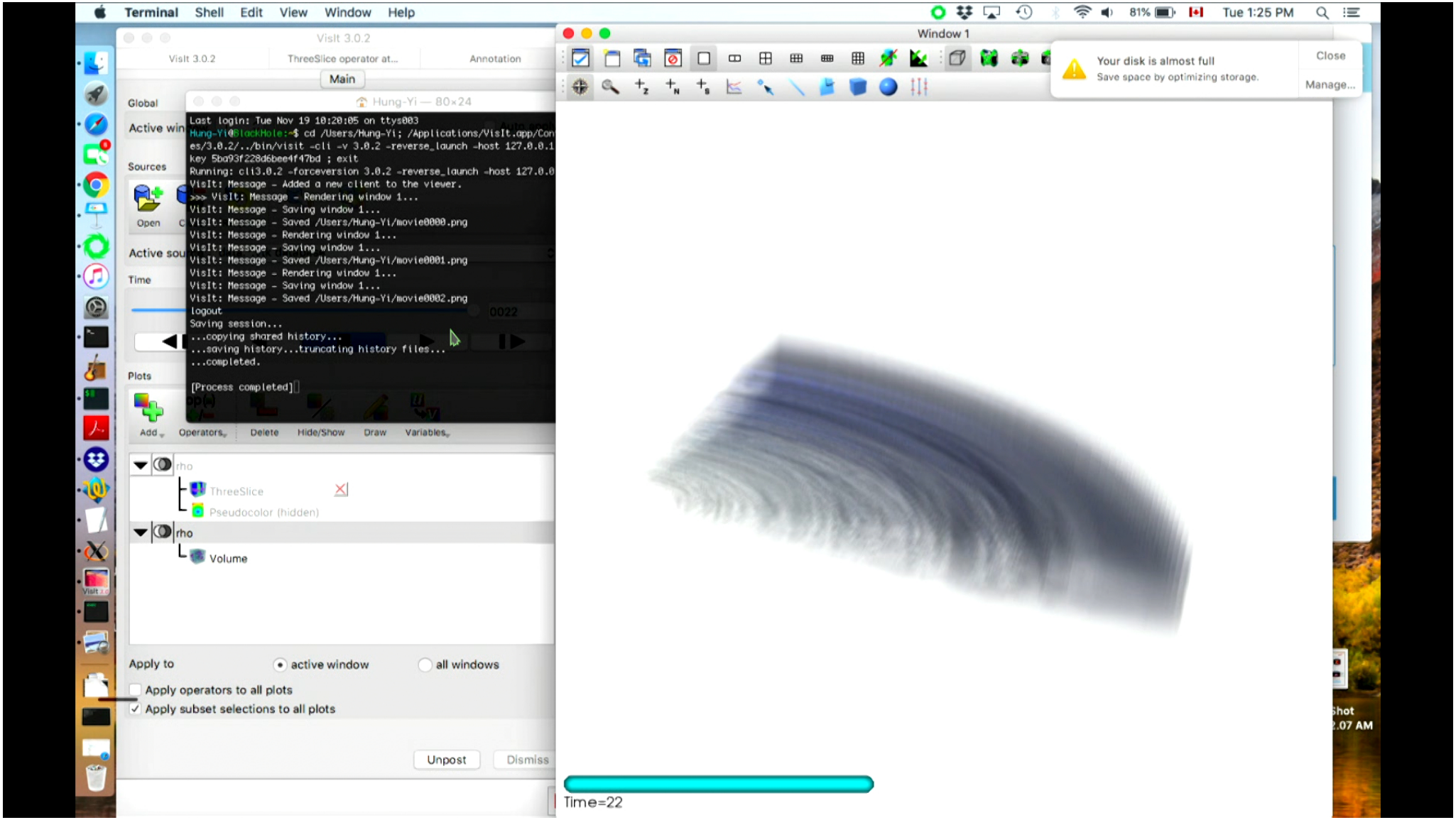

Terminal Shell Edit View Window Help
82% Tue 1:23 PM
VisIt 3.0.2
Main
Terminal — python • -bash — 80×24
Last login: Tue Nov 19 10:20:05 on ttys003
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
CLI launch progress
Cancel
VisIt is waiting for a CLI to launch on localhost.
Global
Sources
Open
Time
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
me=22

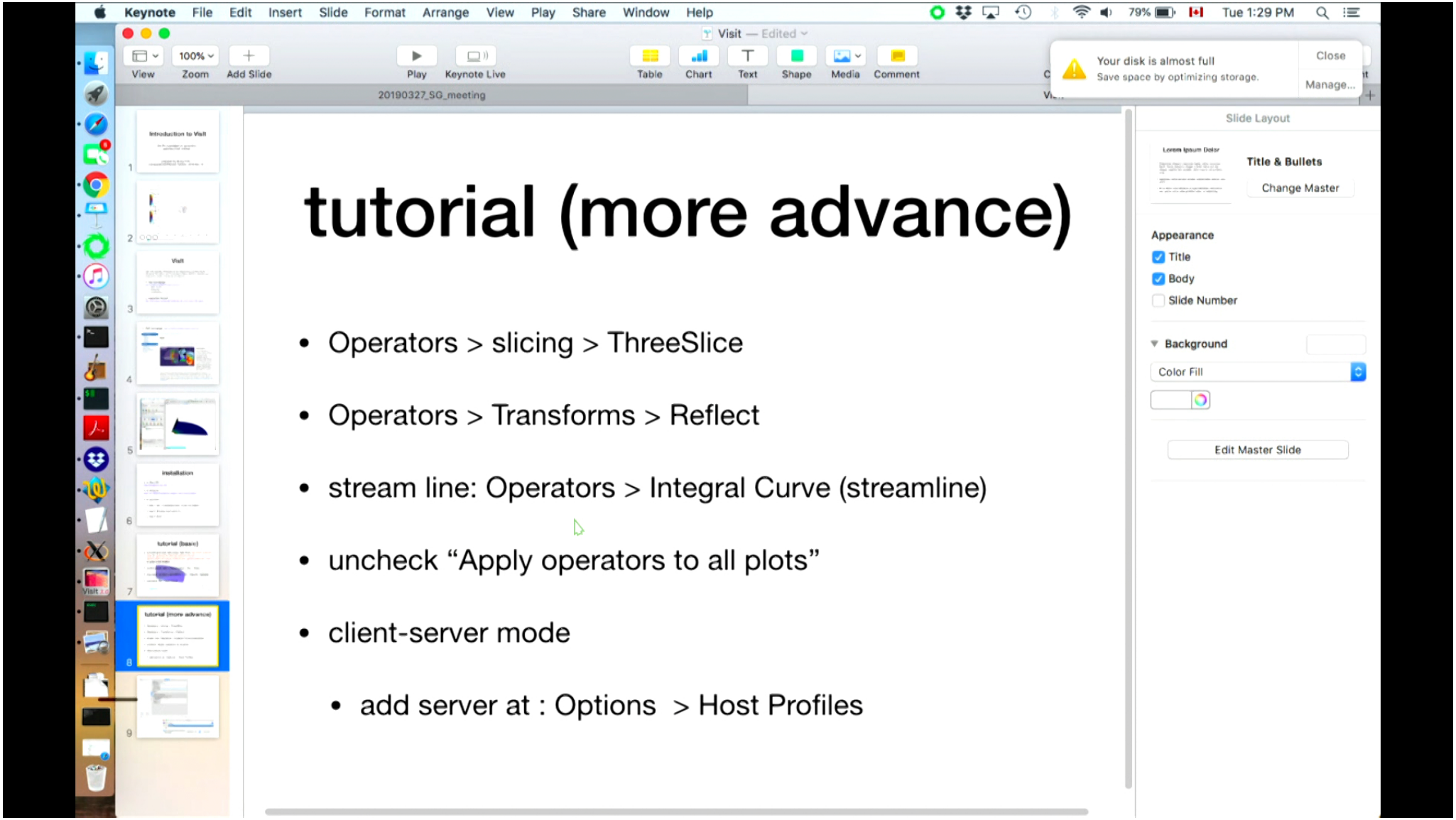

Terminal Shell Edit View Window Help
82% Tue 1:23 PM
VisIt 3.0.2
Main
Hung-Yi — cli • frontendlauncher.py /Applications/VisIt.app/Content...
Last login: Tue Nov 19 10:20:05 on ttys003
Running: cli3.0.2 -forceversion 3.0.2 -reverse_launch -host 127.0.0.1 -port 5600
VisIt: Message - Added a new client to the viewer.
>>> VisIt: Message - Rendering window 1...
VisIt: Message - Saving window 1...
VisIt: Message - Saved /Users/Hung-Yi/movie0000.png
Generating frames
Cancel
Pseudocolor (hidden)
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
0% done: Executing pipeline. (0% of stage 1/11)
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...

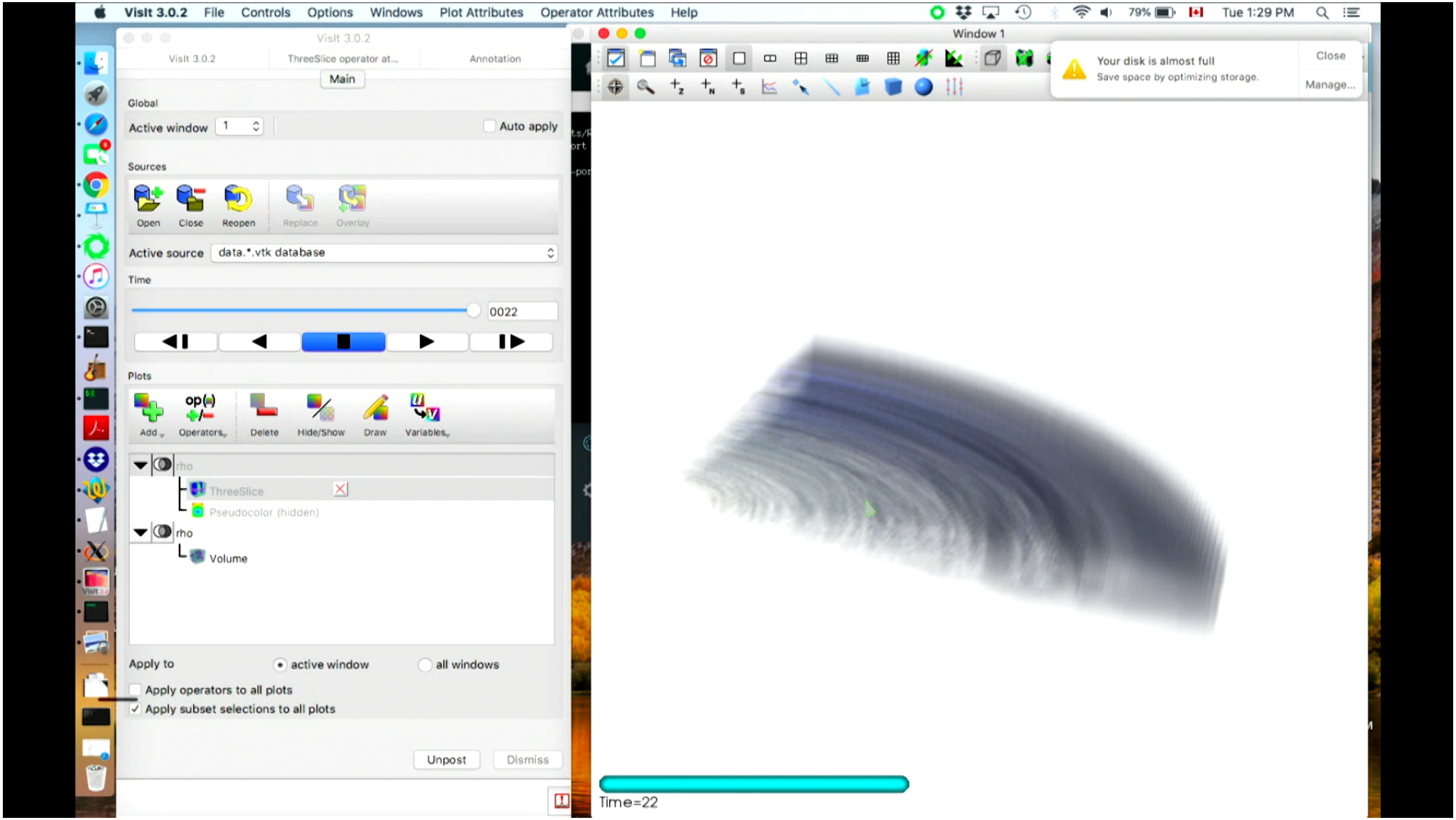

Visit 3.0.2
File
Controls
Options
Windows
Plot Attributes
Operator Attributes
Help
Tue 1:24 PM
Visit 3.0.2
Main
Global
Active window
Auto apply
Sources
Open
Close
Reopen
Active source
data.*.vtk database
Time
0022
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Saved /Users/Hung-Yi/movie0002.png
Time=22
solstice
Share
Hung-Yi Pu
Sharing 1 item
Your disk is almost full
Save space by optimizing storage.
Manage...
Media File
Stop Sharing All (1)
Git_Collection
Screen Shot
2019-11...52.07 PM
Screen Shot
2019-11...32.07 AM

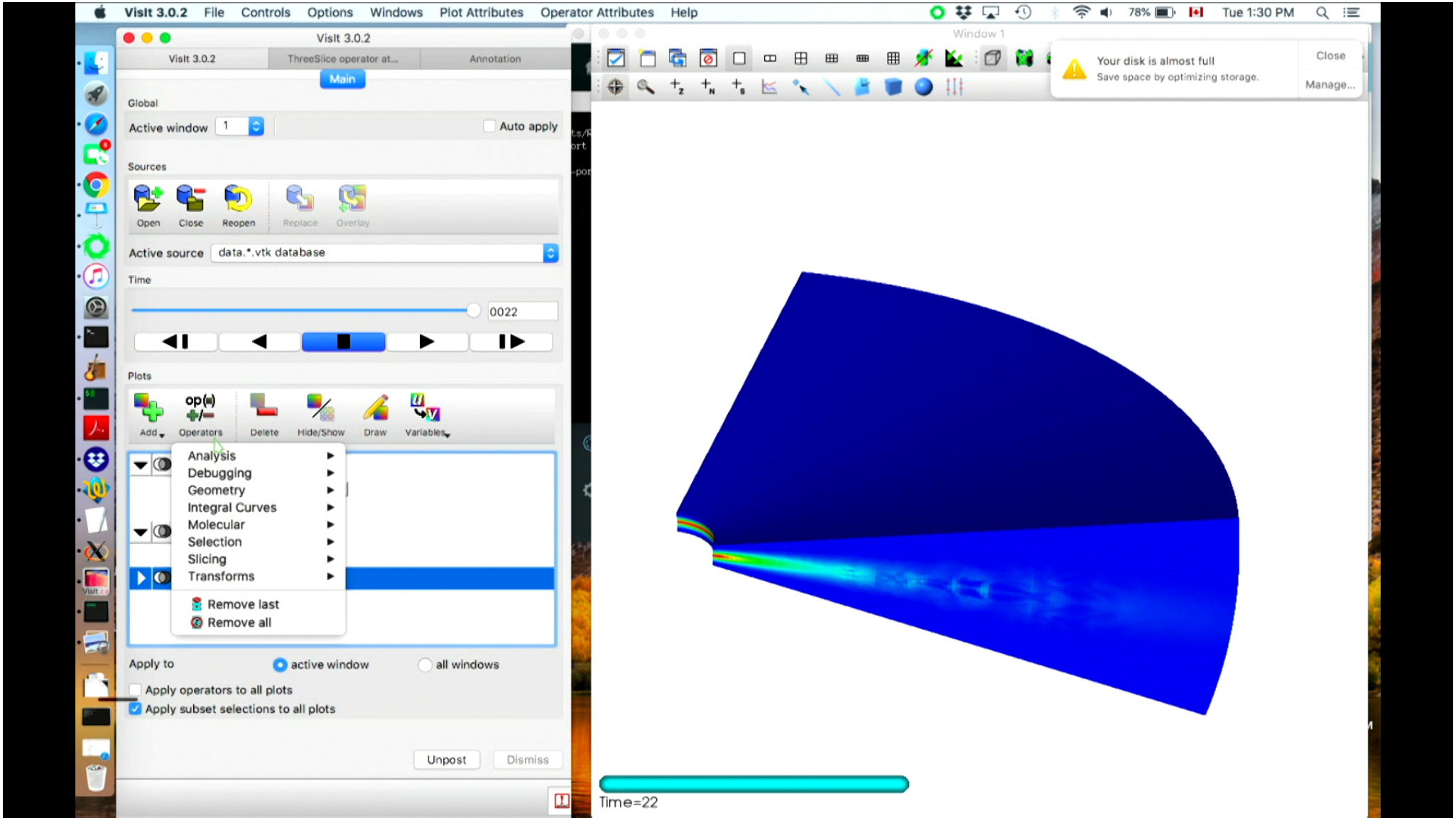

Preview File Edit View Go Tools Window Help
81% Tue 1:24 PM
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
movie0001.png
Unknown.png

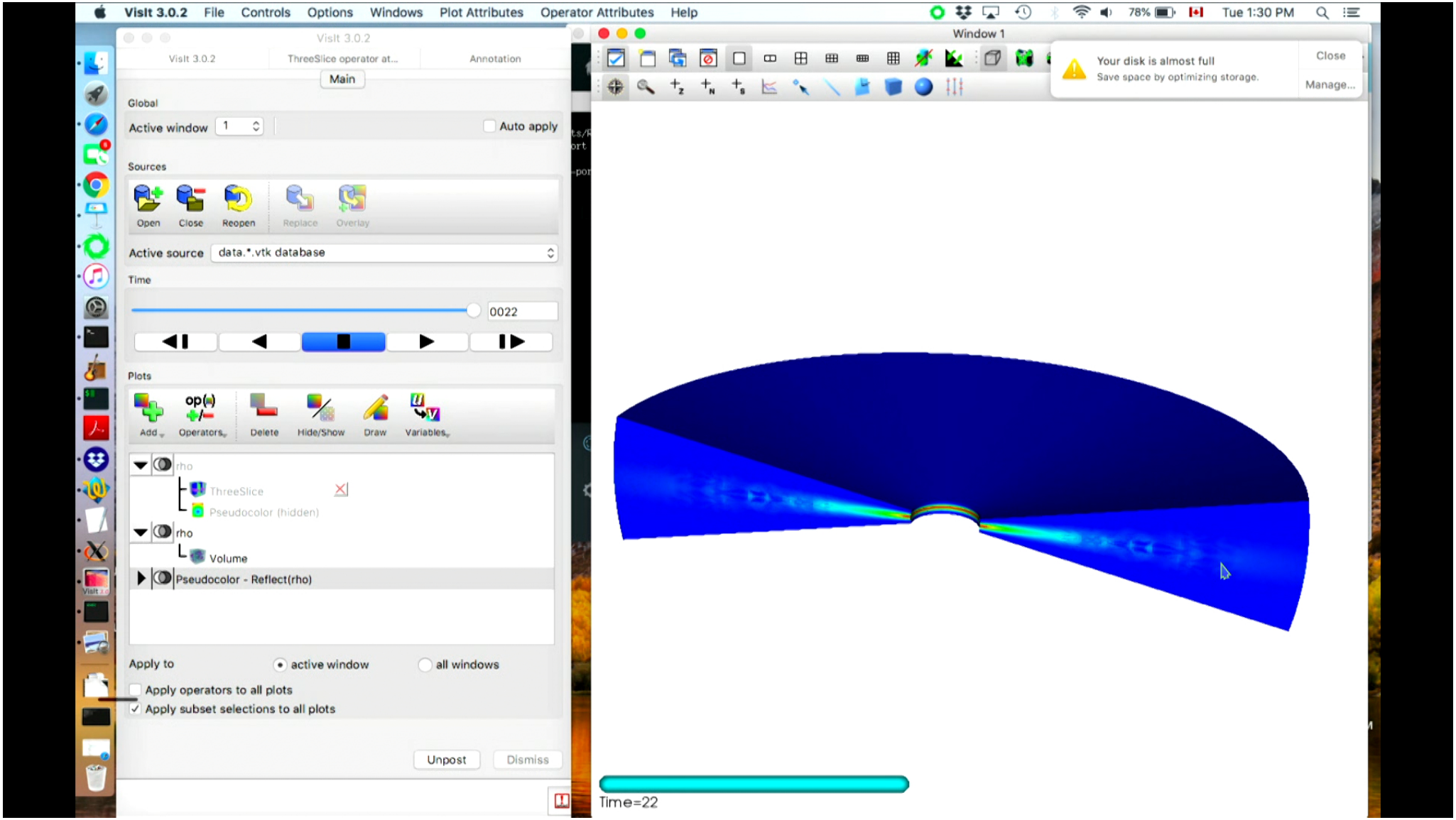

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:24 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator at...
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0022
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
ime=22

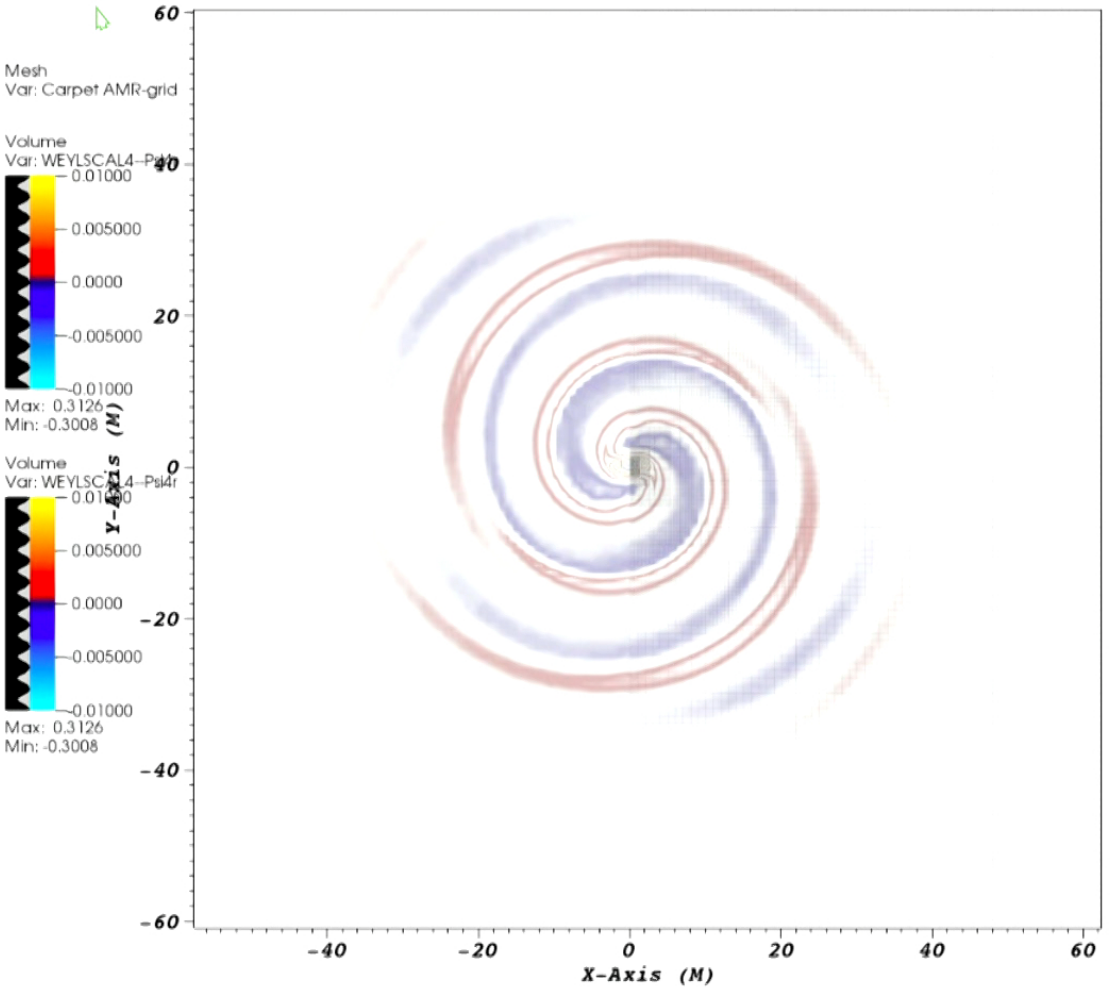

Terminal Shell Edit View Window Help
81% Tue 1:25 PM
VisIt 3.0.2
Main
Global
Sources
Open
Time
Plots
Add Operators Delete Hide/Show Draw Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Hung-Yi — 80×24
Last login: Tue Nov 19 10:20:05 on ttys003
Running: cli3.0.2 -forceversion 3.0.2 -reverse_launch -host 127.0.0.1
VisIt: Message - Added a new client to the viewer.
>>> VisIt: Message - Rendering window 1...
VisIt: Message - Saving window 1...
VisIt: Message - Saved /Users/Hung-Yi/movie0000.png
VisIt: Message - Rendering window 1...
VisIt: Message - Saving window 1...
VisIt: Message - Saved /Users/Hung-Yi/movie0001.png
VisIt: Message - Rendering window 1...
VisIt: Message - Saving window 1...
VisIt: Message - Saved /Users/Hung-Yi/movie0002.png
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.
[Process completed]
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Time=22

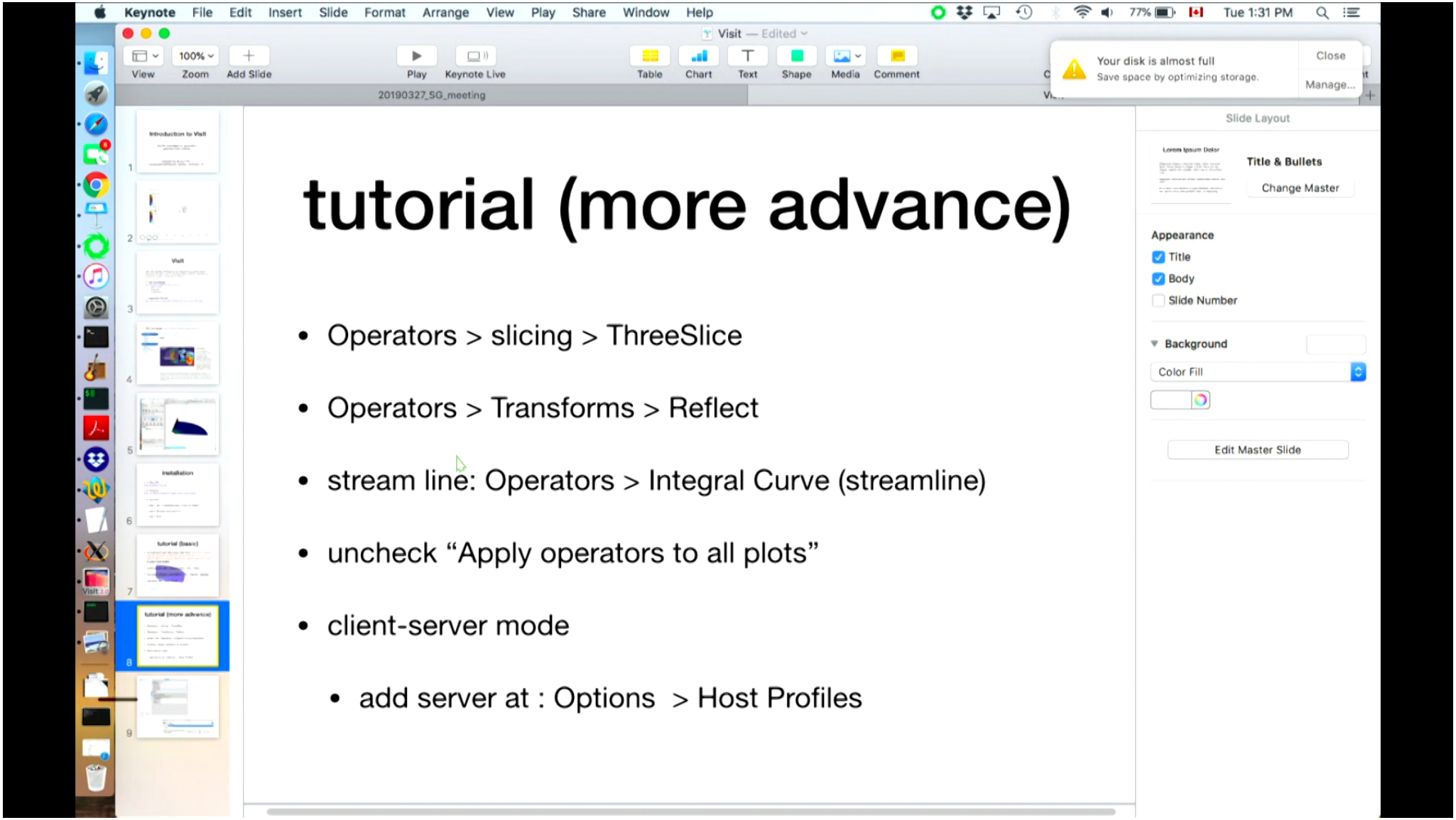

Keynote File Edit Insert Slide Format Arrange View Play Share Window Help
Visit — Edited
20190327_SG_meeting
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
tutorial (more advance)
• Operators > slicing > ThreeSlice
• Operators > Transforms > Reflect
• stream line: Operators > Integral Curve (streamline)
• uncheck “Apply operators to all plots”
• client-server mode
• add server at : Options > Host Profiles
Slide Layout
Title & Bullets
Change Master
Appearance
Title
Body
Slide Number
Background
Color Fill
Edit Master Slide

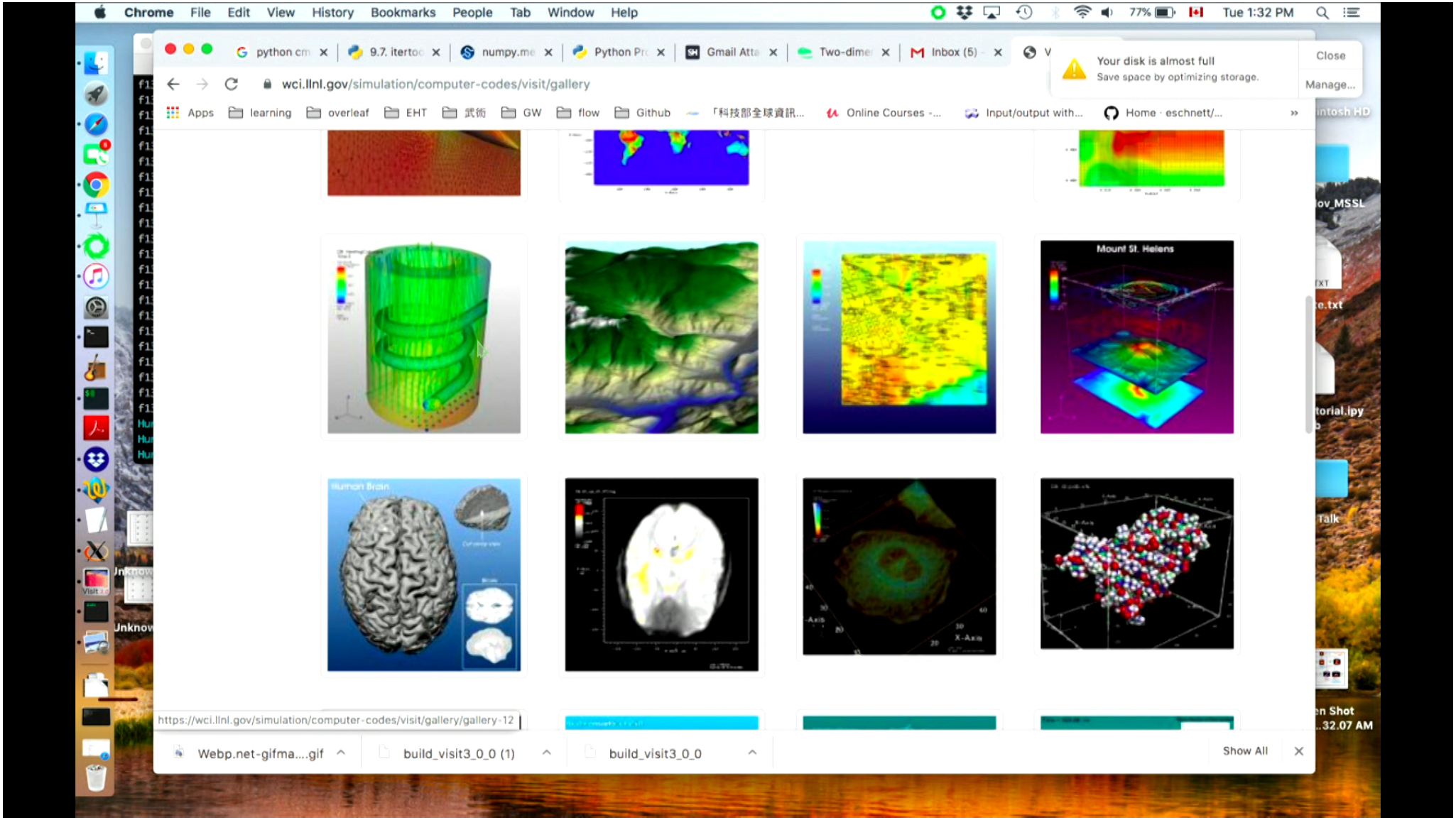

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
79% Tue 1:29 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator at...
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0022
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Time=22

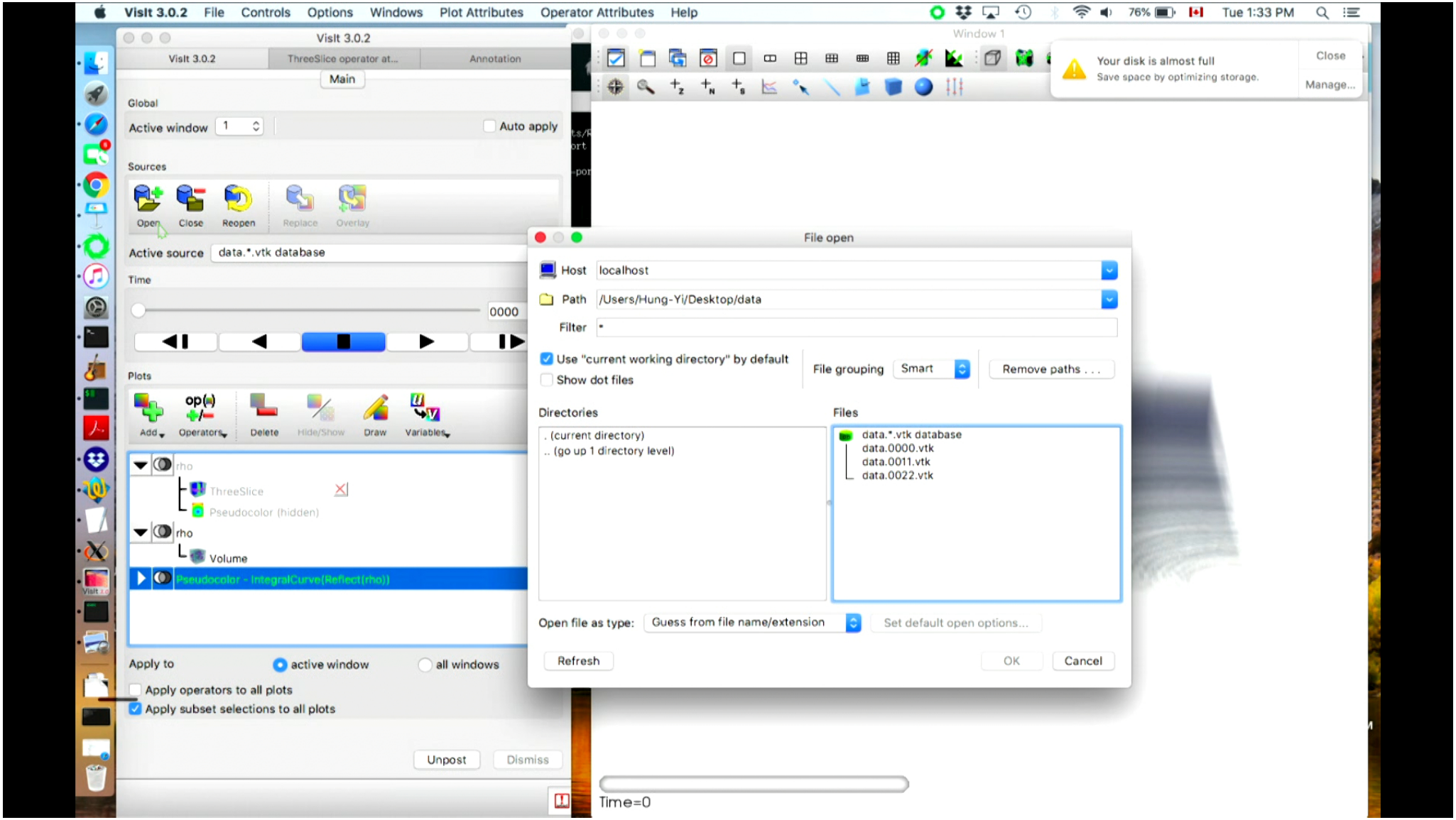

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
78% Tue 1:30 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator at...
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0022
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
Analysis
Debugging
Geometry
Integral Curves
Molecular
Selection
Slicing
Transforms
Remove last
Remove all
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Time=22

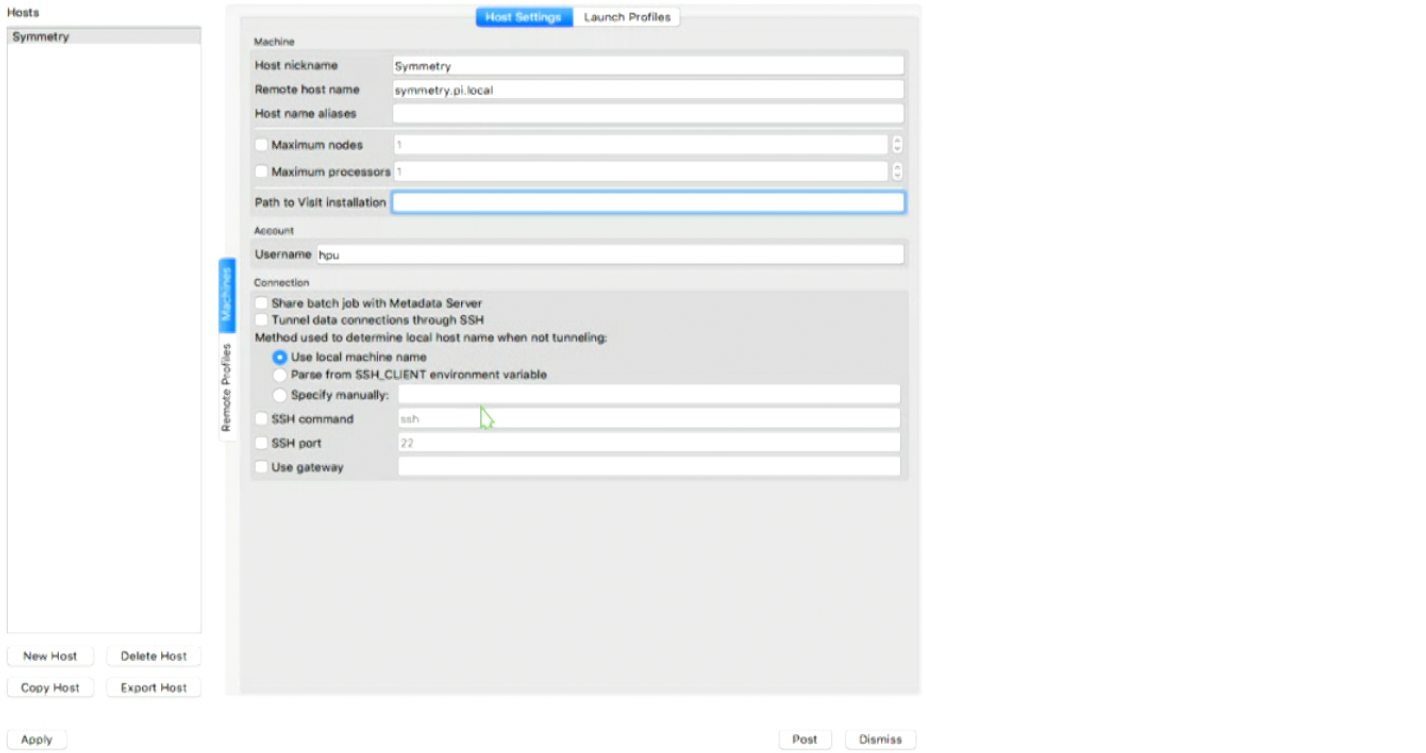

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
78% Tue 1:30 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator at...
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0022
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Pseudocolor - Reflect(rho)
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Time=22

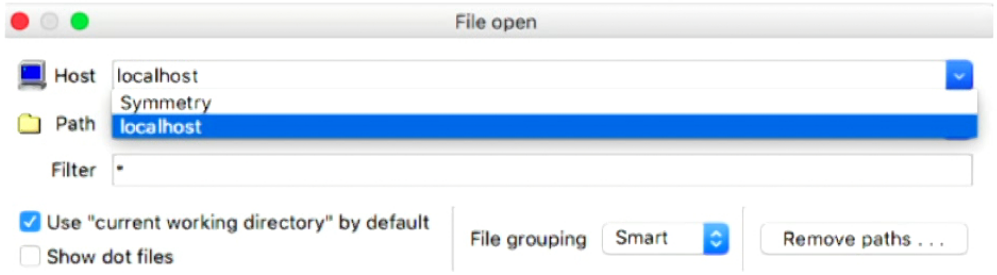

Mesh
Var: Carpet AMR-grid
Volume
Var: WEYLSCAL4--Psi4r
0.01000
0.005000
0.0000
-0.005000
-0.01000
Max: 0.3126
Min: -0.3008
Volume
Var: WEYLSCAL4--Psi4r
0.01000
0.005000
0.0000
-0.005000
-0.01000
Max: 0.3126
Min: -0.3008
60
40
20
0
-20
-40
-60
Y-Axis (M)
-40
-20
0
20
40
60
X-Axis (M)

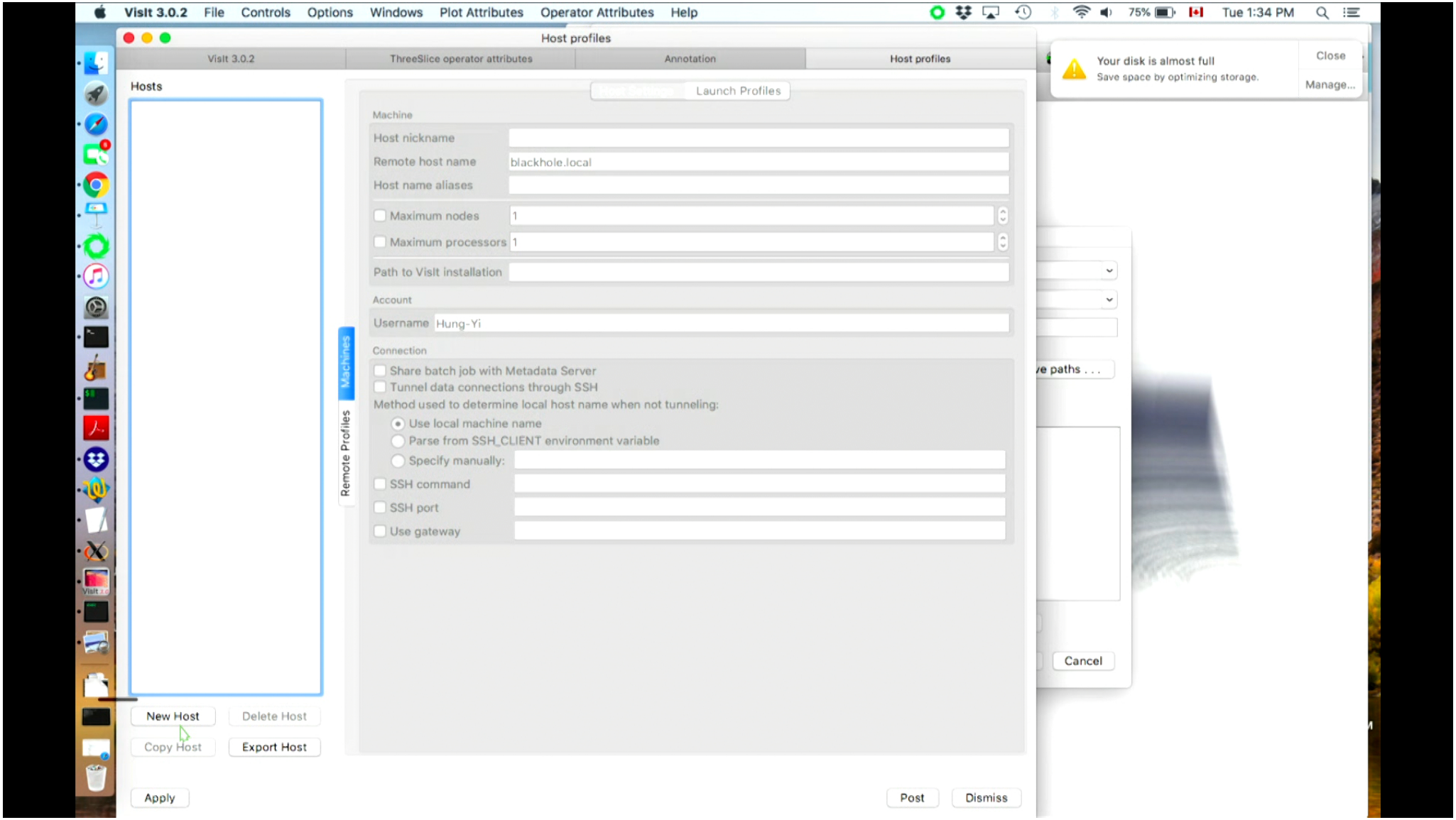

Keynote File Edit Insert Slide Format Arrange View Play Share Window Help
Tue 1:31 PM
Visit — Edited
View Zoom Add Slide Play Keynote Live Table Chart Text Shape Media Comment
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
20190327_SG_meeting
tutorial (more advance)
• Operators > slicing > ThreeSlice
• Operators > Transforms > Reflect
• stream line: Operators > Integral Curve (streamline)
• uncheck “Apply operators to all plots”
• client-server mode
• add server at : Options > Host Profiles
Slide Layout
Title & Bullets
Change Master
Appearance
Title
Body
Slide Number
Background
Color Fill
Edit Master Slide

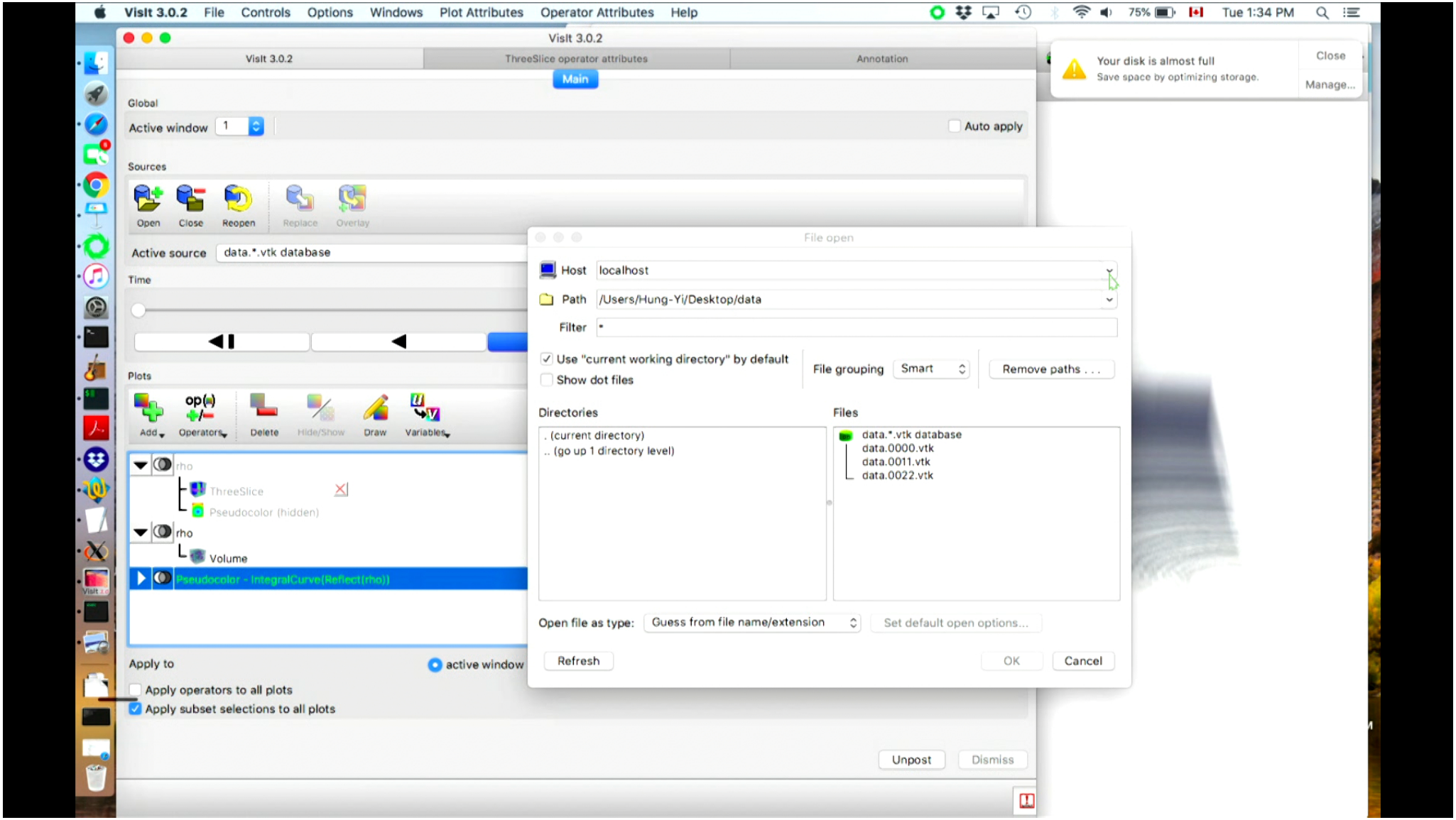

Chrome File Edit View History Bookmarks People Tab Window Help
Tue 1:32 PM
wci.llnl.gov/simulation/computer-codes/visit/gallery
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Apps learning overleaf EHT 武術 GW flow Github Online Courses -... Input/output with... Home · eschnett/...
Mount St. Helens
https://wci.llnl.gov/simulation/computer-codes/visit/gallery/gallery-12
Webp.net-gifma....gif
build_visit3_0_0 (1)
build_visit3_0_0
Show All

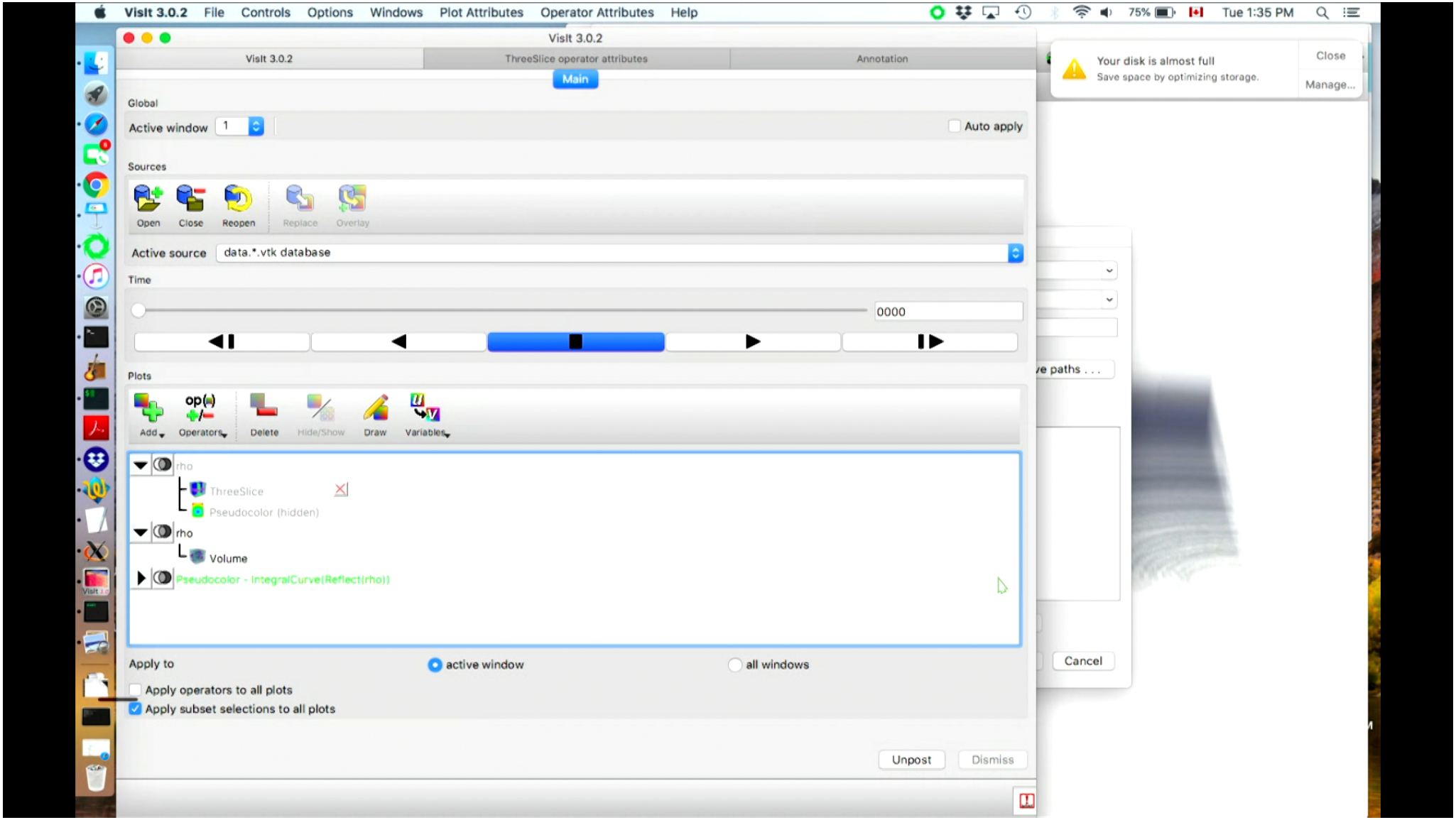

VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:33 PM
VisIt 3.0.2
Main
Global
Active window 1
Auto apply
Sources
Open Close Reopen Replace Overlay
Active source data.*.vtk database
Time
Plots
Add Operators Delete Hide/Show Draw Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Pseudocolor - IntegralCurve(Reflect(rho))
Apply to active window all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost Dismiss
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
File open
Host localhost
Path /Users/Hung-Yi/Desktop/data
Filter *
Use "current working directory" by default
Show dot files
File grouping Smart
Remove paths . . .
Directories
. (current directory)
.. (go up 1 directory level)
Files
data.*.vtk database
data.0000.vtk
data.0011.vtk
data.0022.vtk
Open file as type: Guess from file name/extension
Set default open options...
Refresh
OK
Cancel
Time=0

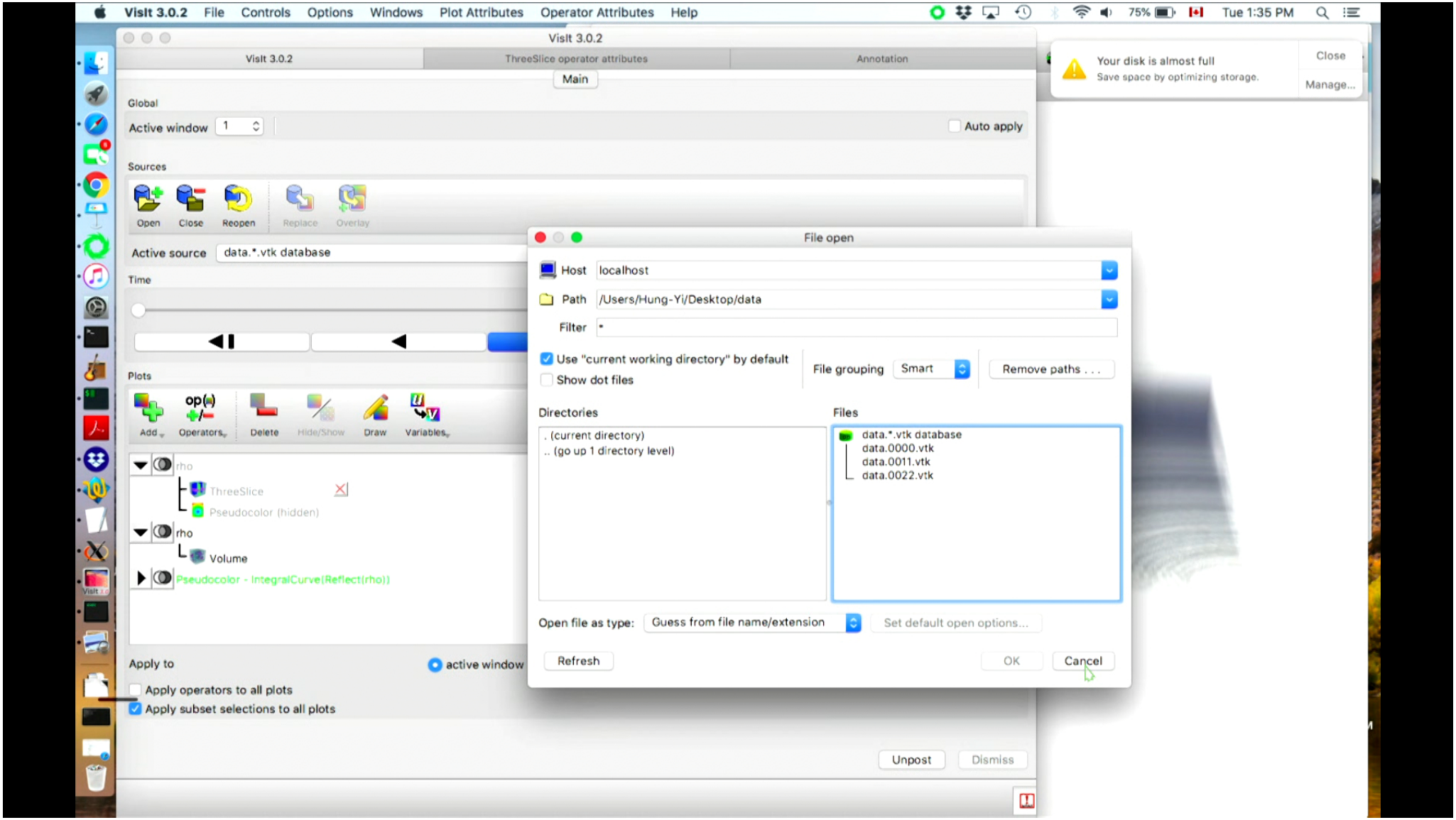

Hosts
Symmetry
Host Settings
Launch Profiles
Machine
Host nickname
Symmetry
Remote host name
symmetry.pi.local
Host name aliases
Maximum nodes
Maximum processors
Path to Visit installation
Account
Username
hpu
Connection
Share batch job with Metadata Server
Tunnel data connections through SSH
Method used to determine local host name when not tunneling:
Use local machine name
Parse from SSH_CLIENT environment variable
Specify manually:
SSH command
ssh
SSH port
22
Use gateway
Machines
Remote Profiles
New Host
Delete Host
Copy Host
Export Host
Apply
Post
Dismiss

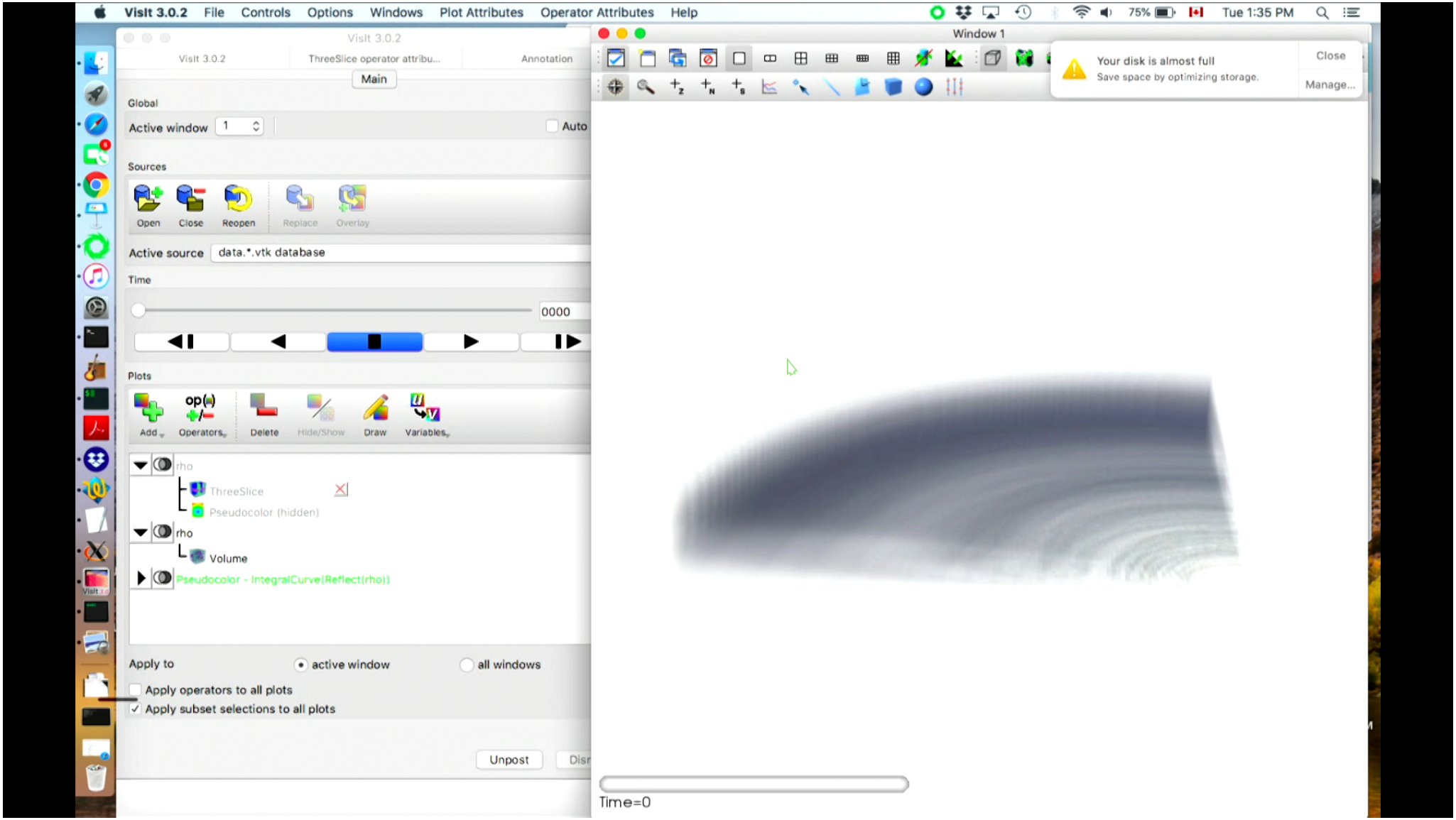

File open
Host
localhost
Symmetry
Path
localhost
Filter
*
Use "current working directory" by default
Show dot files
File grouping
Smart
Remove paths . . .


Visit 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
75% Tue 1:34 PM
Host profiles
Visit 3.0.2
ThreeSlice operator attributes
Annotation
Host profiles
Hosts
Launch Profiles
Machine
Host nickname
Remote host name
blackhole.local
Host name aliases
Maximum nodes
1
Maximum processors
1
Path to VisIt installation
Account
Username
Hung-Yi
Connection
Share batch job with Metadata Server
Tunnel data connections through SSH
Method used to determine local host name when not tunneling:
Use local machine name
Parse from SSH_CLIENT environment variable
Specify manually:
SSH command
SSH port
Use gateway
Machines
Remote Profiles
New Host
Delete Host
Copy Host
Export Host
Apply
Post
Dismiss
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Cancel


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:34 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator attributes
Annotation
Main
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Pseudocolor - IntegralCurve(Reflect(rho))
Apply to
active window
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
File open
Host localhost
Path /Users/Hung-Yi/Desktop/data
Filter *
Use "current working directory" by default
Show dot files
File grouping Smart
Remove paths . . .
Directories
. (current directory)
.. (go up 1 directory level)
Files
data.*.vtk database
data.0000.vtk
data.0011.vtk
data.0022.vtk
Open file as type: Guess from file name/extension
Set default open options...
Refresh
OK
Cancel


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:35 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator attributes
Annotation
Main
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0000
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Pseudocolor - IntegralCurve(Reflect(rho))
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Cancel


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:35 PM
VisIt 3.0.2
VisIt 3.0.2
ThreeSlice operator attributes
Annotation
Main
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Global
Active window 1
Auto apply
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Pseudocolor - IntegralCurve(Reflect(rho))
Apply to
active window
Apply operators to all plots
Apply subset selections to all plots
Unpost
Dismiss
File open
Host localhost
Path /Users/Hung-Yi/Desktop/data
Filter *
Use "current working directory" by default
Show dot files
File grouping Smart
Remove paths . . .
Directories
. (current directory)
.. (go up 1 directory level)
Files
data.*.vtk database
data.0000.vtk
data.0011.vtk
data.0022.vtk
Open file as type: Guess from file name/extension
Set default open options...
Refresh
OK
Cancel


VisIt 3.0.2 File Controls Options Windows Plot Attributes Operator Attributes Help
Tue 1:35 PM
VisIt 3.0.2
ThreeSlice operator attribu...
Annotation
Main
Global
Active window 1
Auto
Sources
Open
Close
Reopen
Replace
Overlay
Active source data.*.vtk database
Time
0000
Plots
Add
Operators
Delete
Hide/Show
Draw
Variables
rho
ThreeSlice
Pseudocolor (hidden)
rho
Volume
Pseudocolor - IntegralCurve(Reflect(rho))
Apply to
active window
all windows
Apply operators to all plots
Apply subset selections to all plots
Unpost
Window 1
Your disk is almost full
Save space by optimizing storage.
Close
Manage...
Time=0