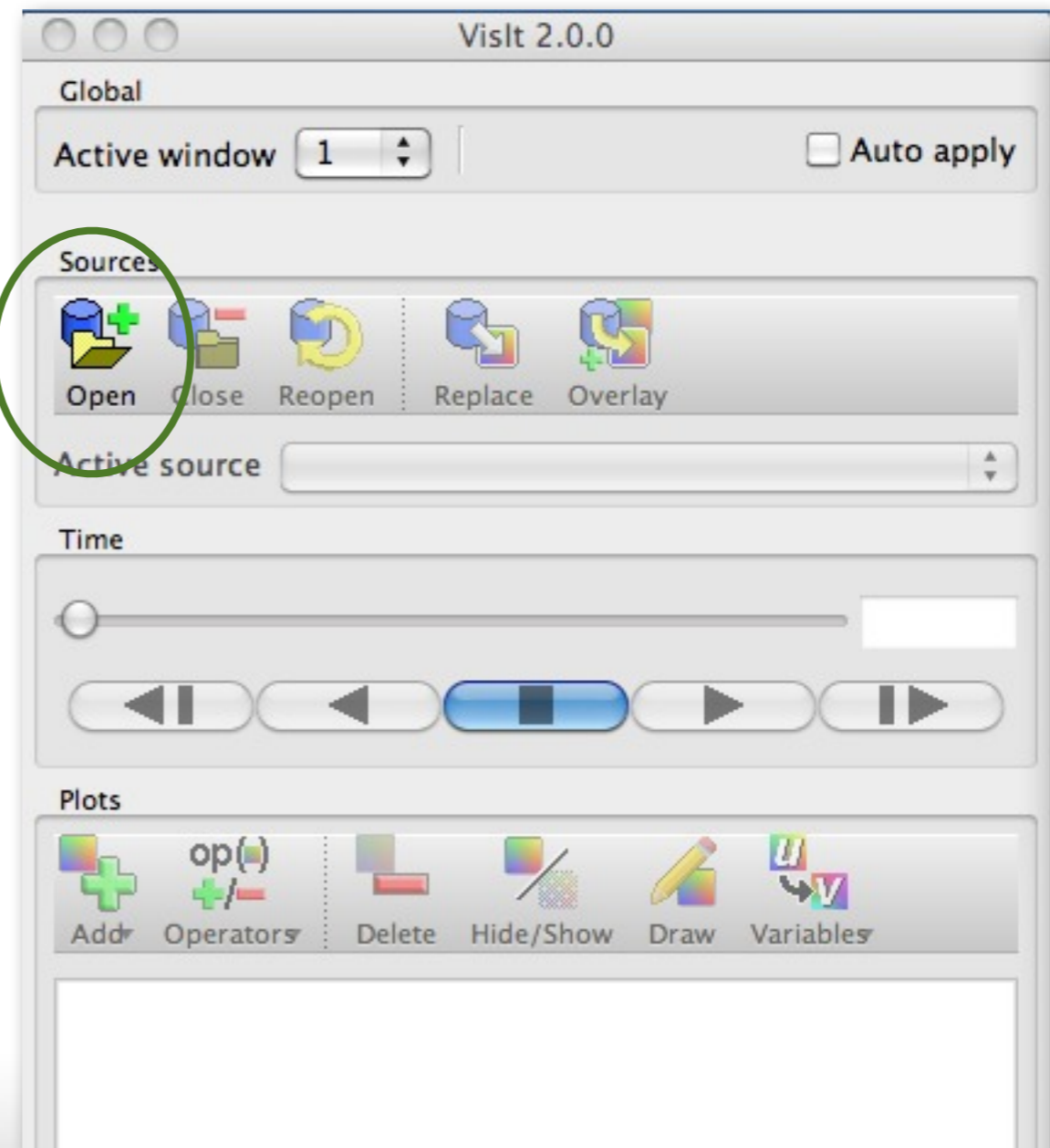


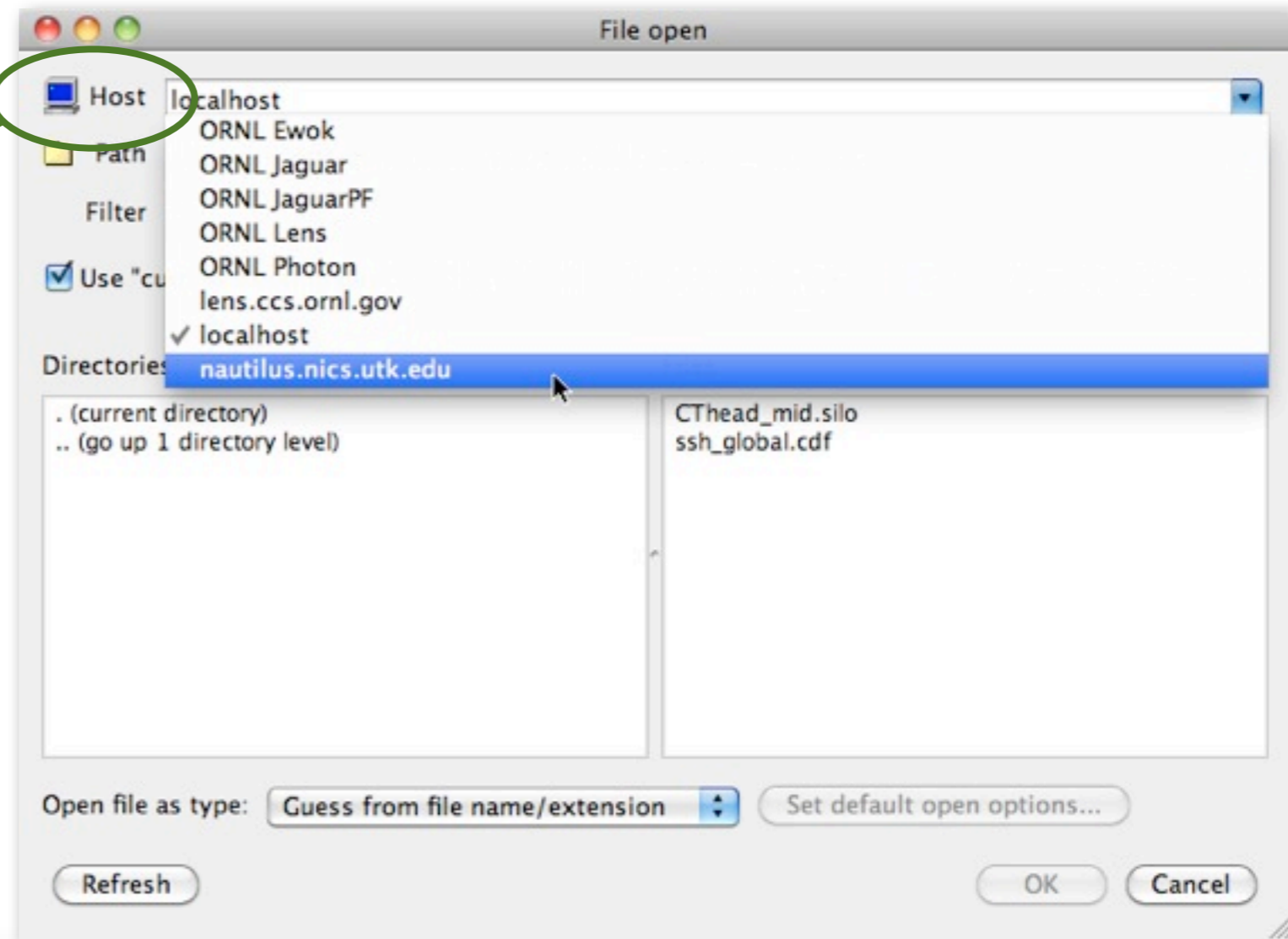
Opening a File

- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



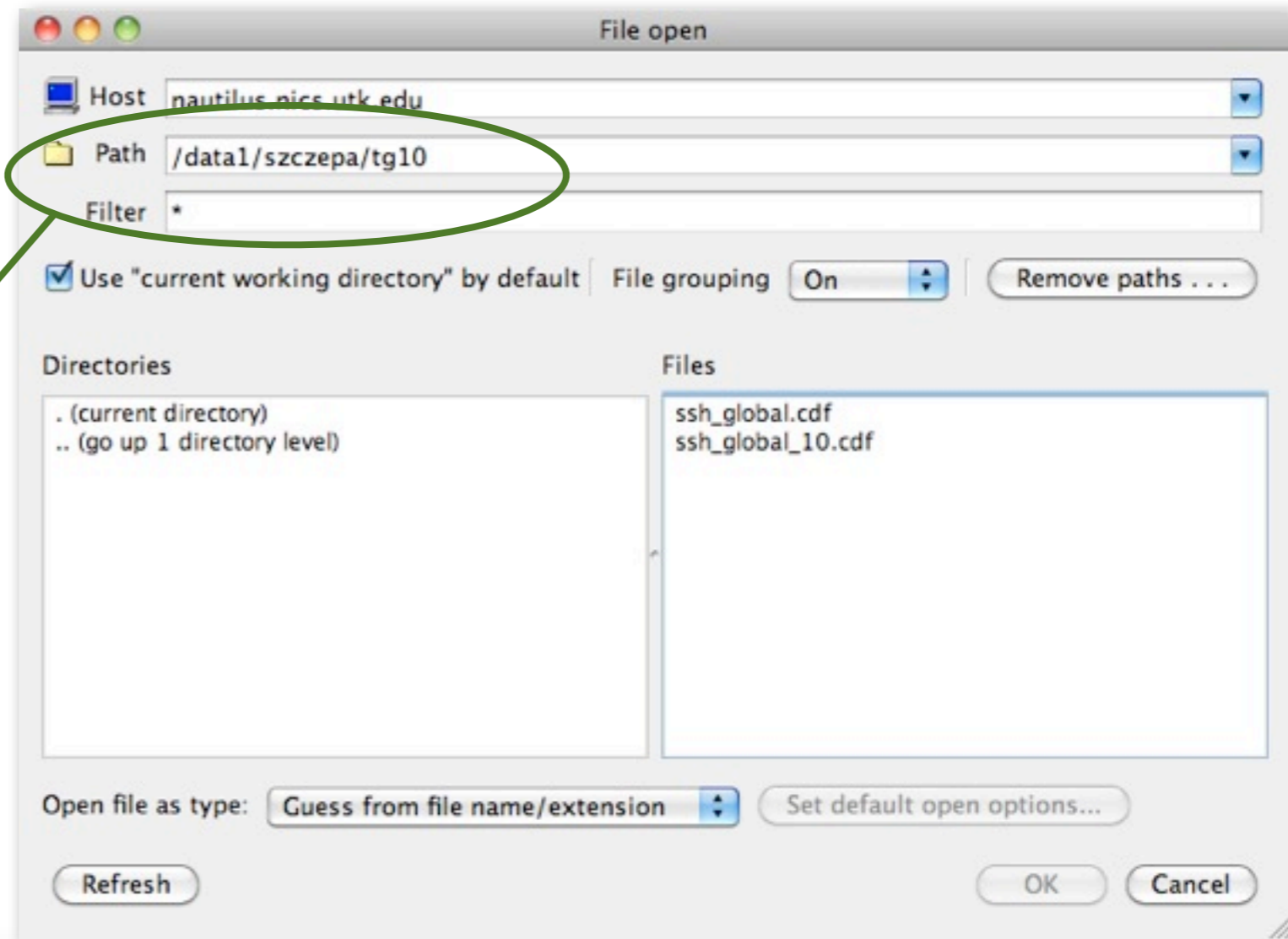
Opening a File

- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



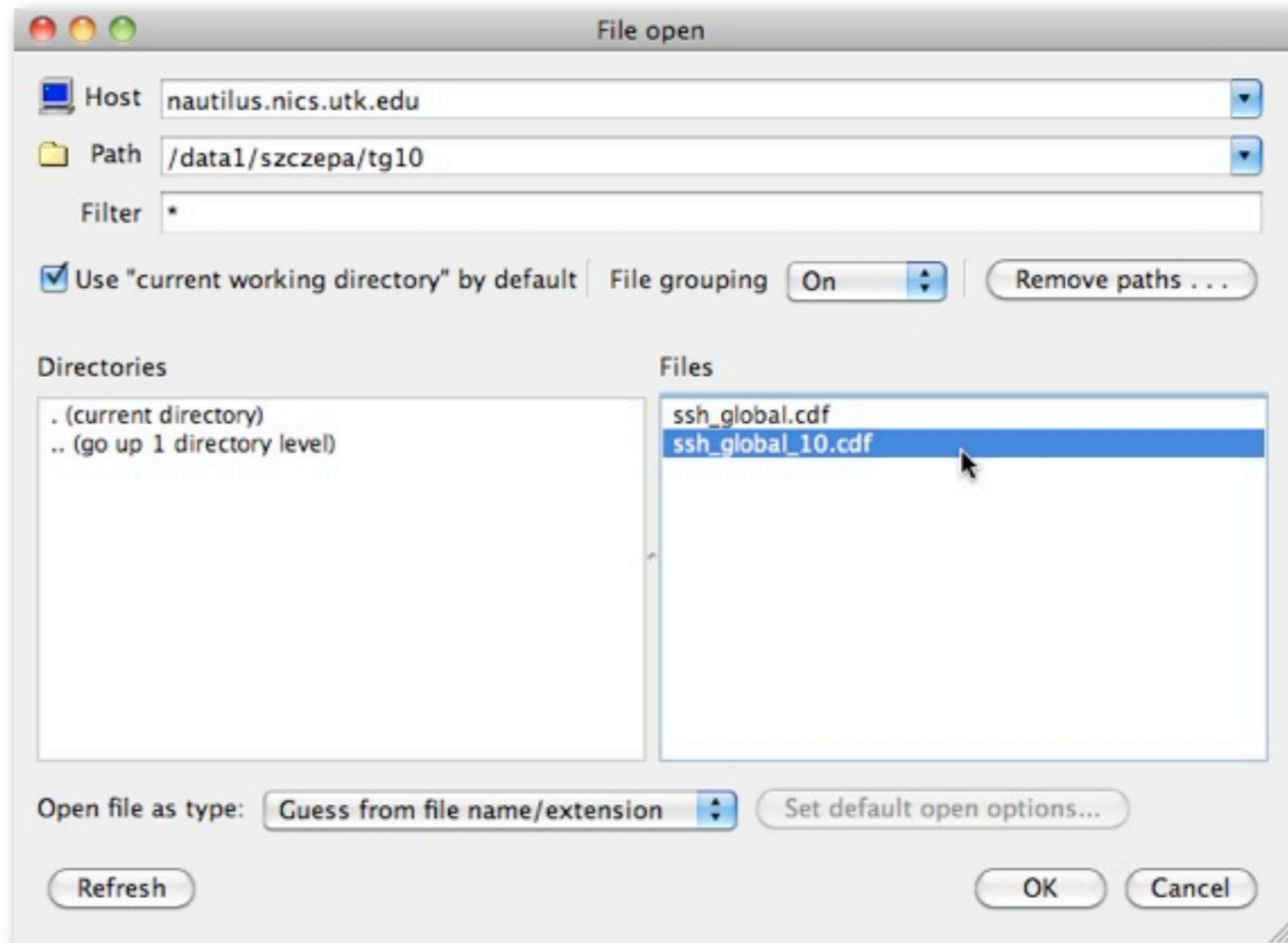
Opening a File

- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



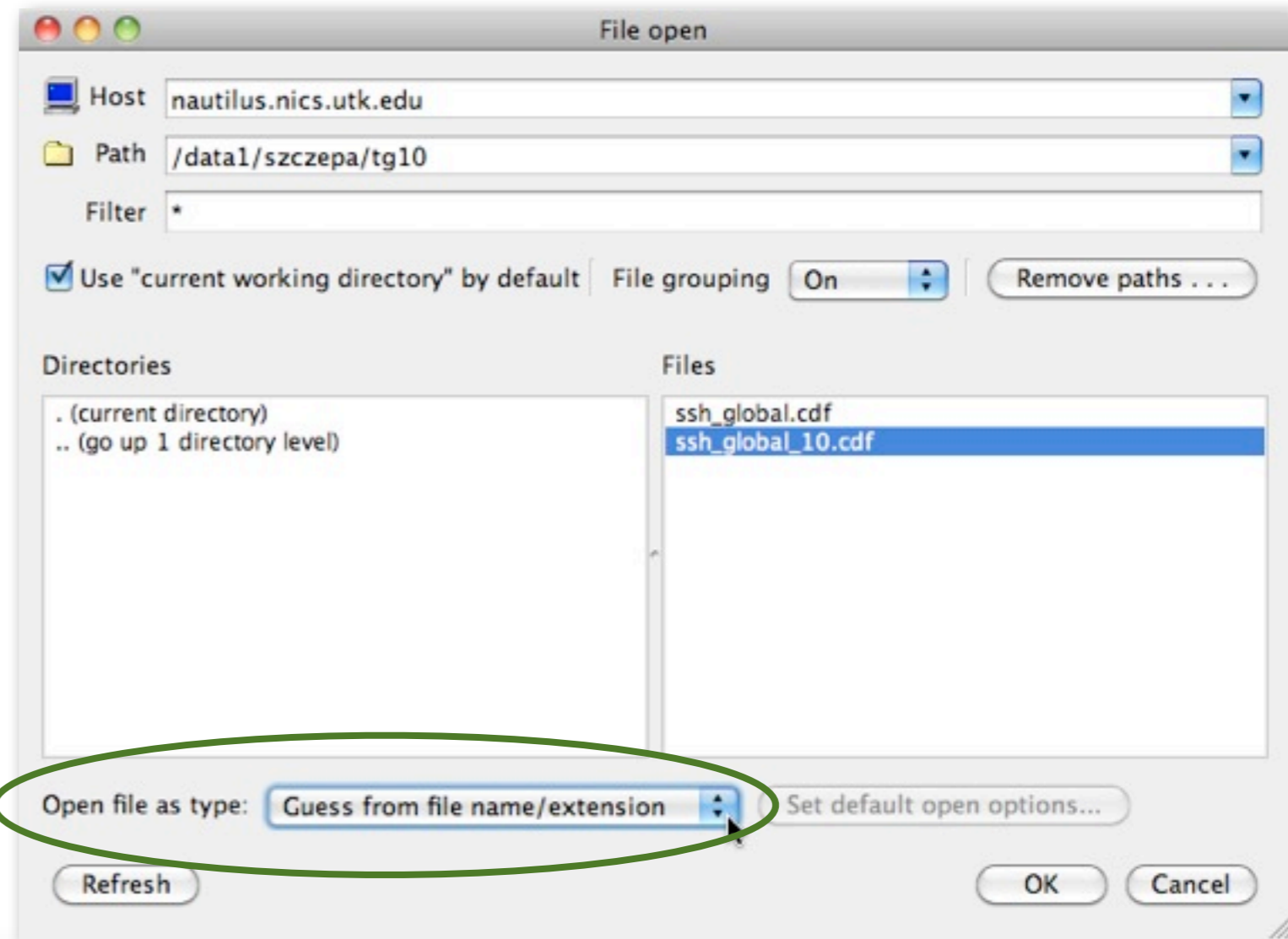
Opening a File

- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



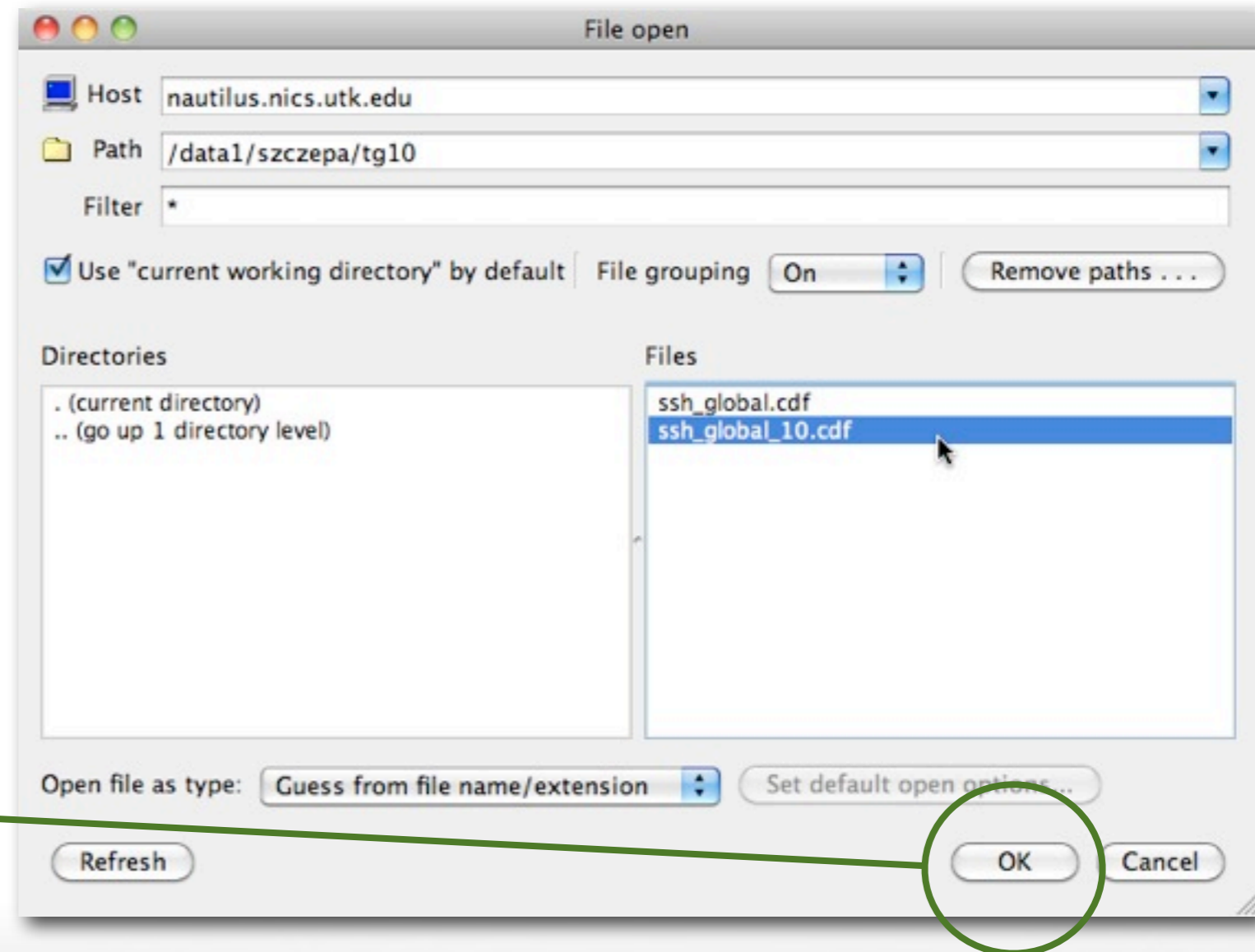
Opening a File

- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



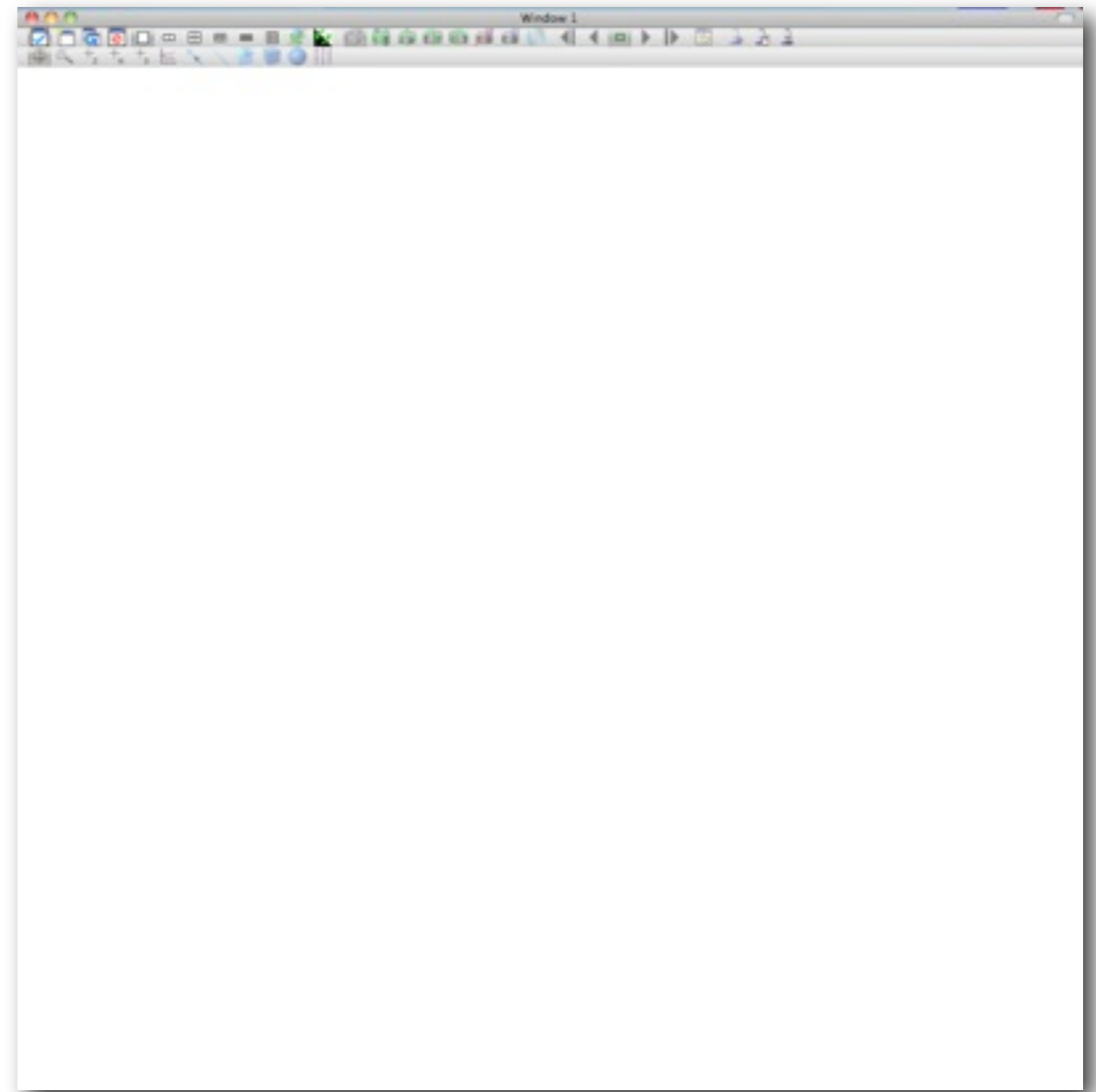
Opening a File

- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



Opening a File

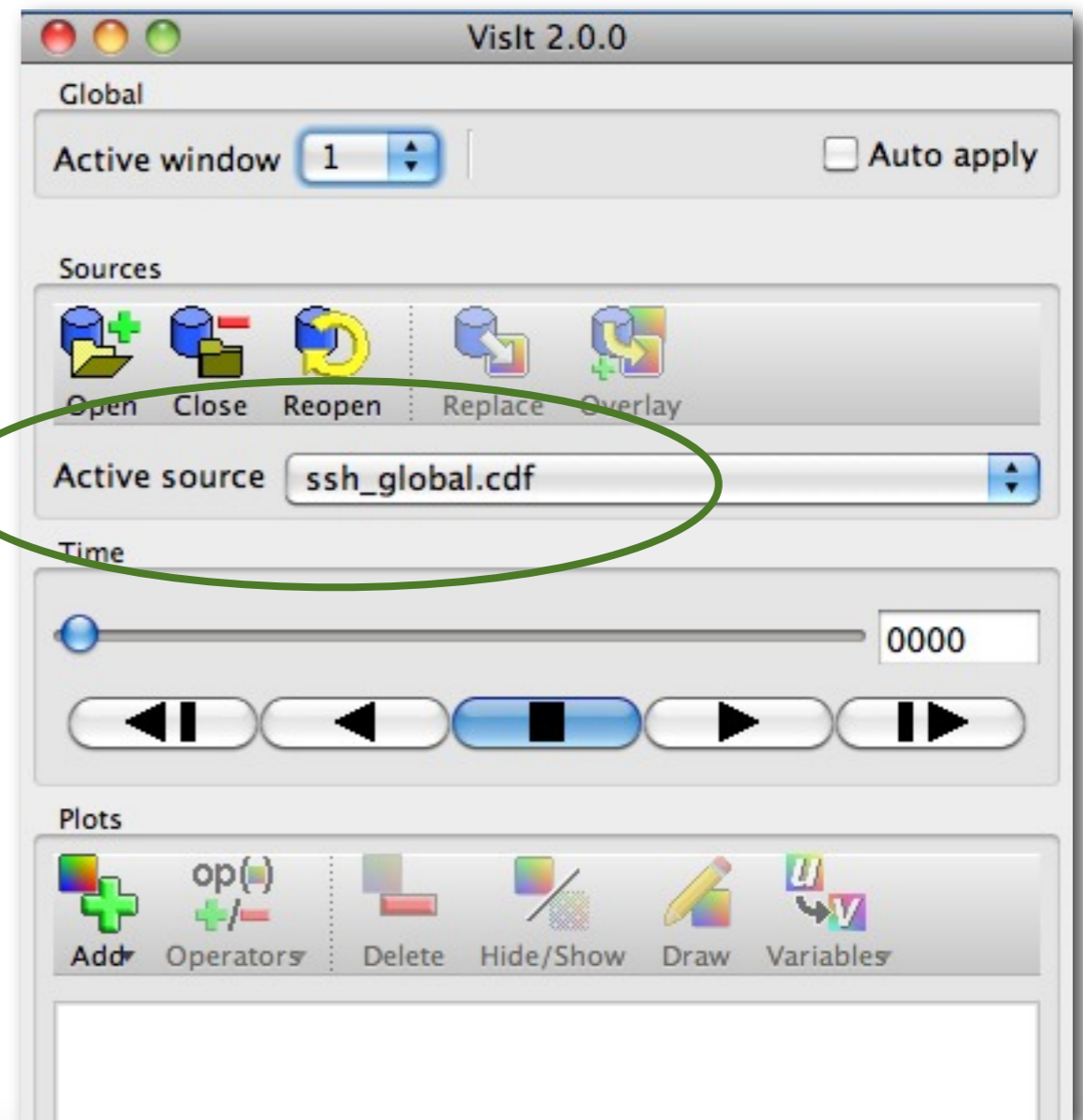
- Click 'Open'
- Choose host
- Specify path or filter
- Navigate to file
- Select file type
- Click 'OK'



Nothing in vis window yet

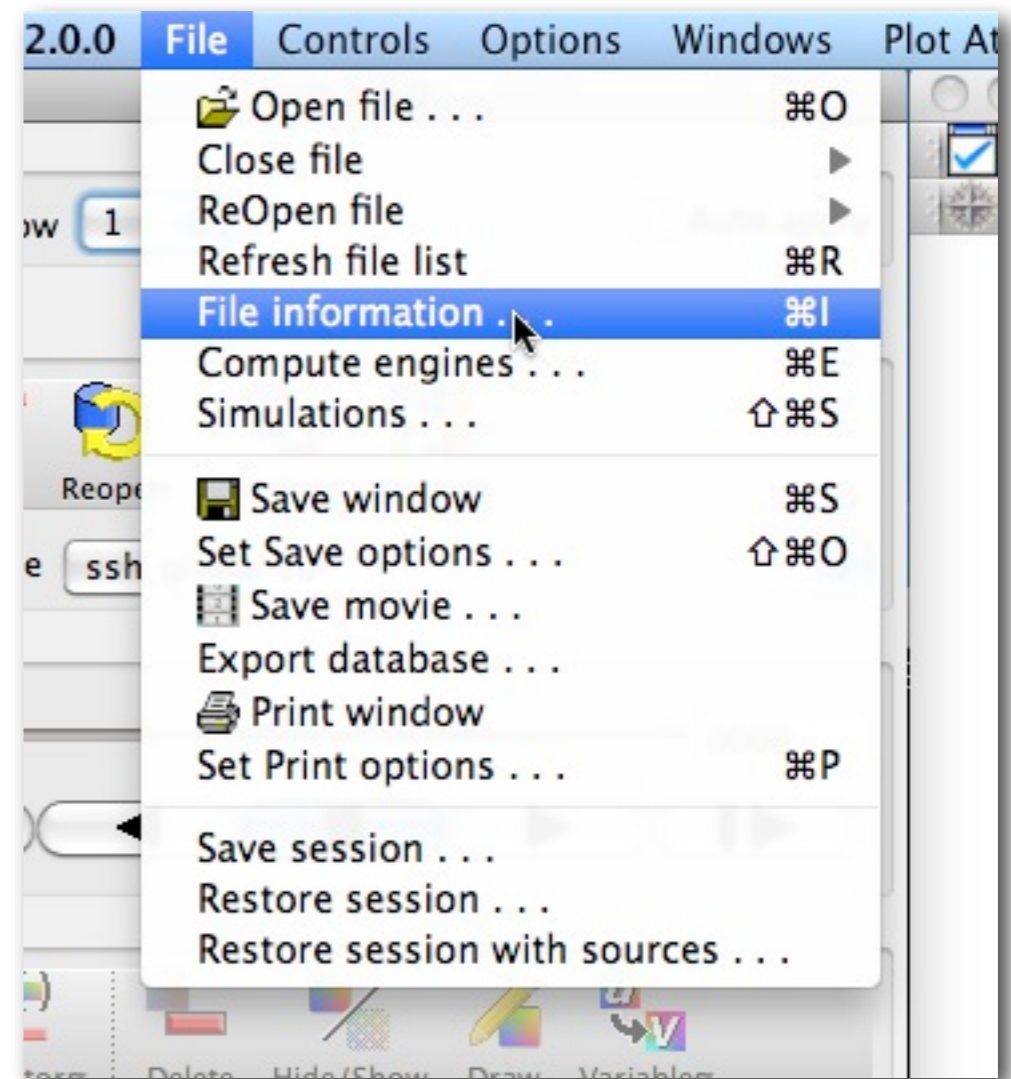
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



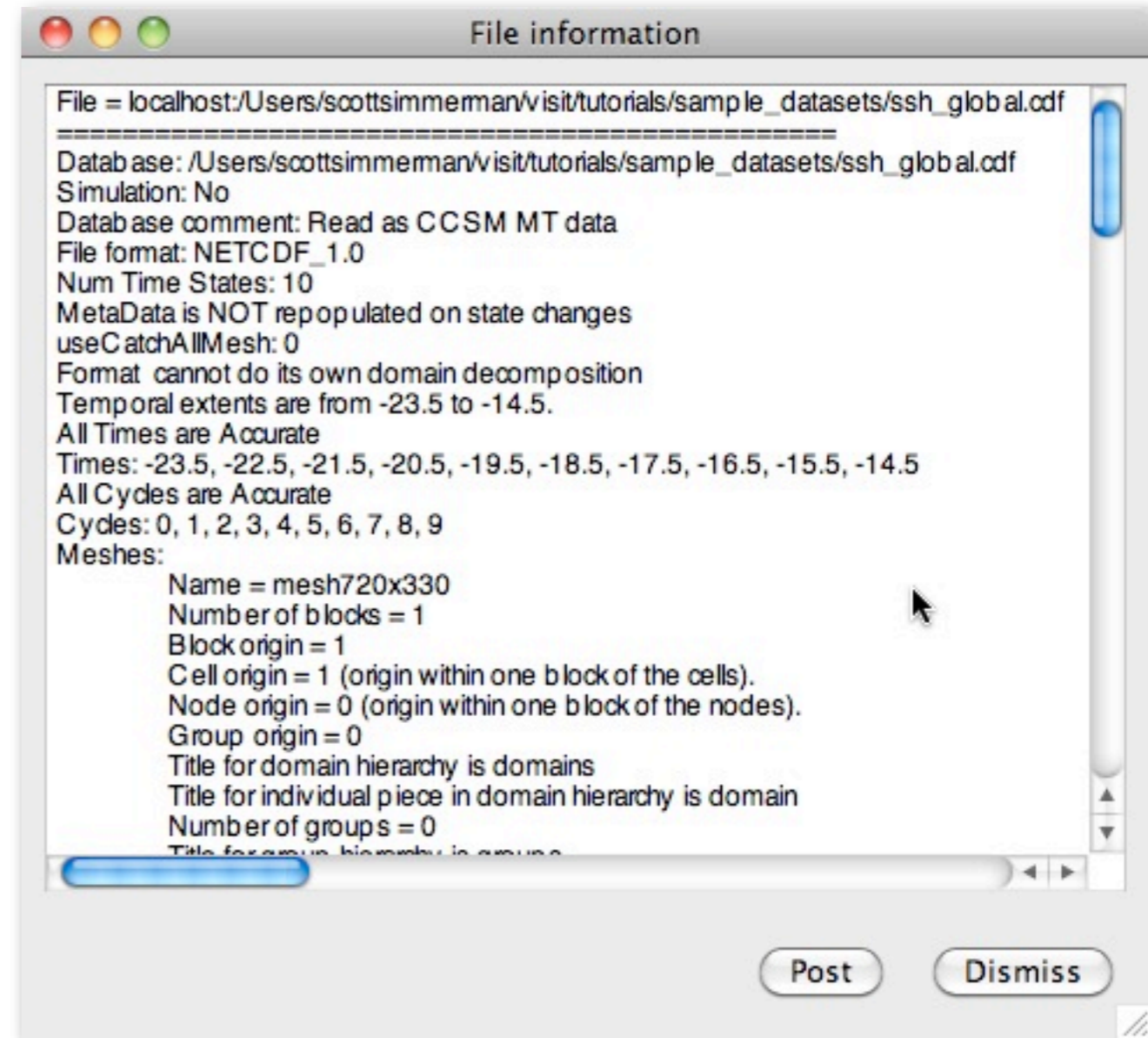
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



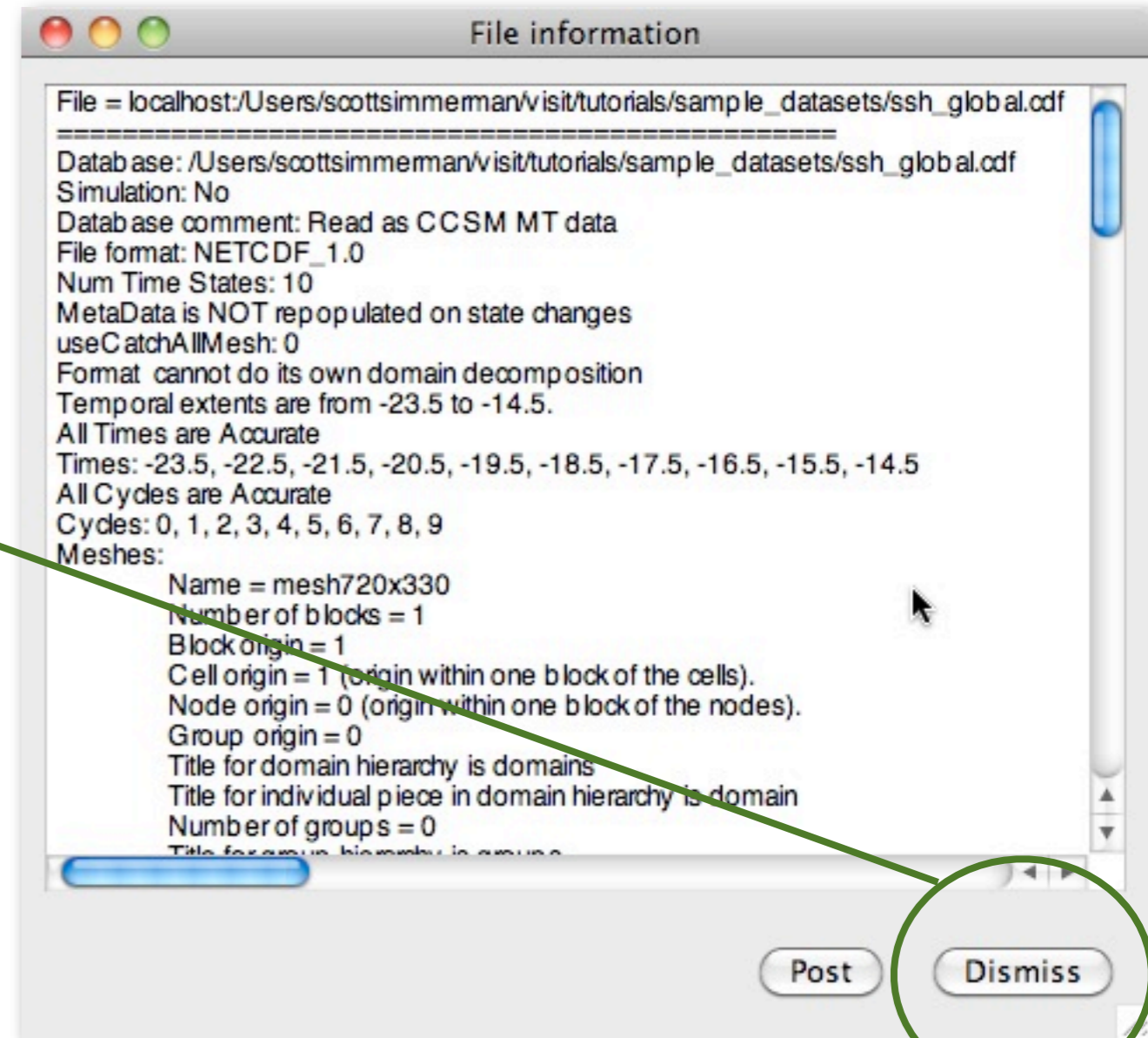
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



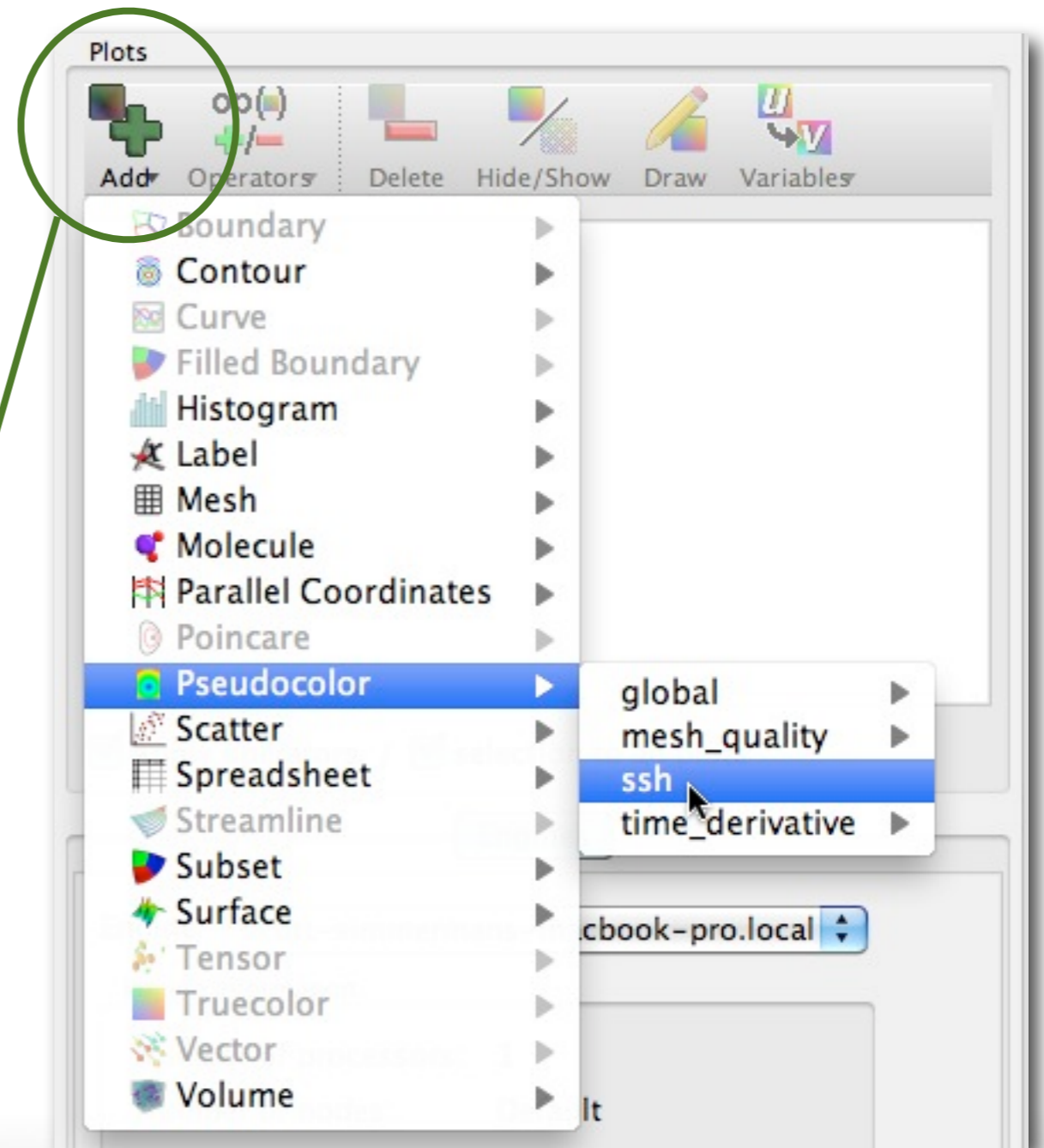
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



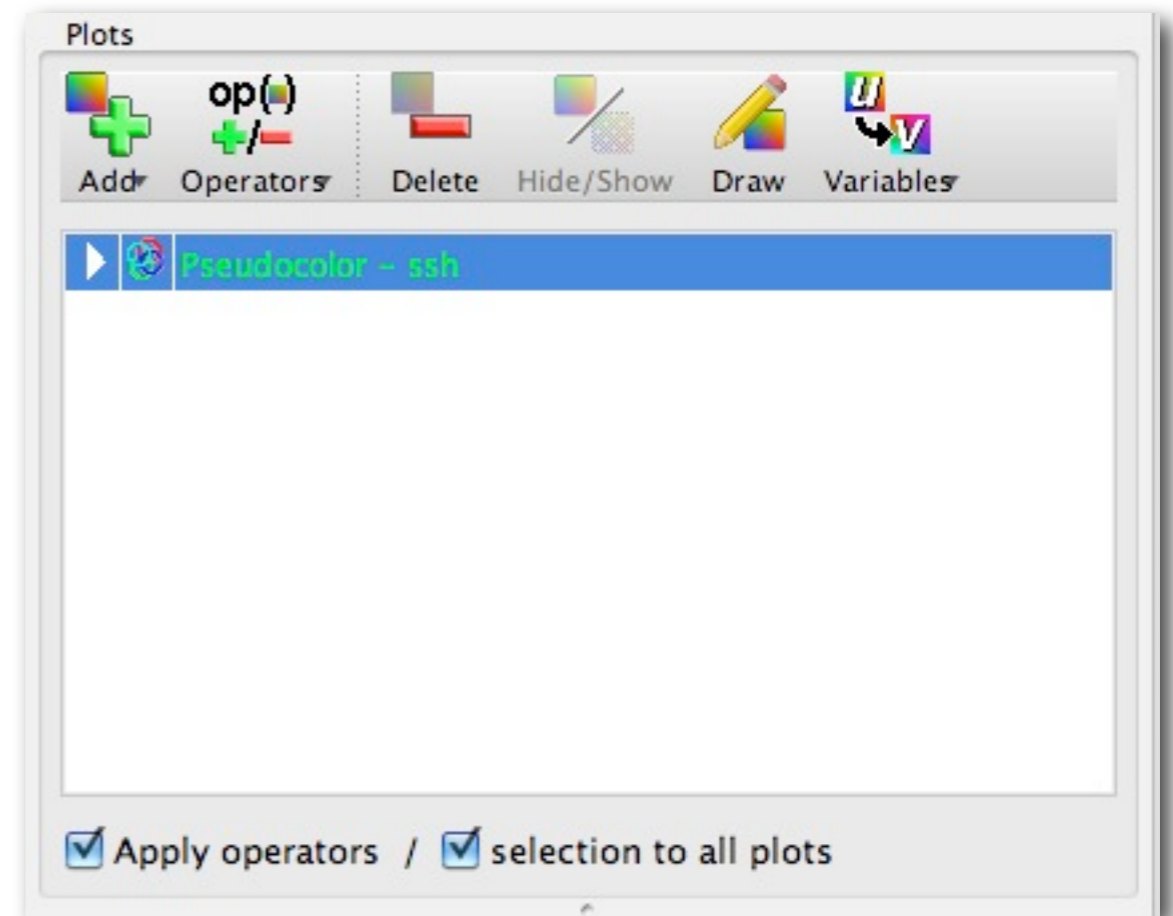
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



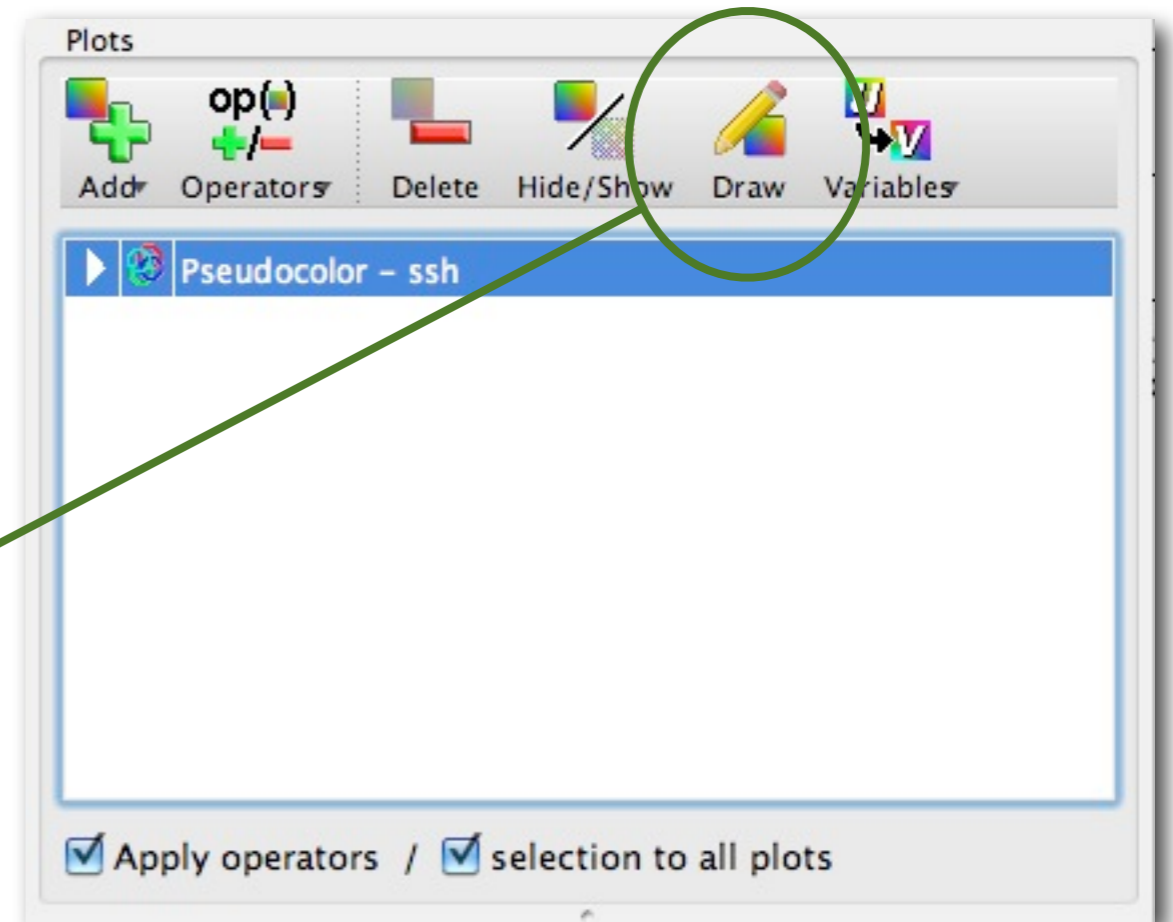
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



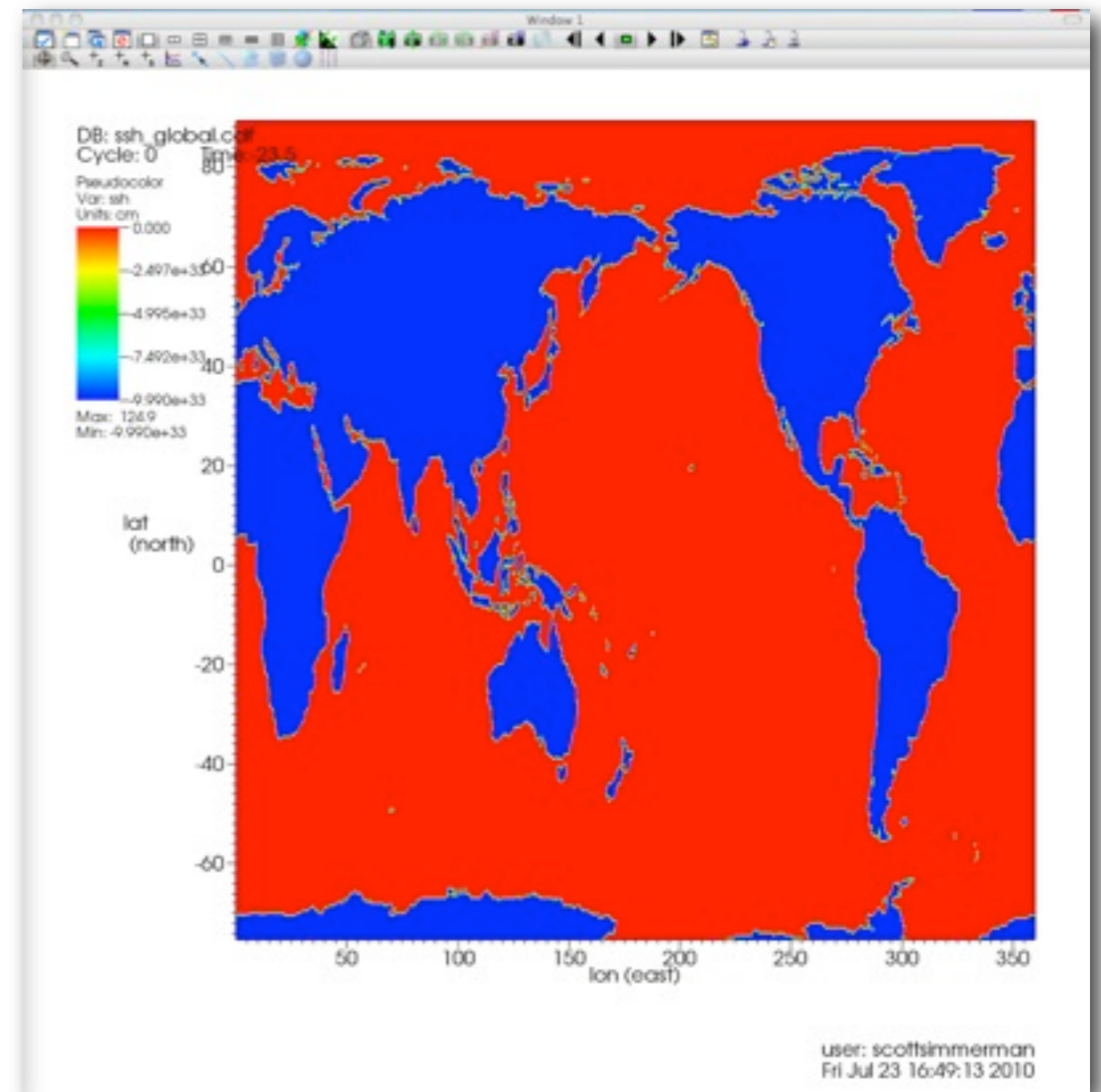
Making a Plot

- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



Making a Plot

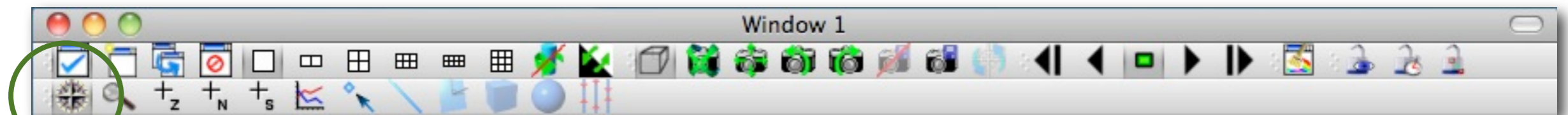
- File is 'Active source'
- File -> File information
- Dismiss file info
- Add->Pseudocolor->ssh
- 'Plots' list
- Click 'Draw'



Initial pseudocolor plot

Navigation

- Reset View
- Undo/Redo View



- Navigate mode - click and drag to pan or rotate
- Zoom mode - click and drag box to zoom in

Navigation

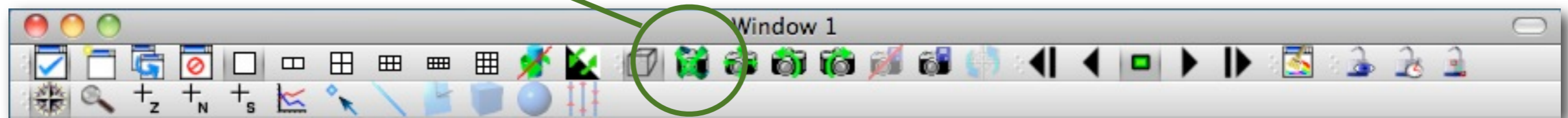
- Reset View
- Undo/Redo View



- Navigate mode - click and drag to pan or rotate
- Zoom mode - click and drag box to zoom in

Navigation

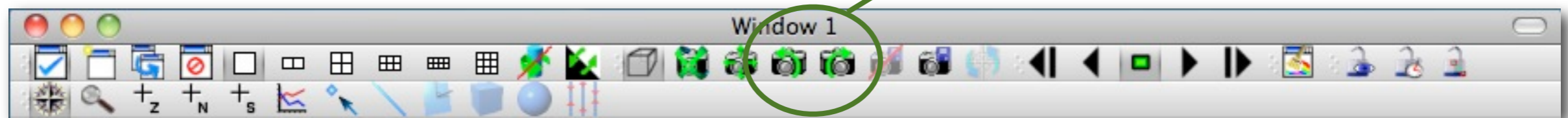
- Reset View
- Undo/Redo View



- Navigate mode - click and drag to pan or rotate
- Zoom mode - click and drag box to zoom in

Navigation

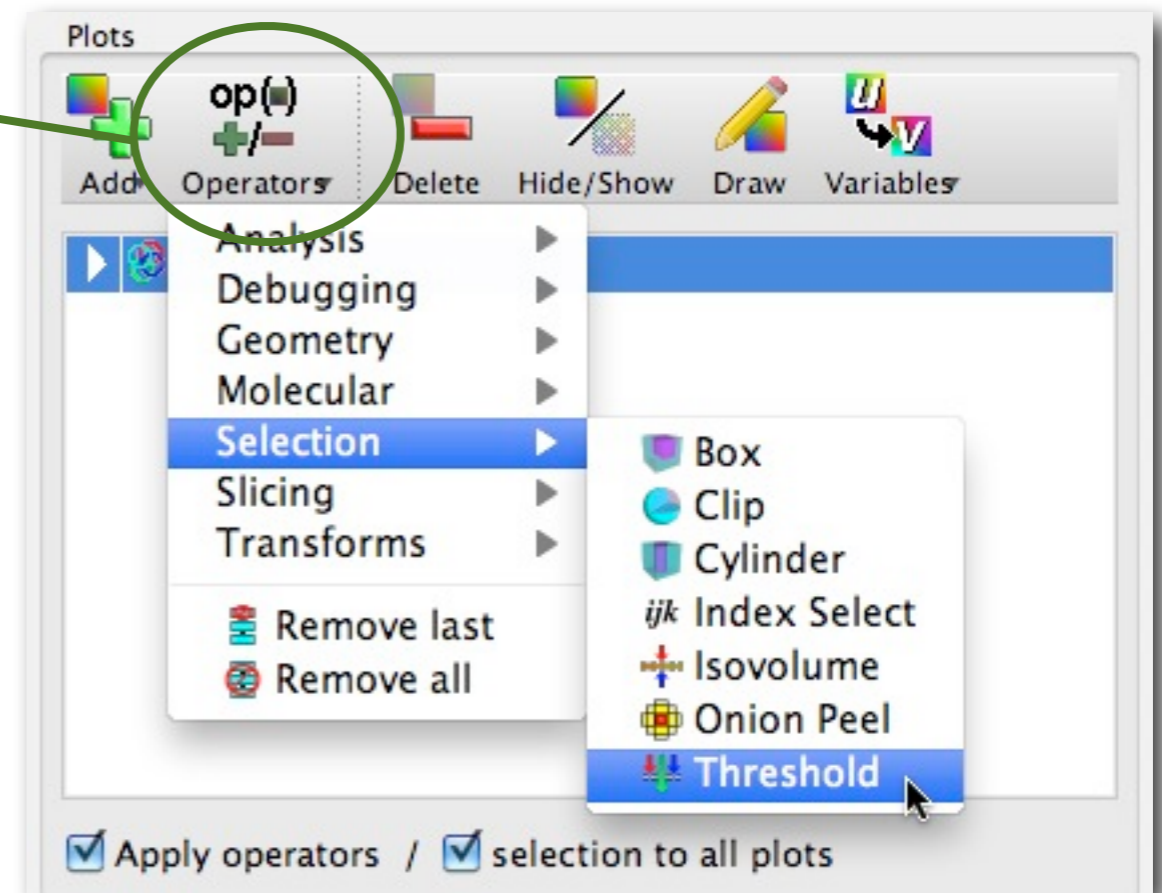
- Reset View
- Undo/Redo View



- Navigate mode - click and drag to pan or rotate
- Zoom mode - click and drag box to zoom in

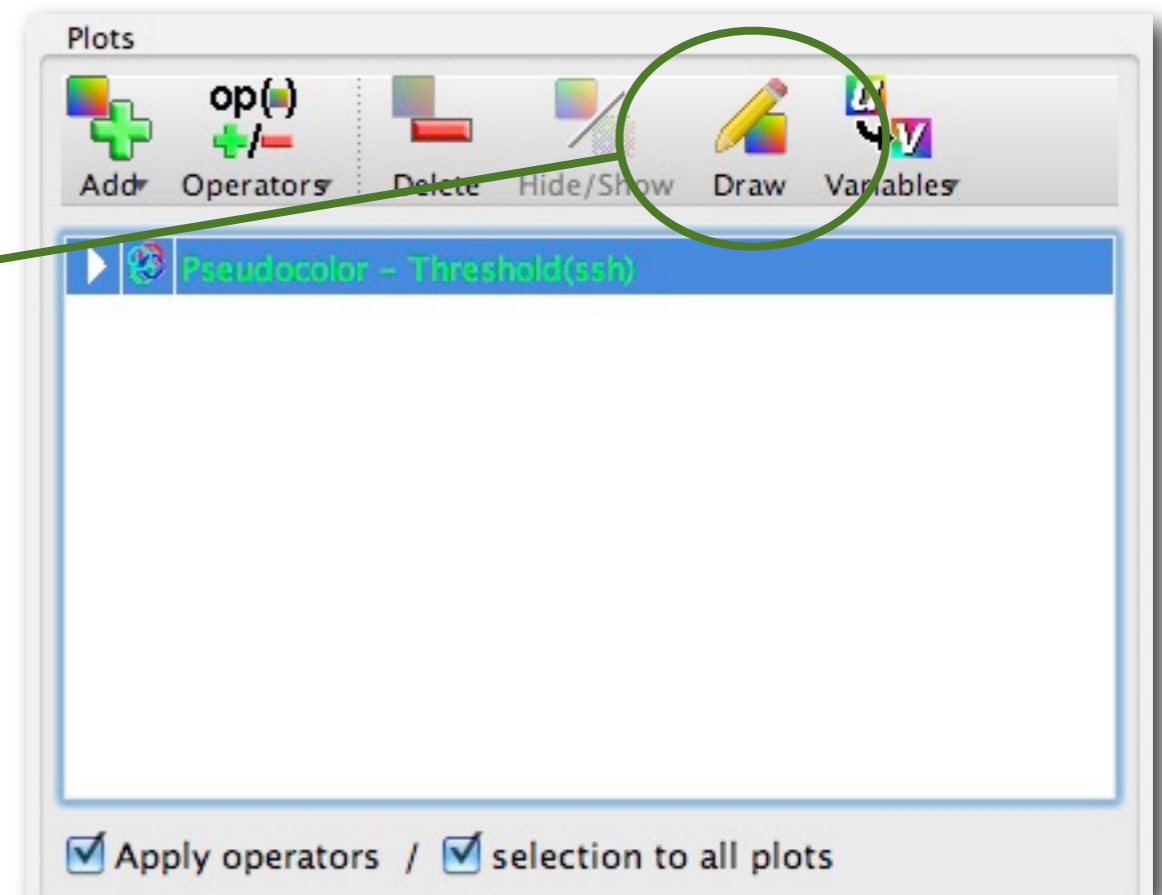
Adding Operators

- Operators-> Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



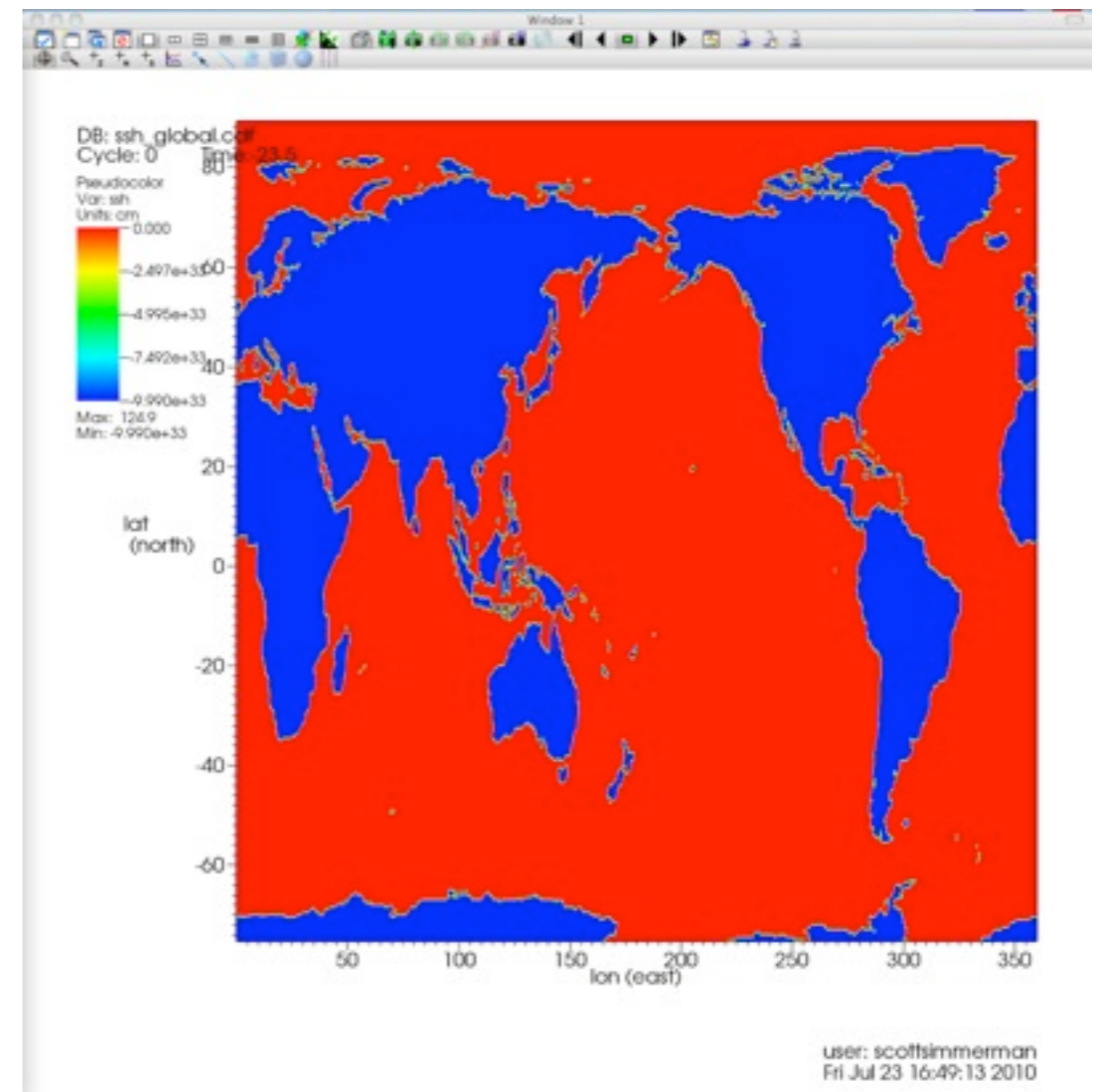
Adding Operators

- Operators-> Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



Adding Operators

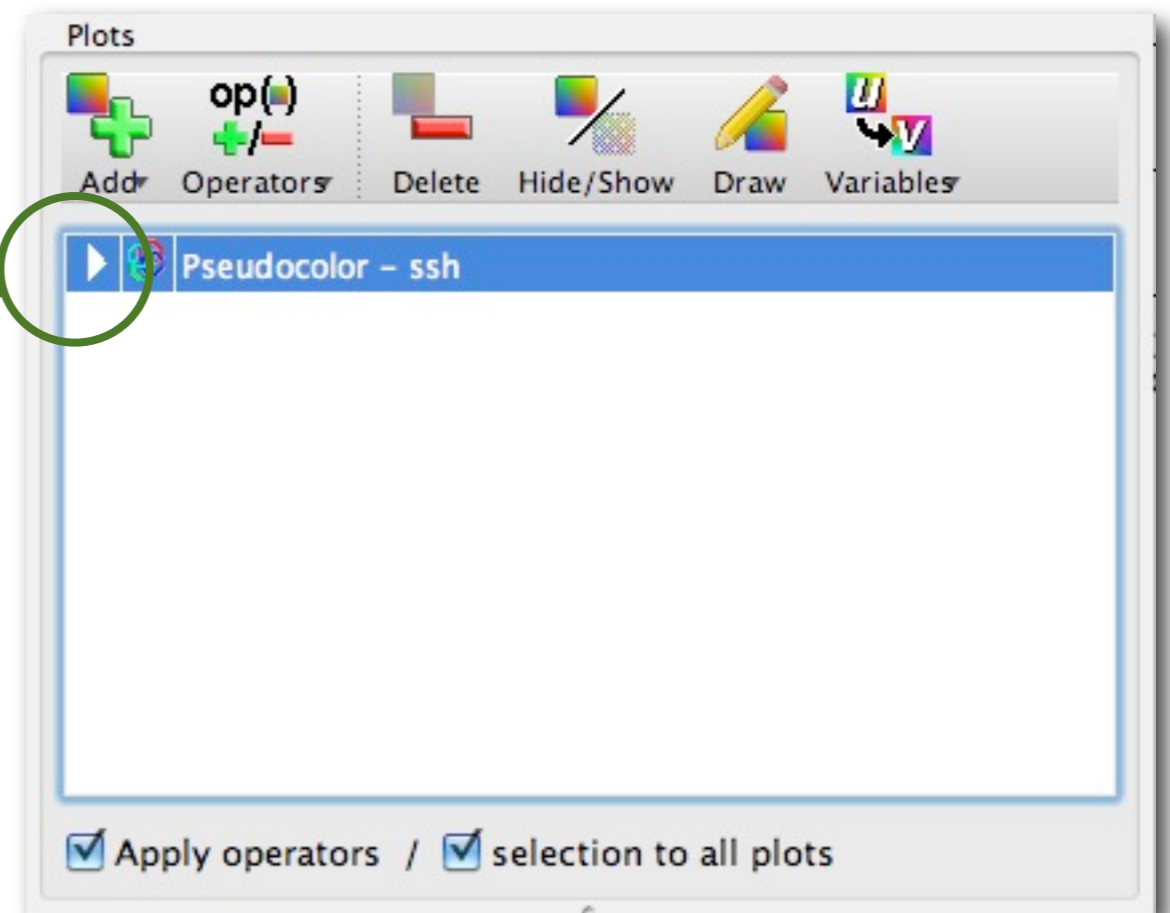
- Operators->
Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



No change

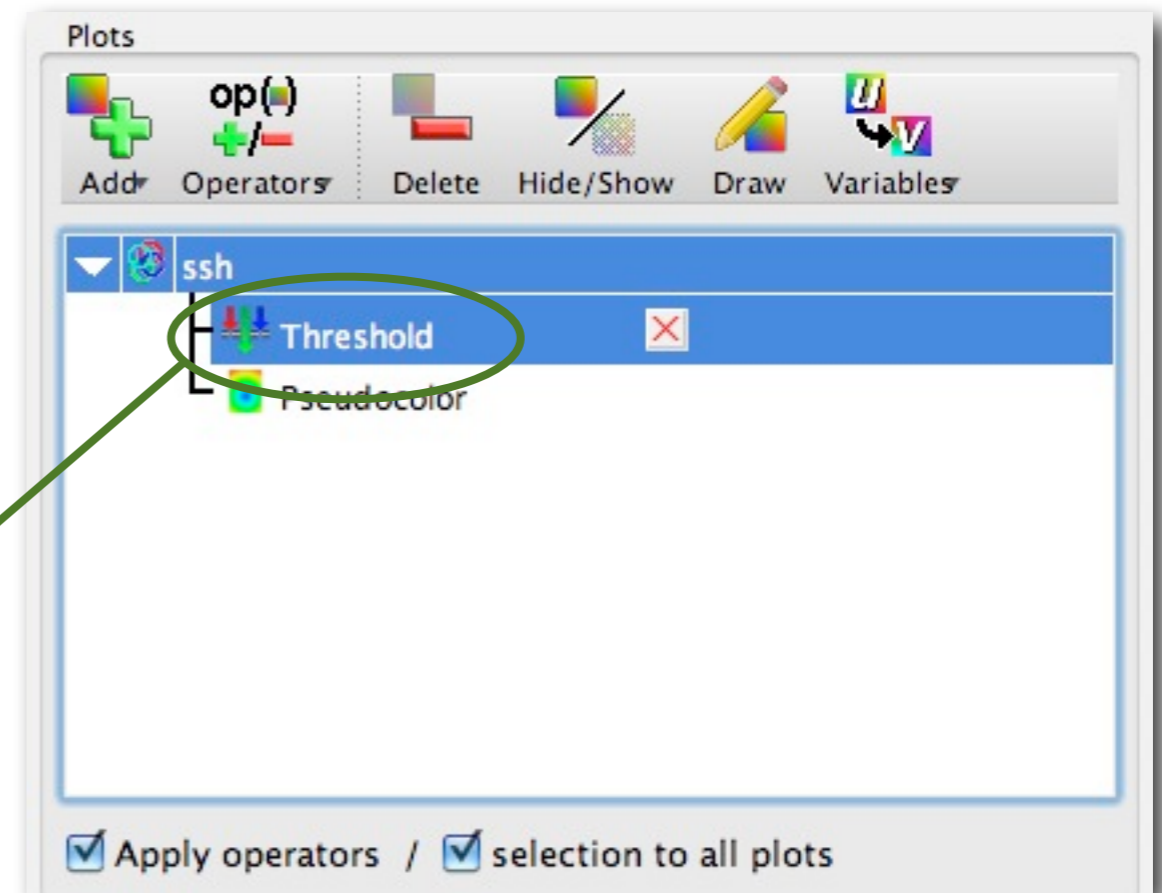
Adding Operators

- Operators-> Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



Adding Operators

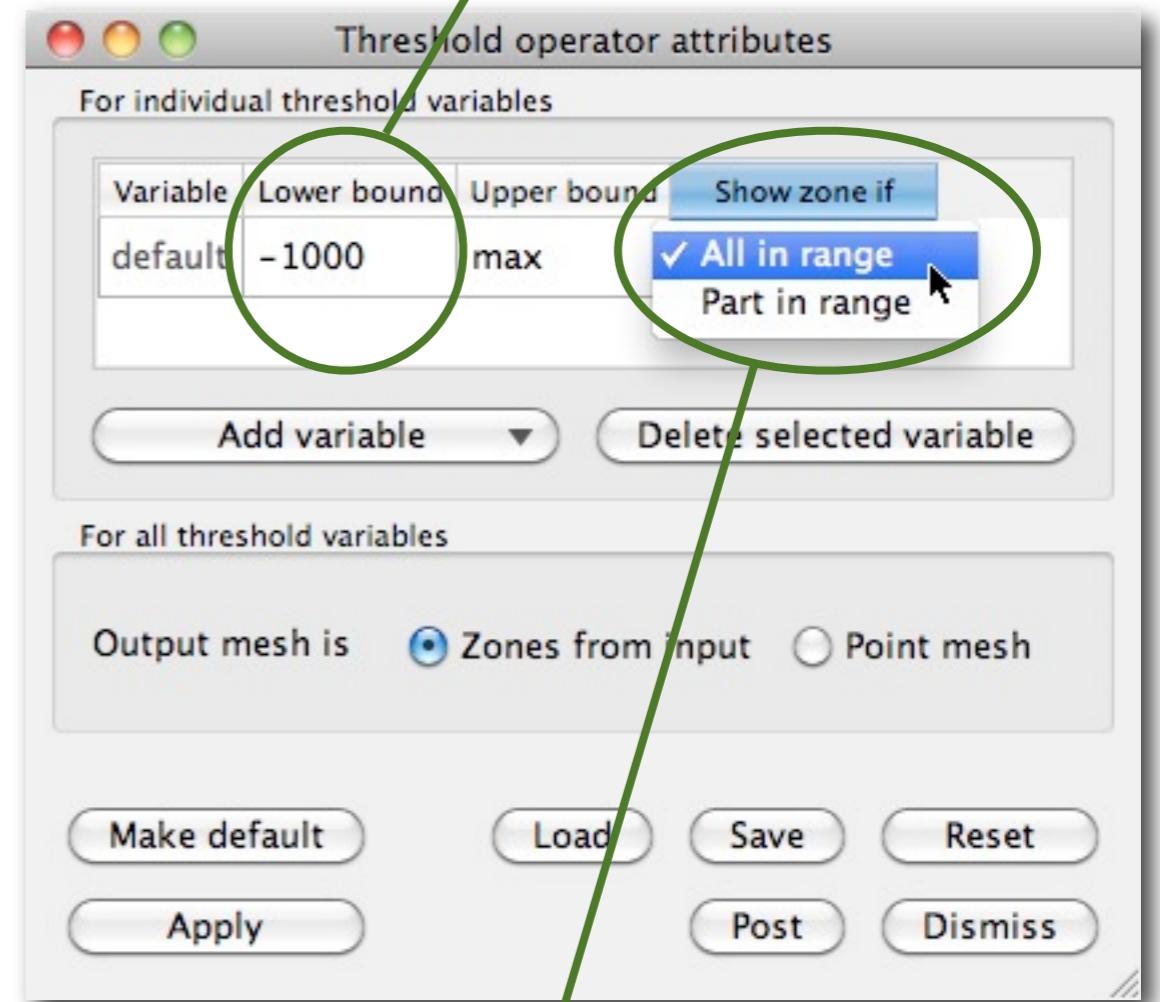
- Operators-> Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



Adding Operators

- Operators-> Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- **Threshold attributes**
- Click 'Apply'

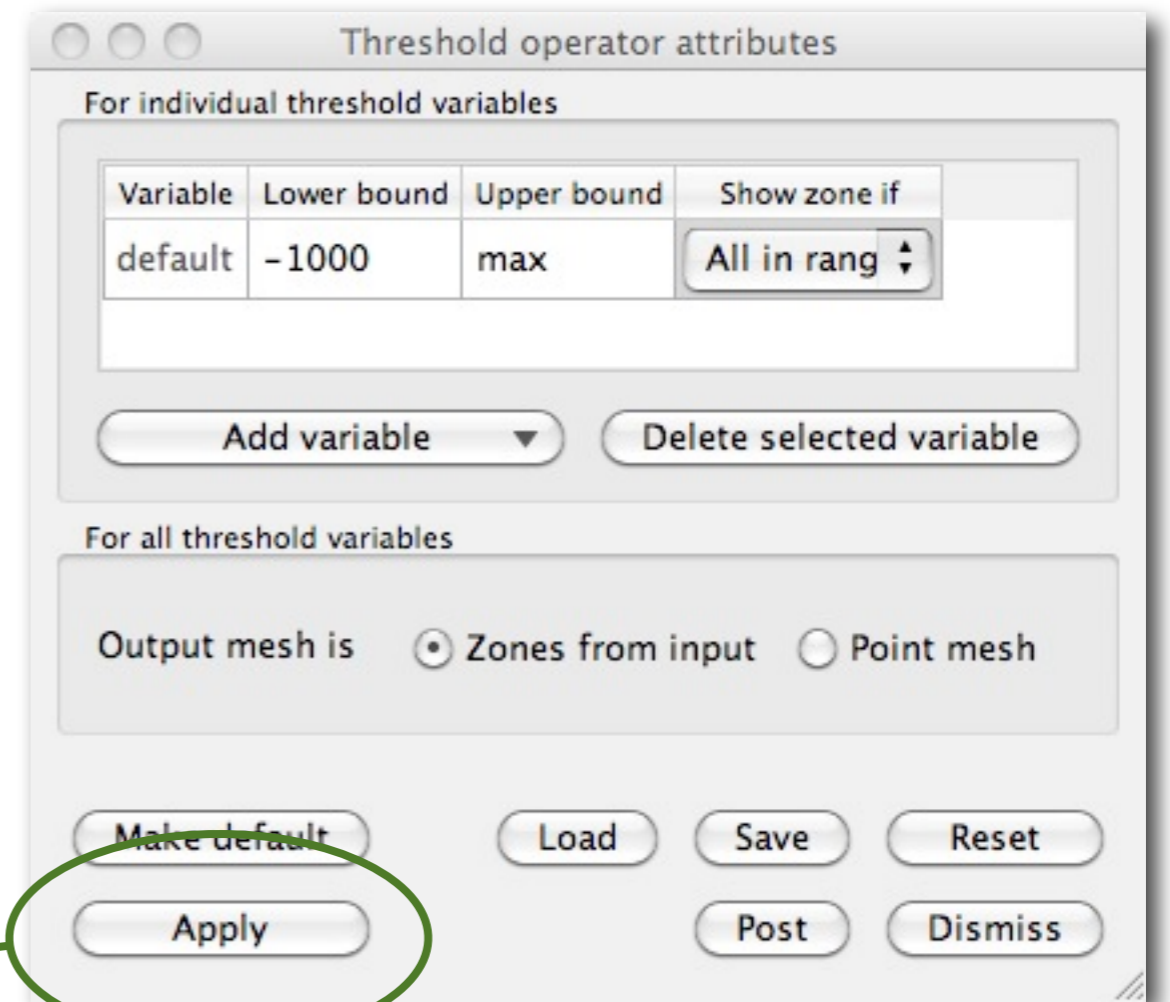
Lower bound of -1000



Choose 'All in range'

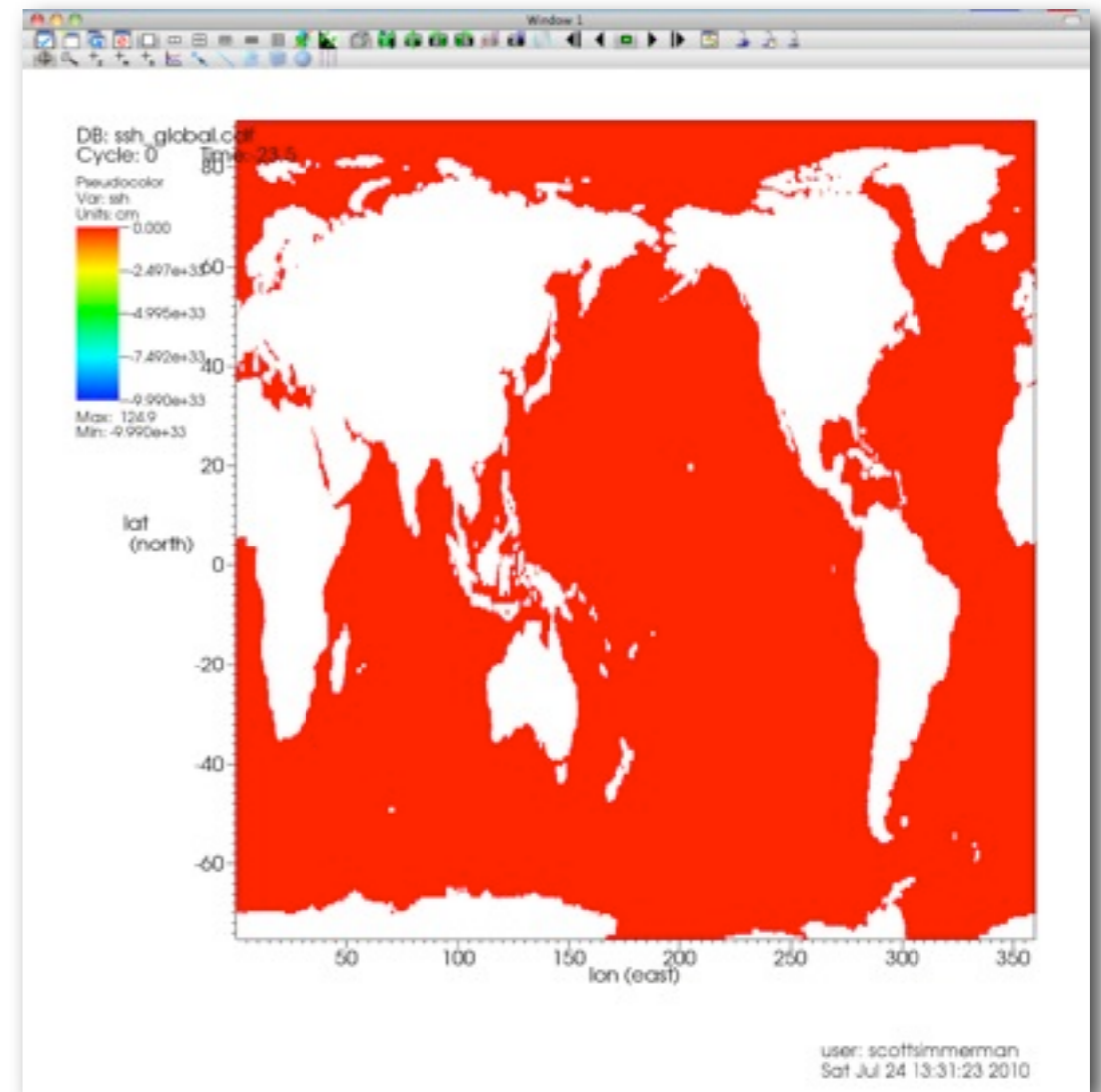
Adding Operators

- Operators-> Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



Adding Operators

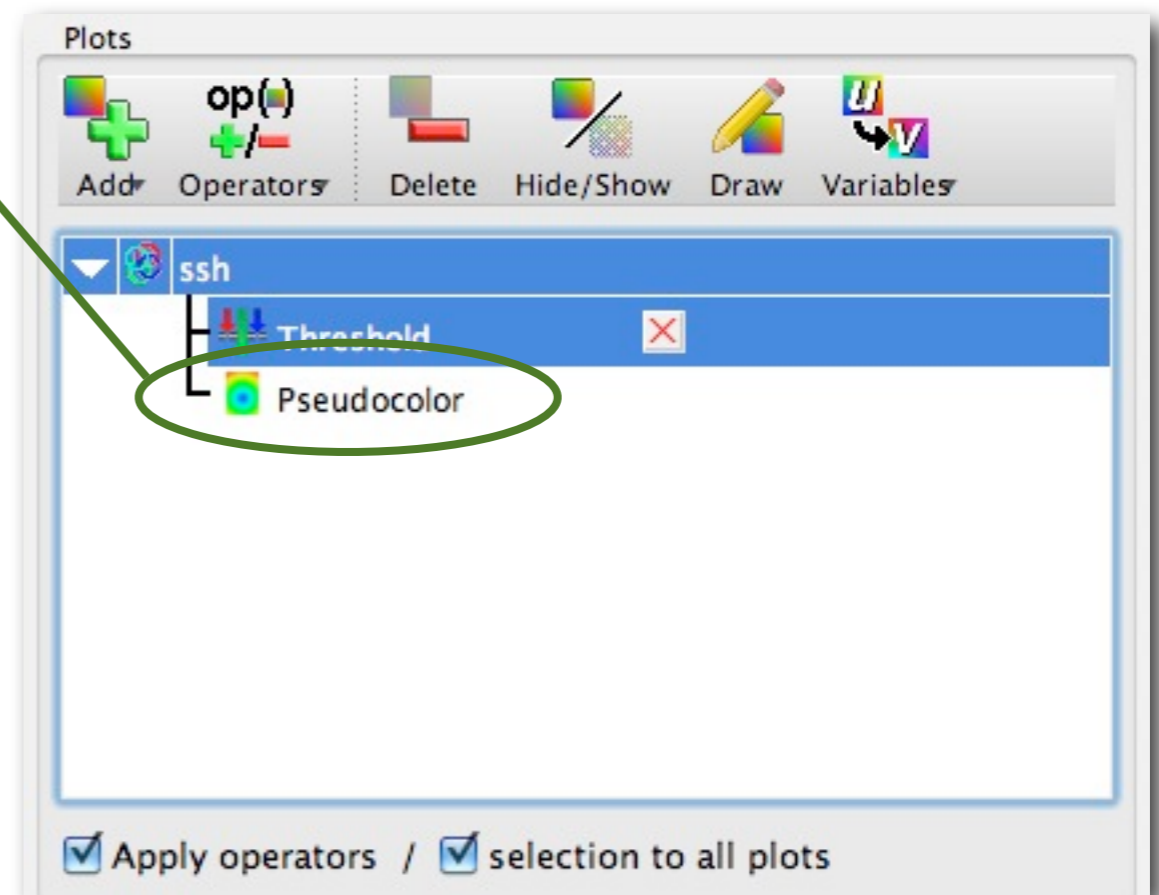
- Operators->
Selection->Threshold
- Click 'Draw'
- Click triangle
- Double-click operator
- Threshold attributes
- Click 'Apply'



Threshold applied

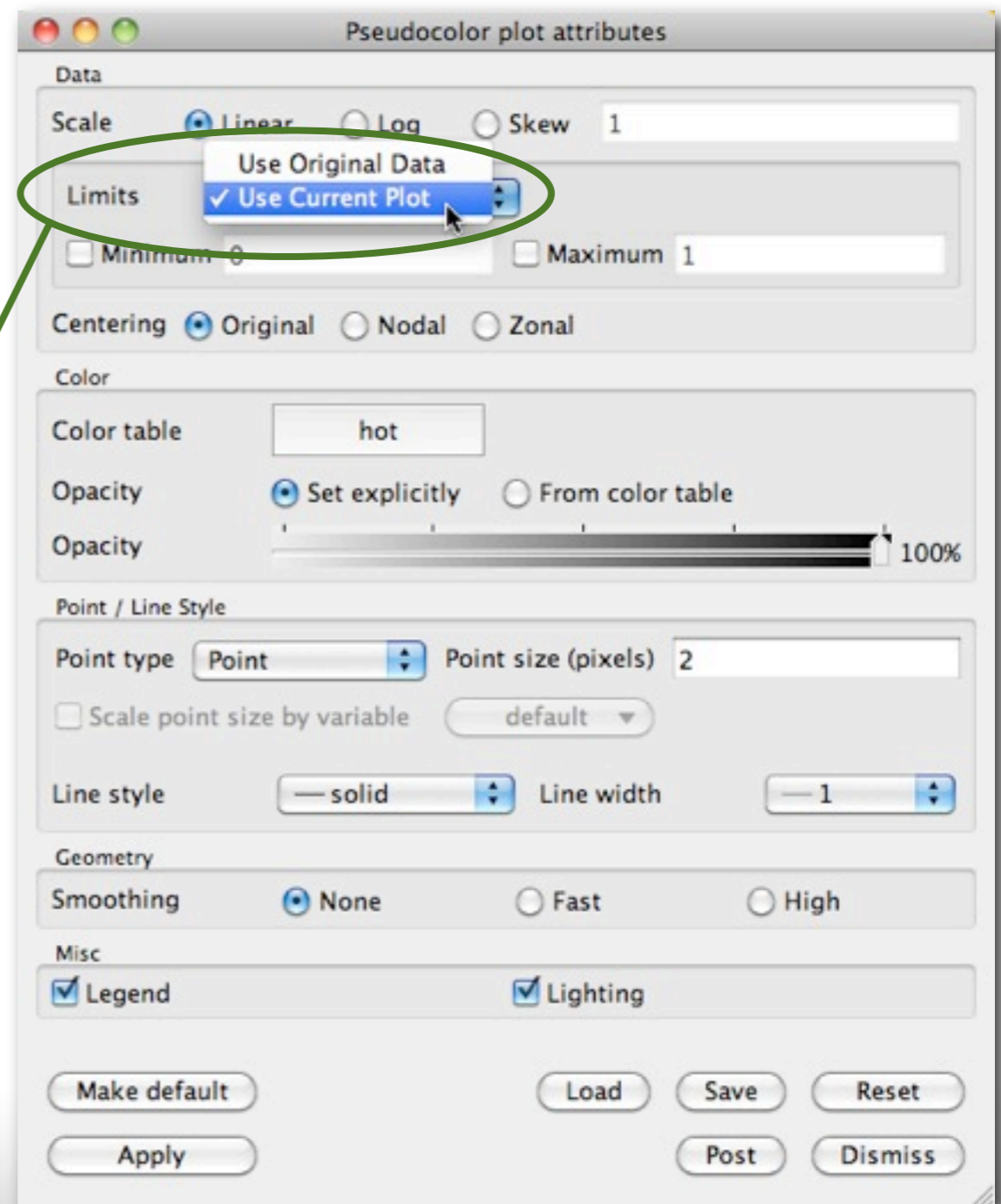
Plot Attributes

- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



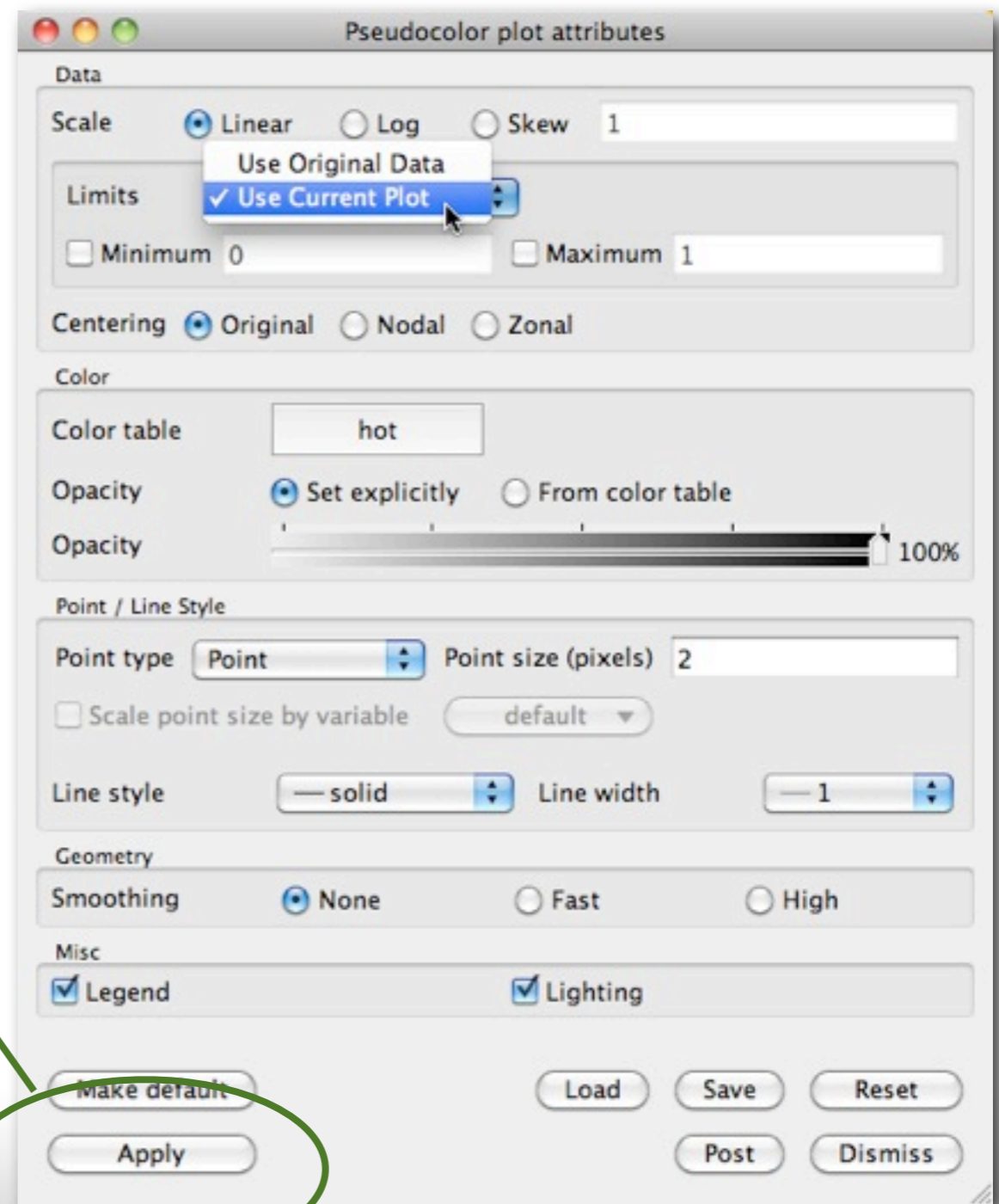
Plot Attributes

- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



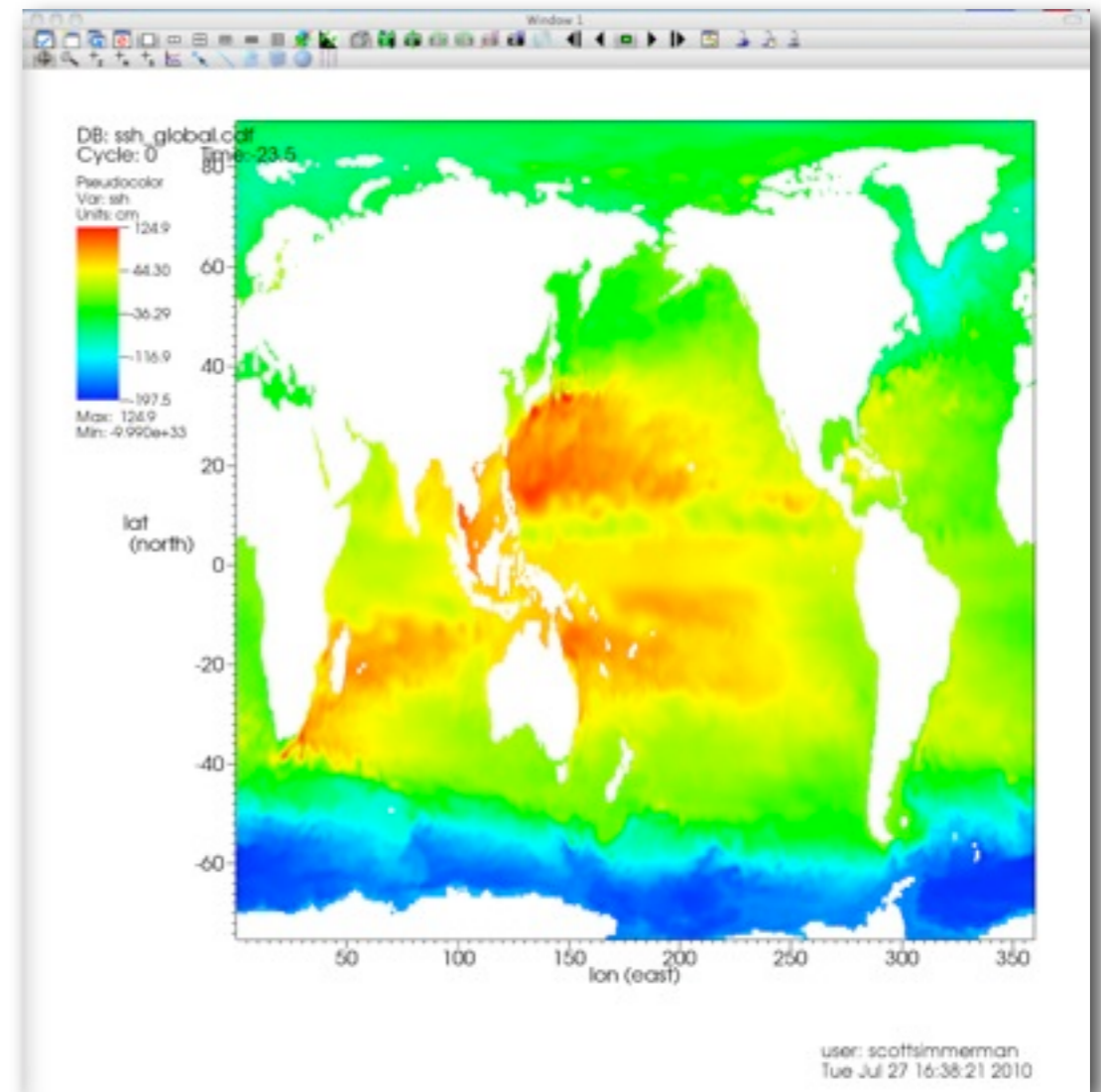
Plot Attributes

- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



Plot Attributes

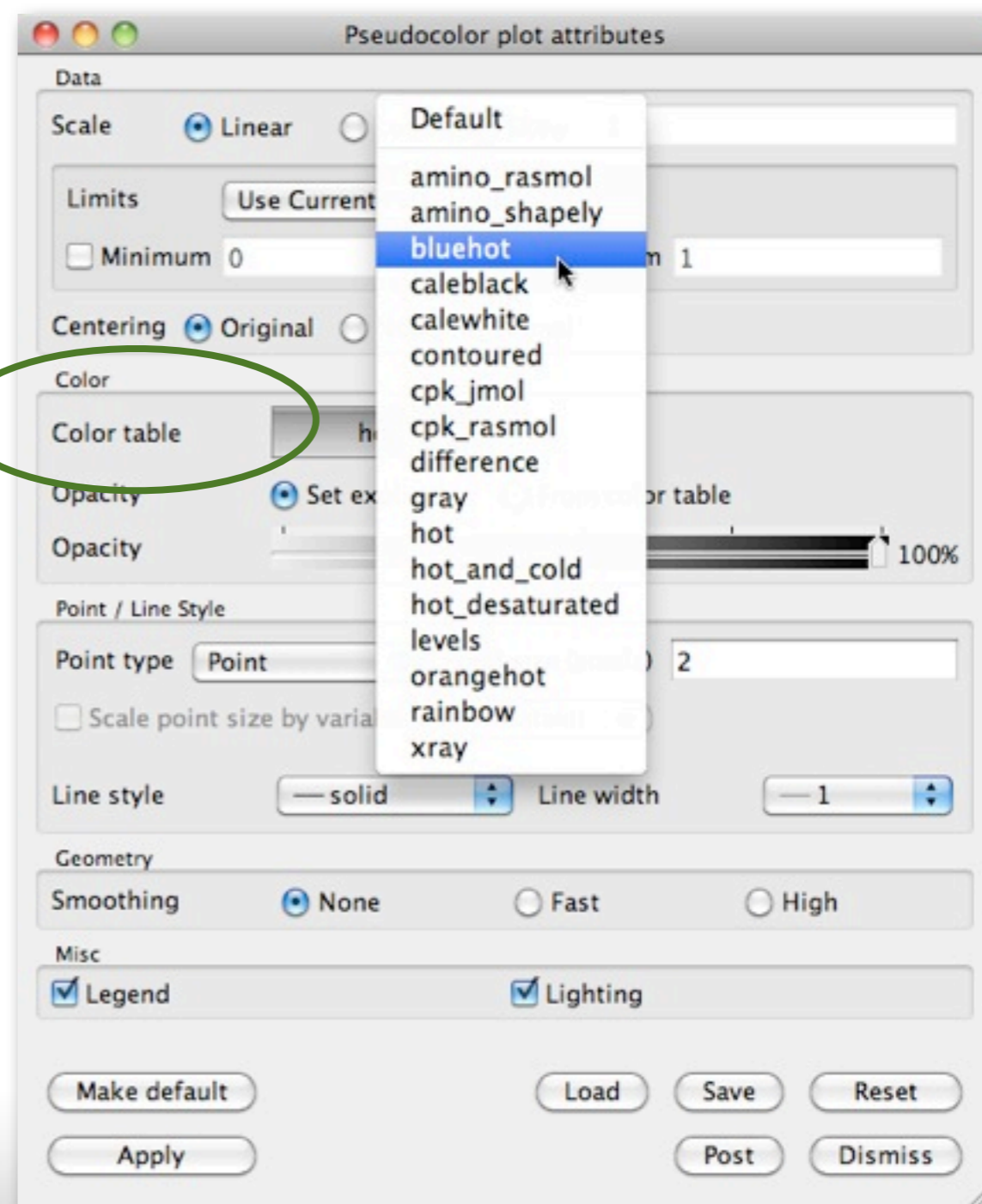
- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



Pseudocolor fixed

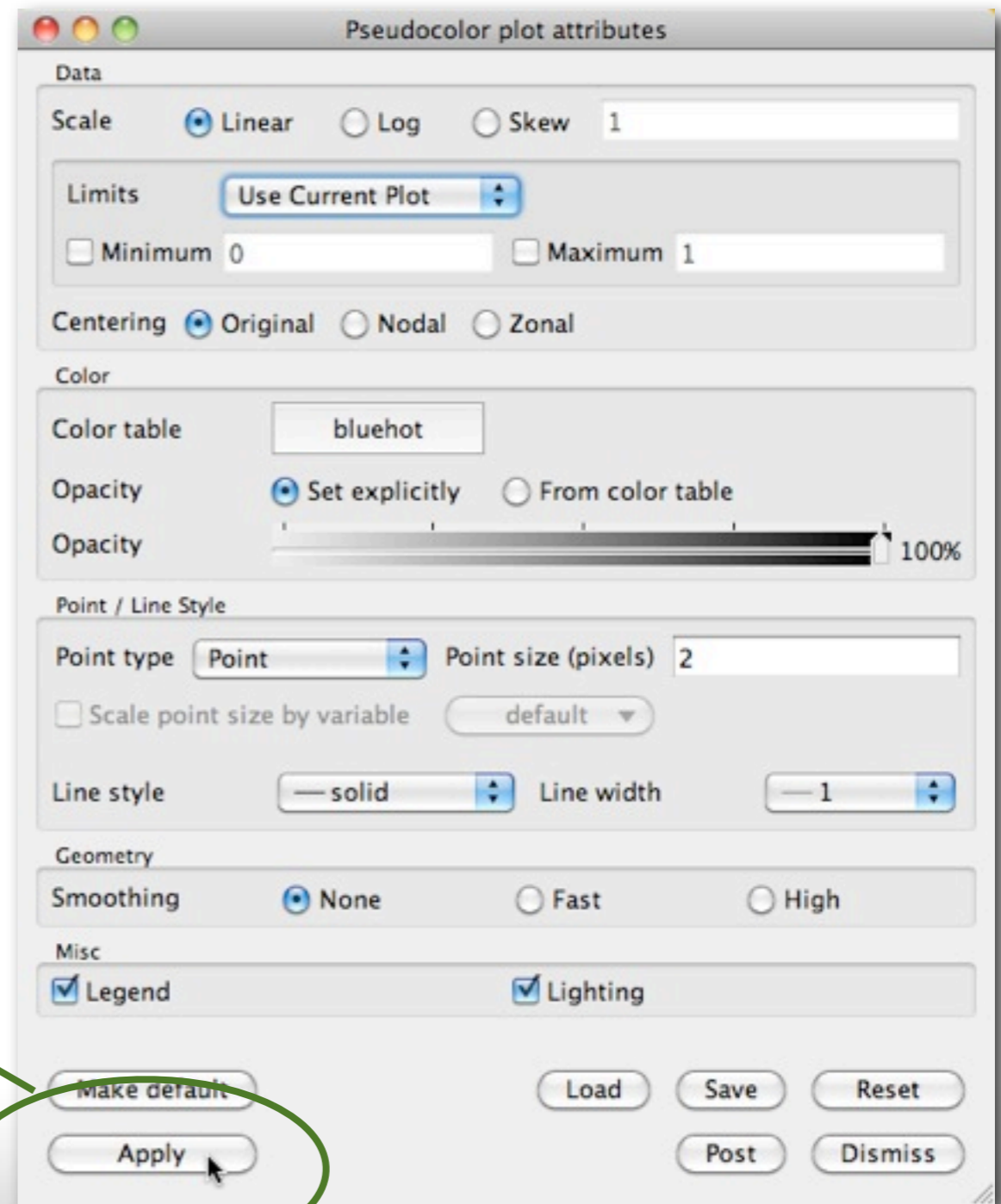
Plot Attributes

- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



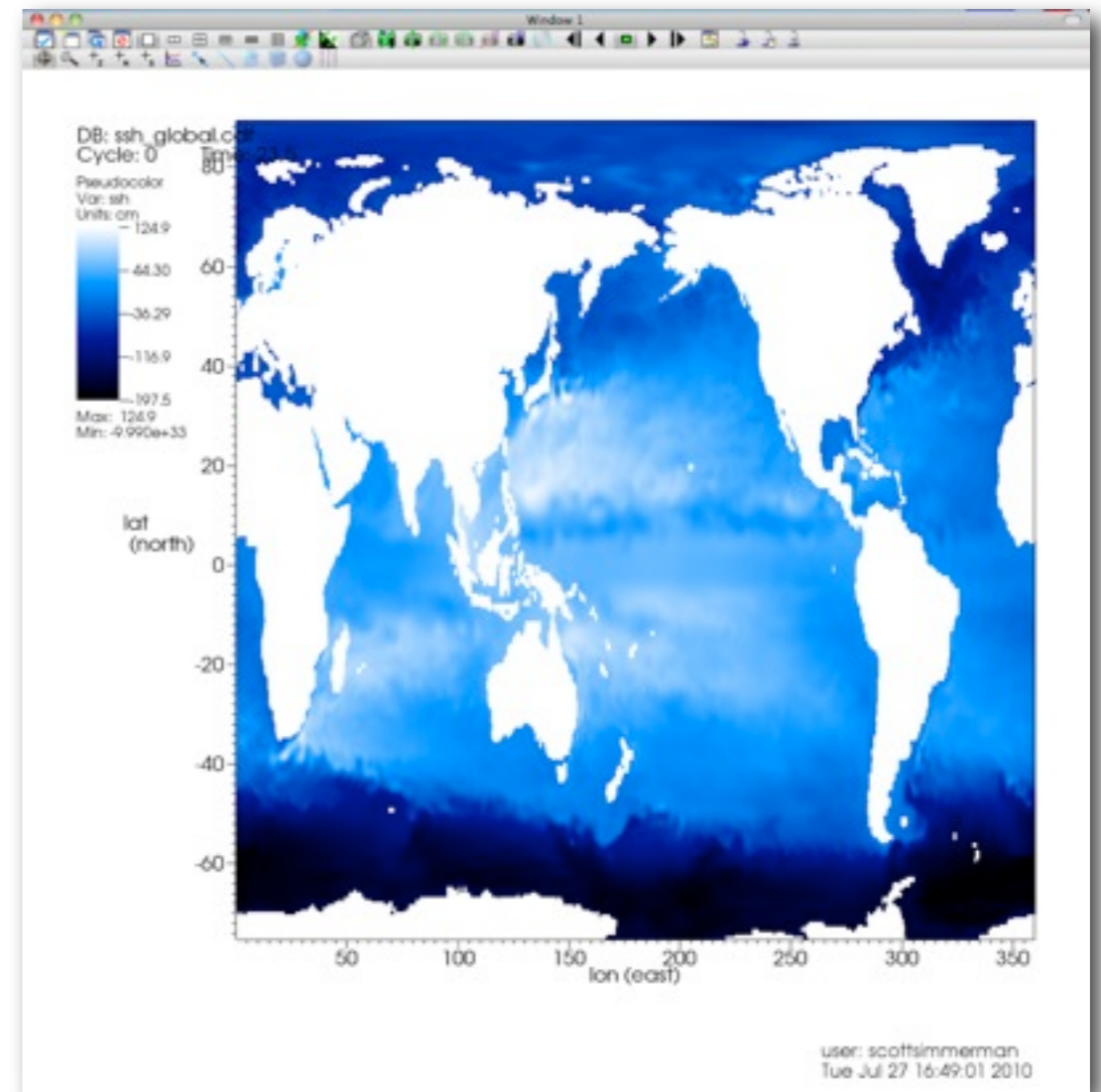
Plot Attributes

- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



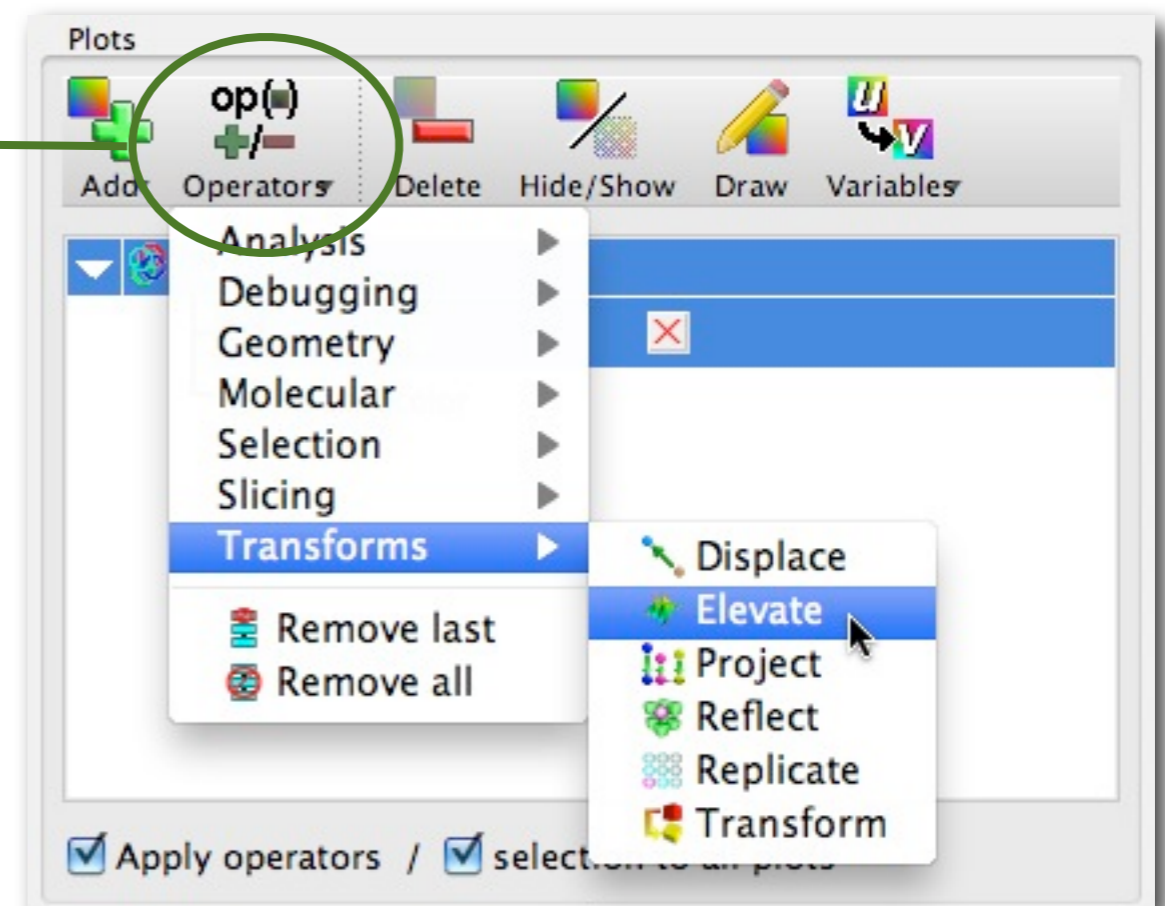
Plot Attributes

- Double-click plot name
- Select 'Use Current Plot'
- Click 'Apply'
- Change color table
- Click 'Apply'



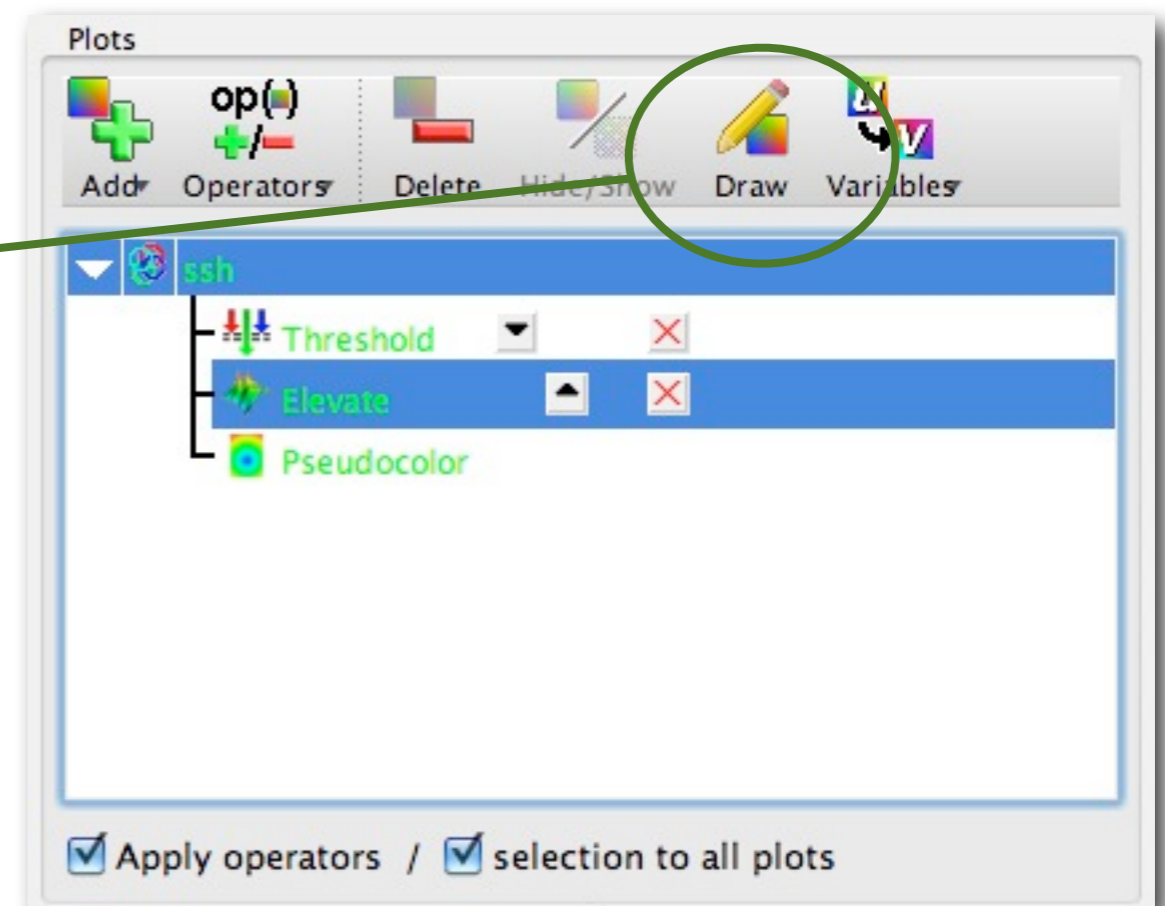
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



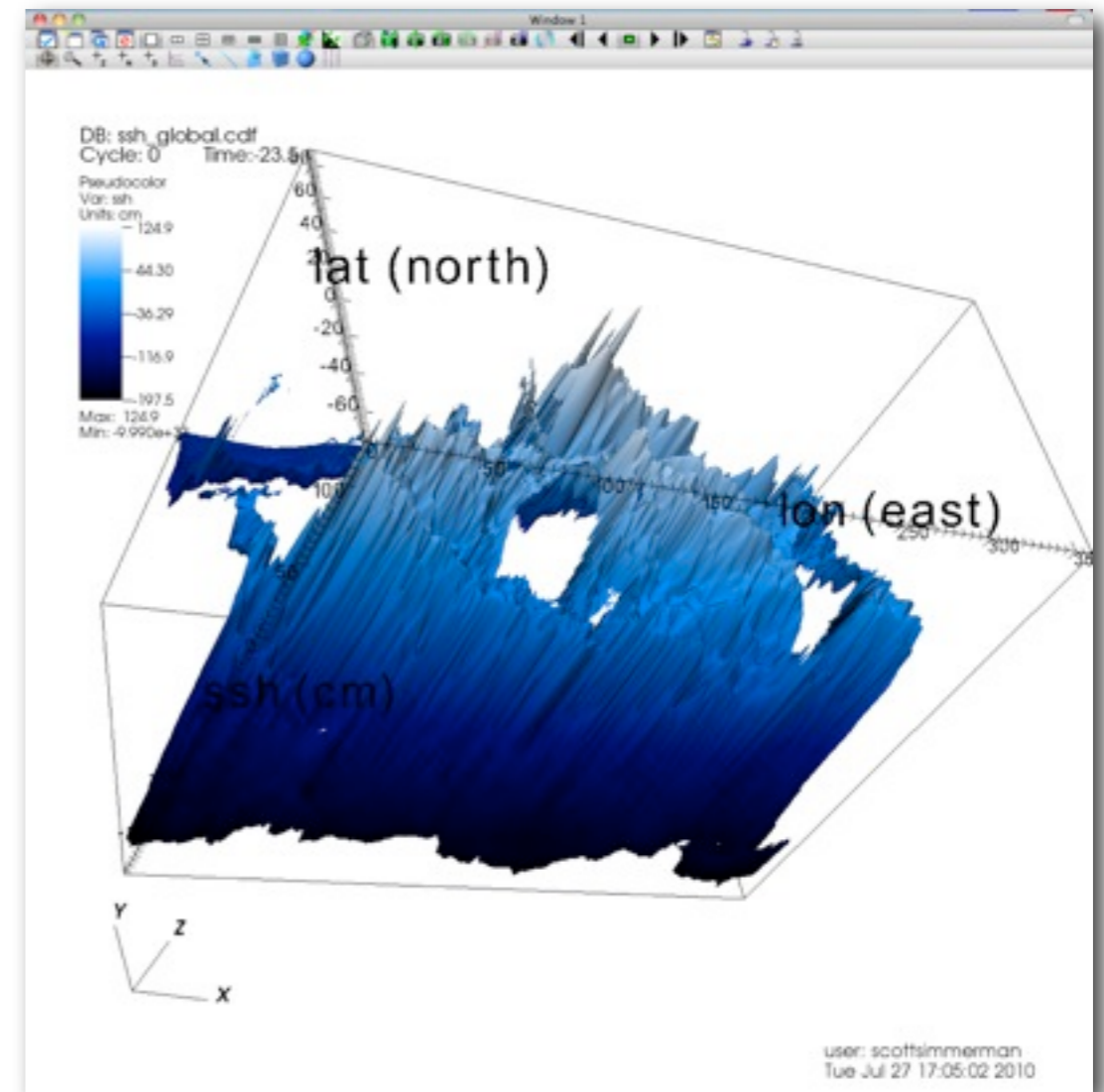
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



More Operators

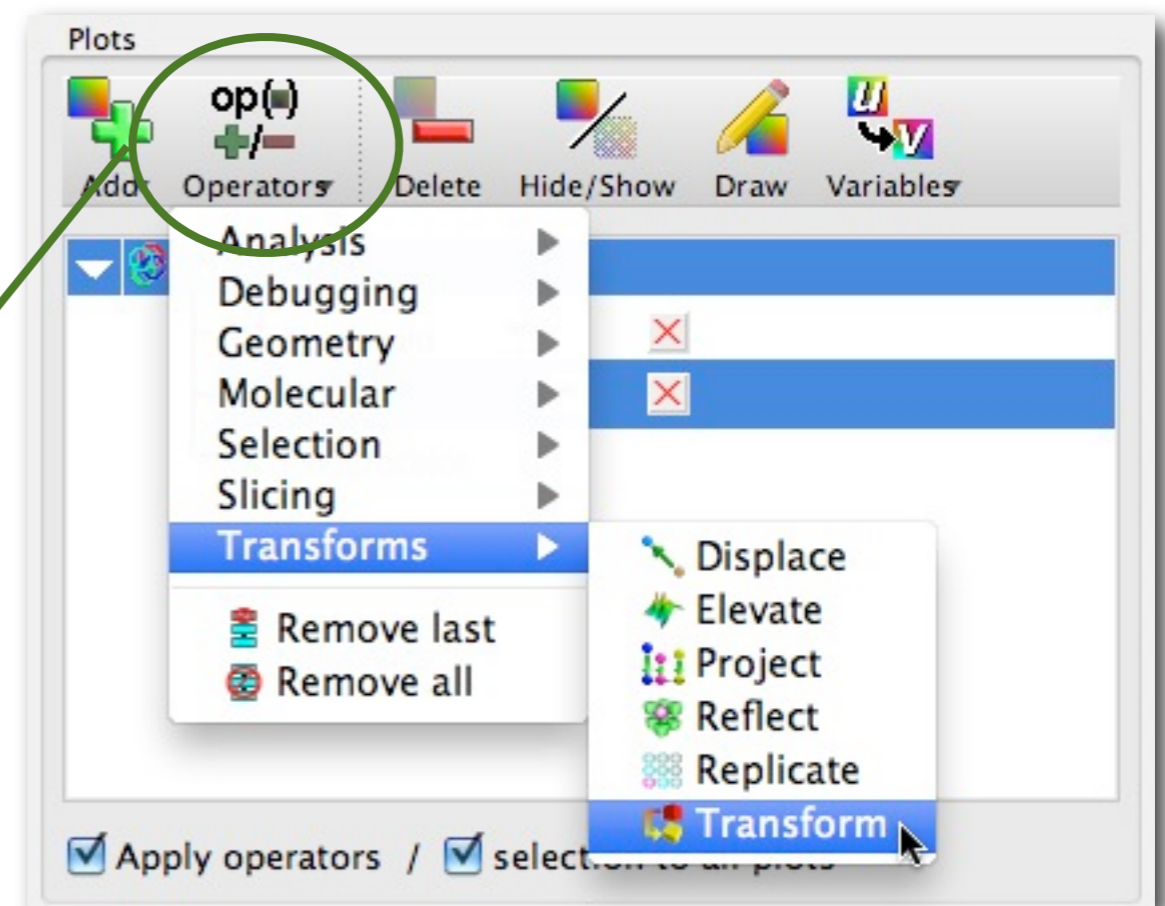
- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



Extreme elevation

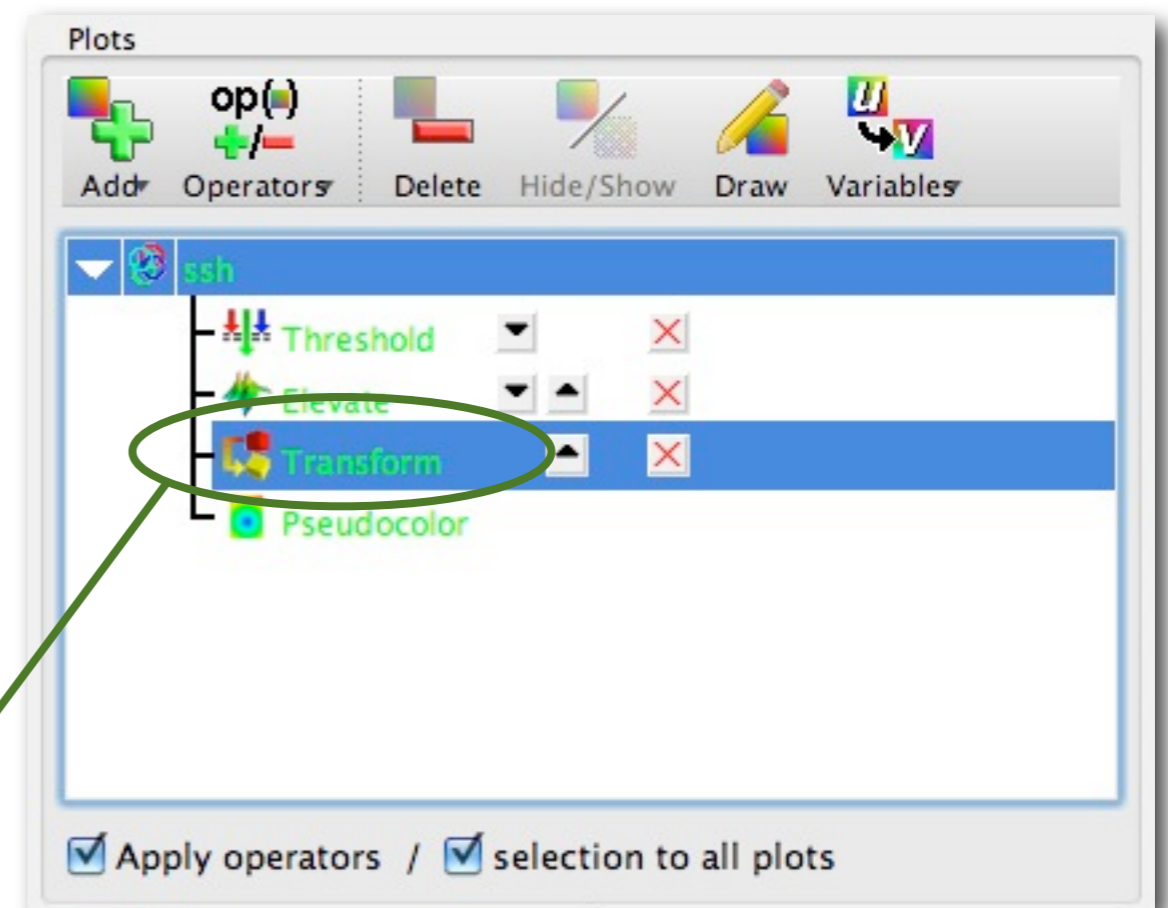
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



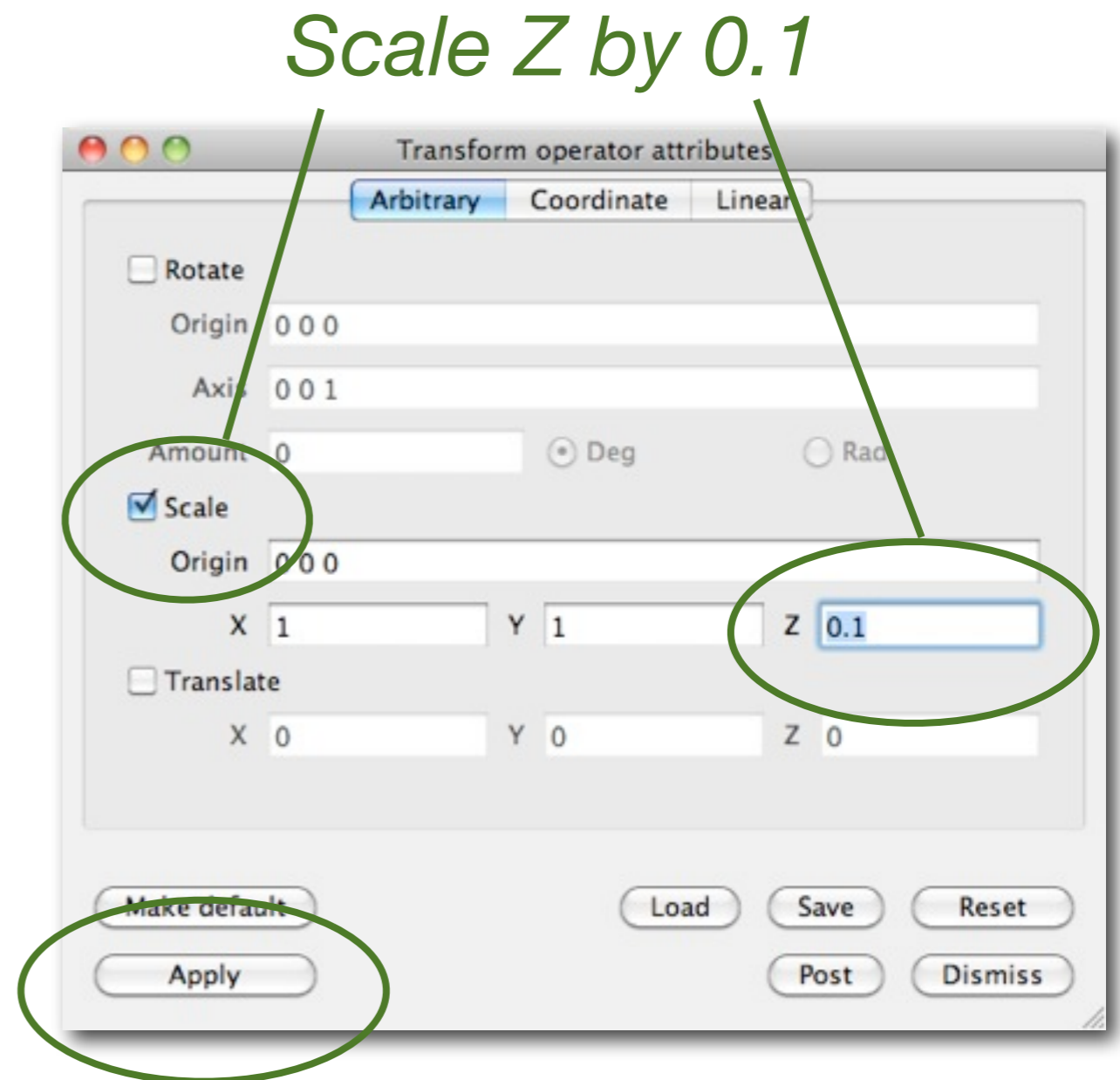
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



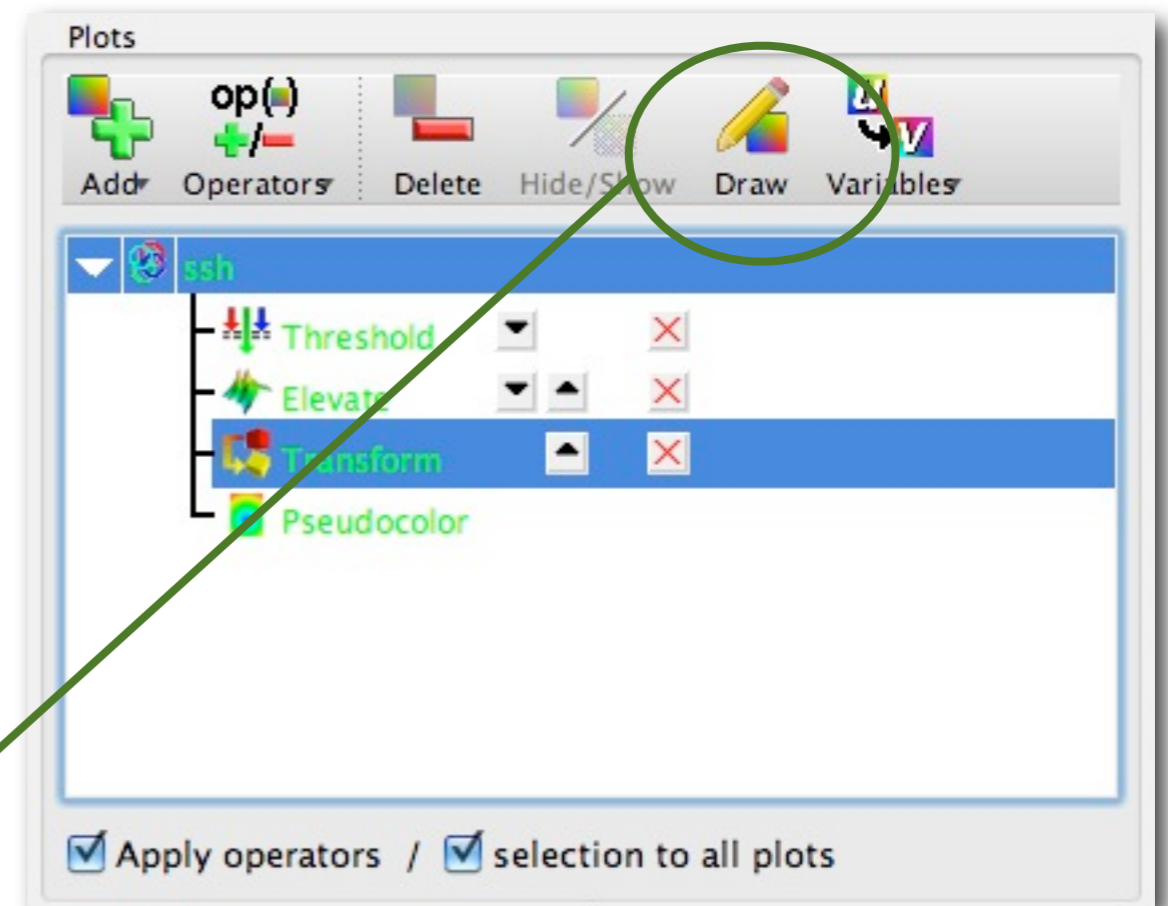
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



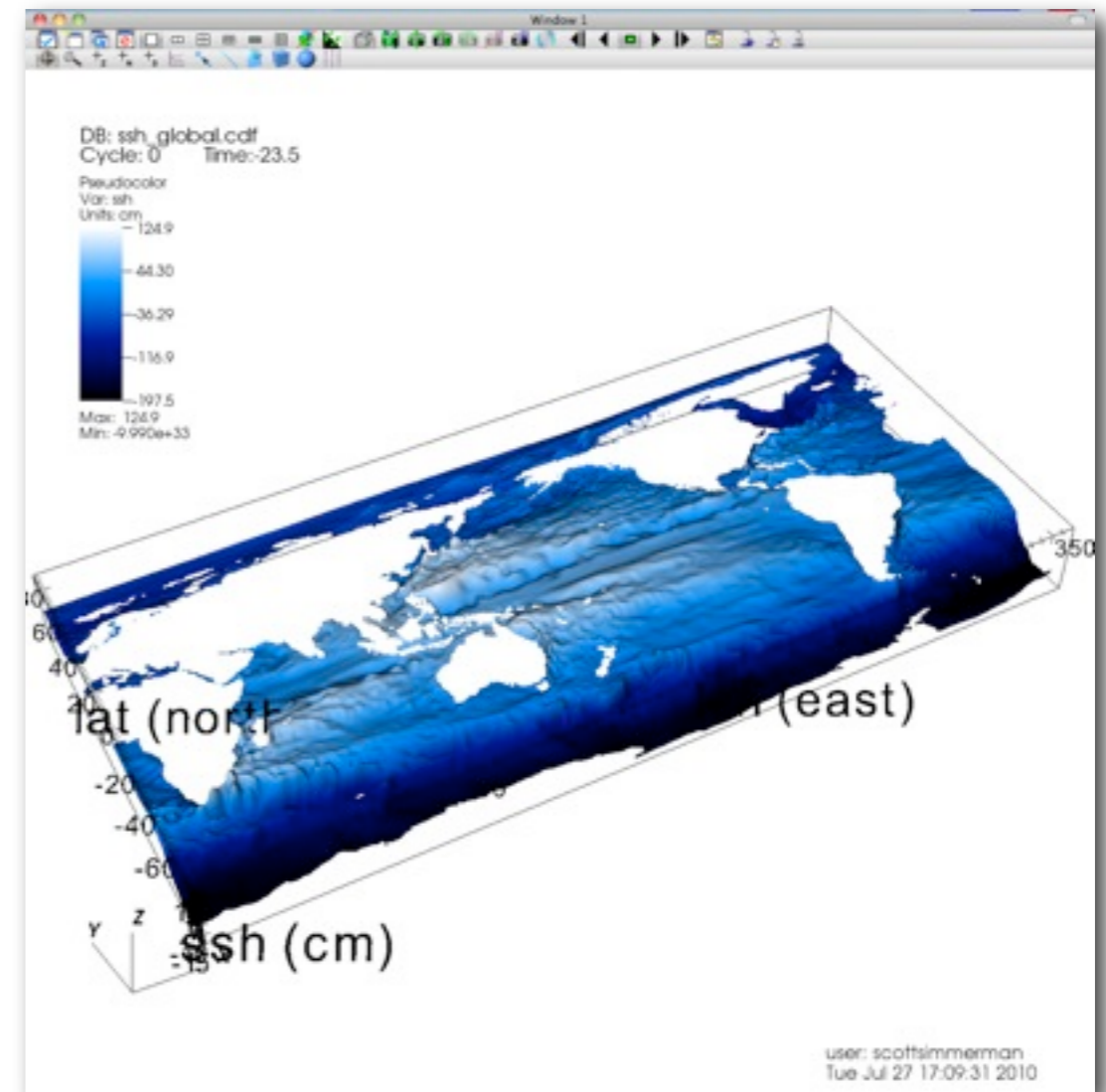
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



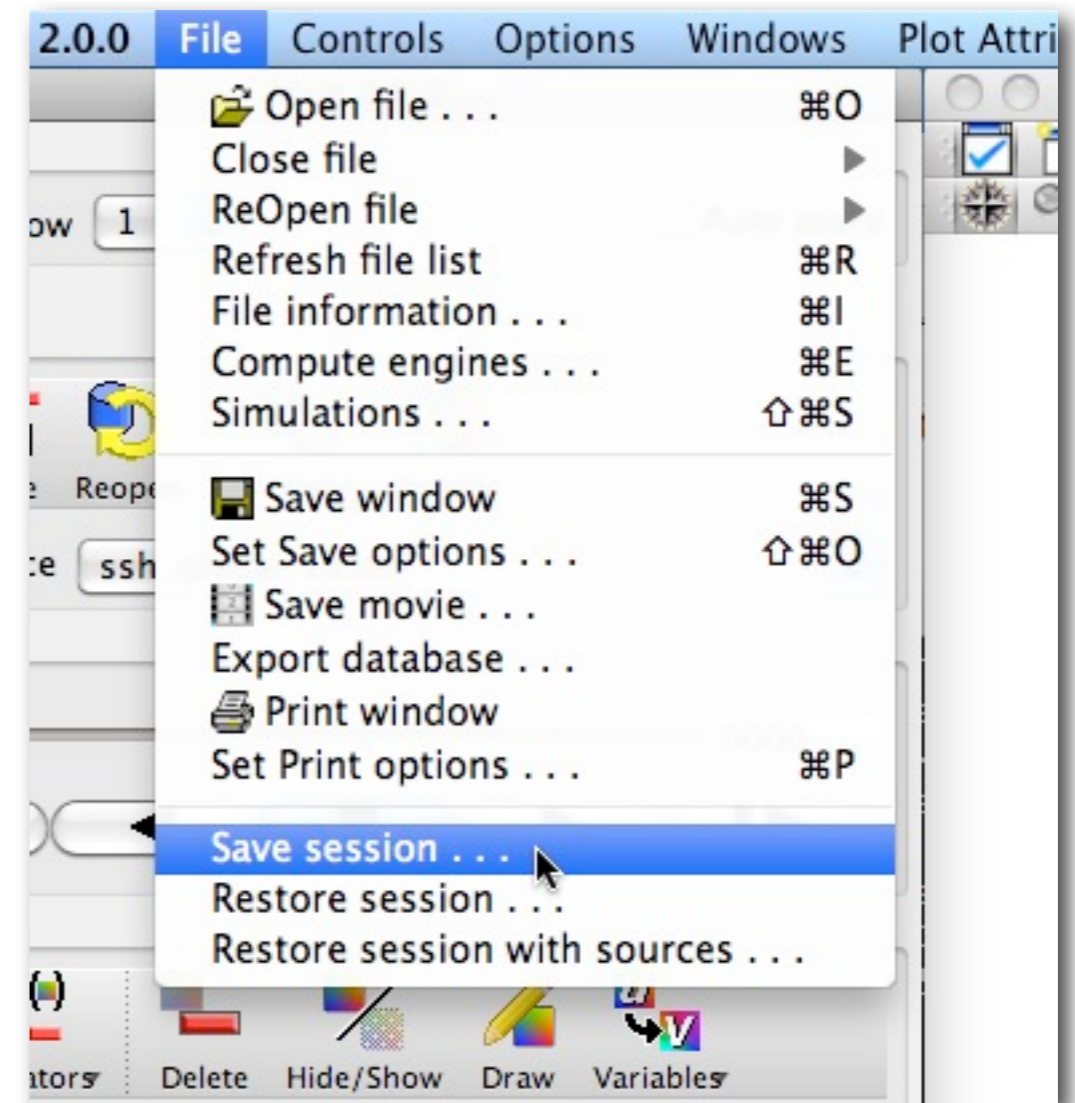
More Operators

- Operator->Transforms
->Elevate
- Click 'Draw'
- Operator->Transforms
->Transform
- Double-click 'Transform'
- Scale Z axis, Apply
- Click 'Draw'



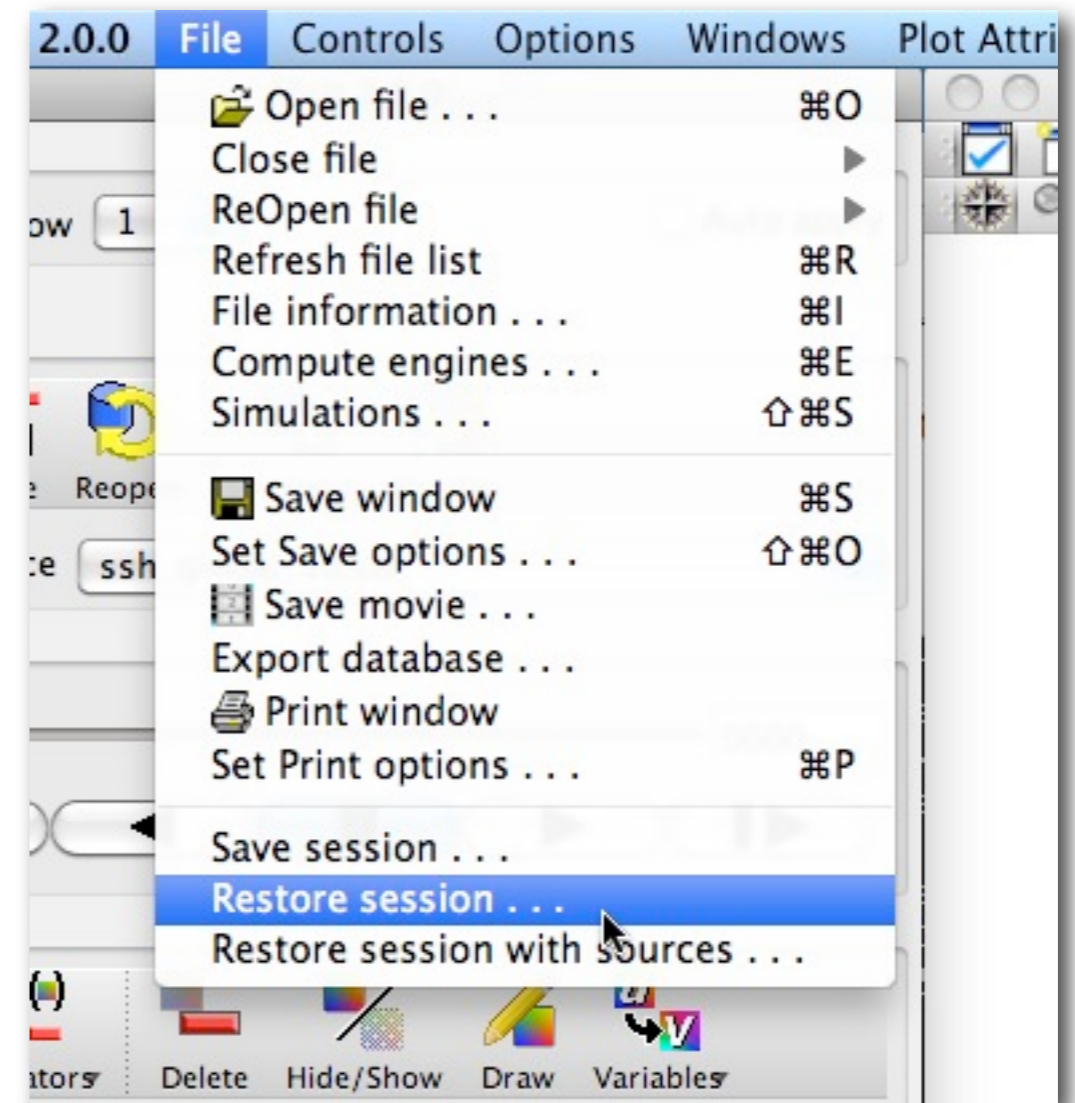
Sessions

- File->Save Session
- File->Restore Session



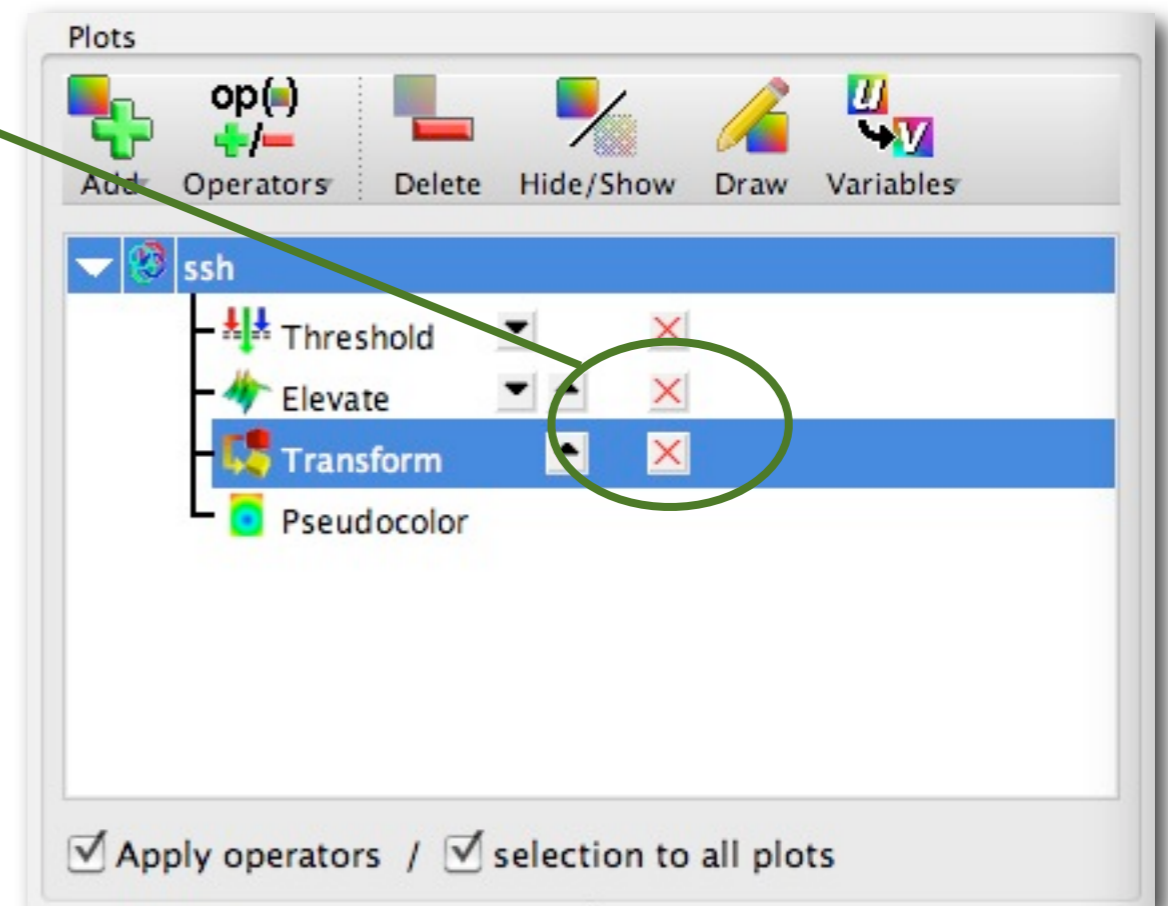
Sessions

- File->Save Session
- File->Restore Session



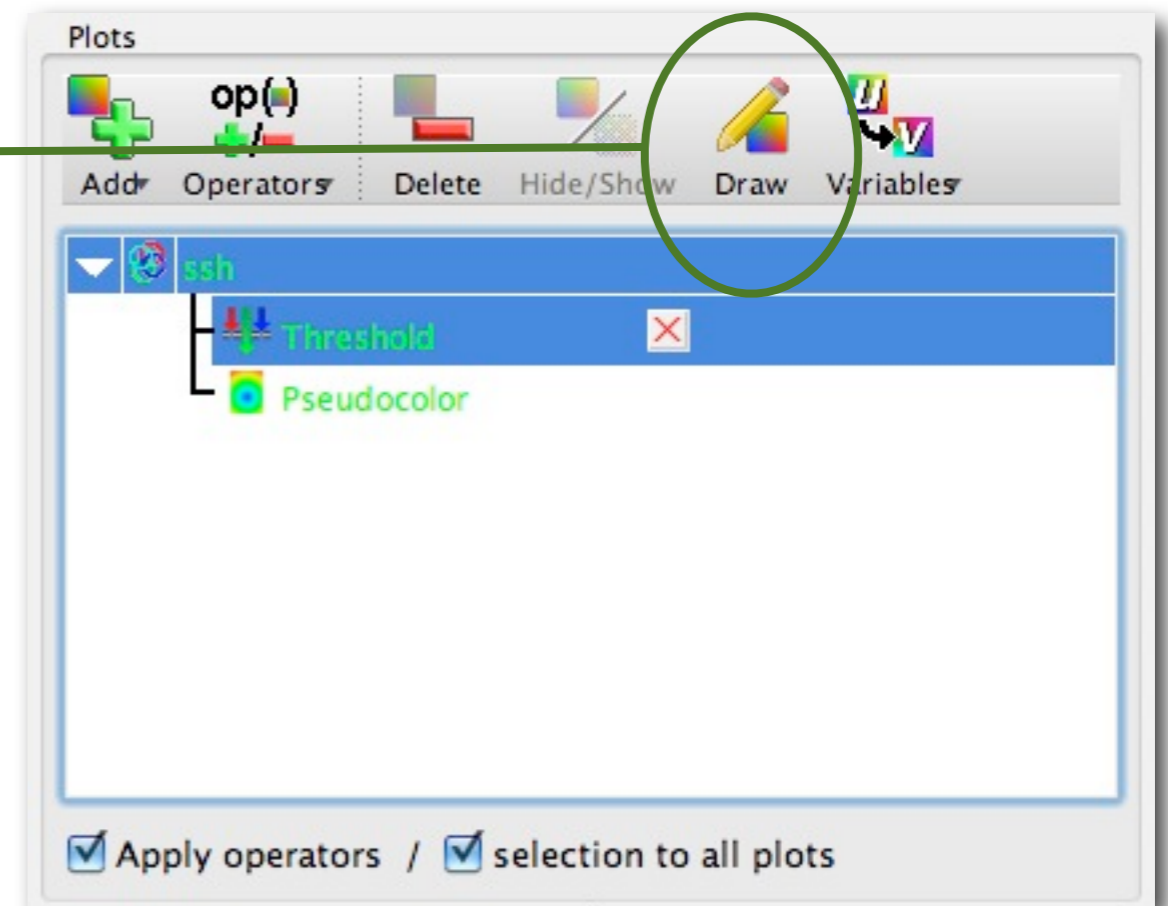
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



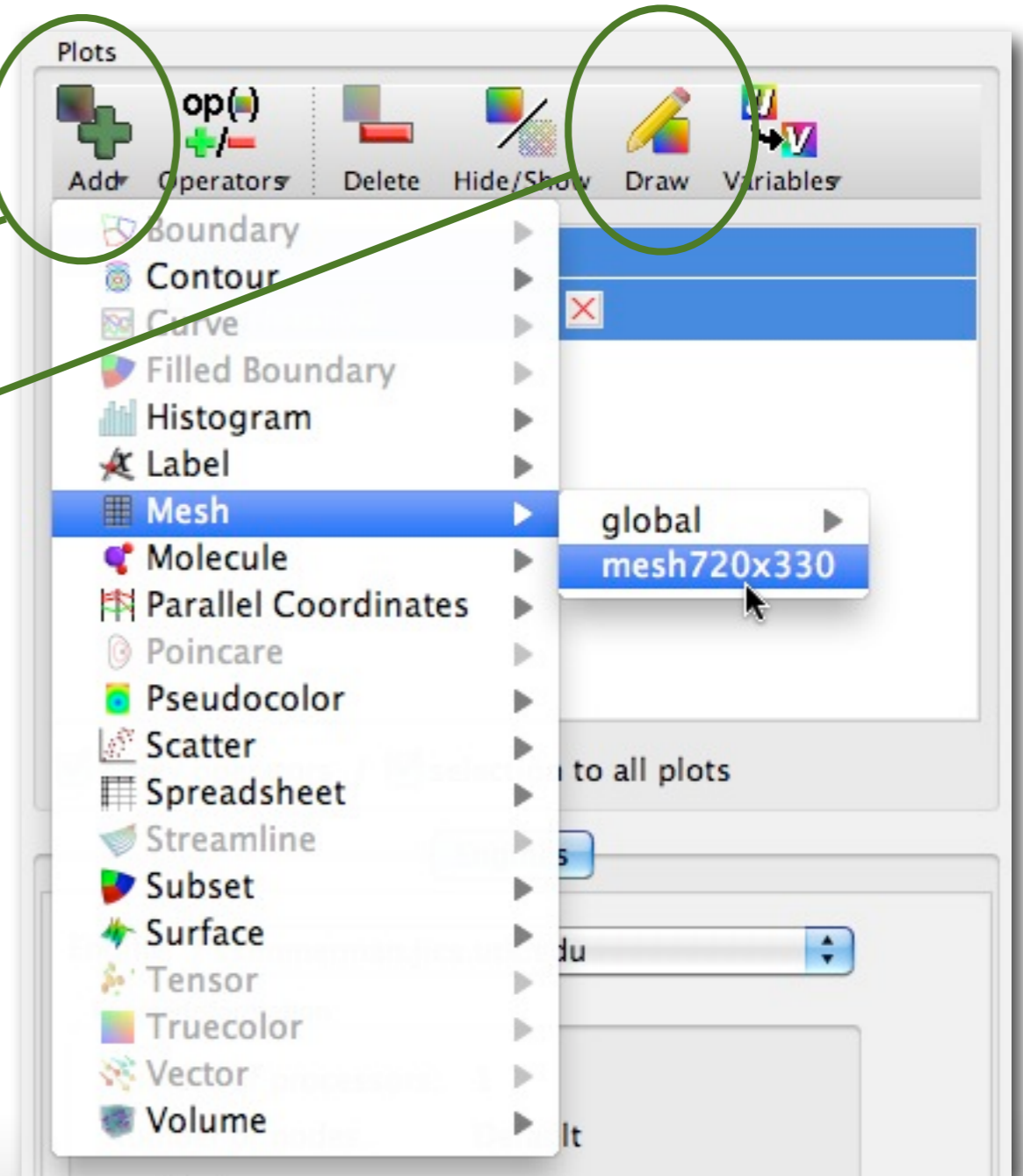
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



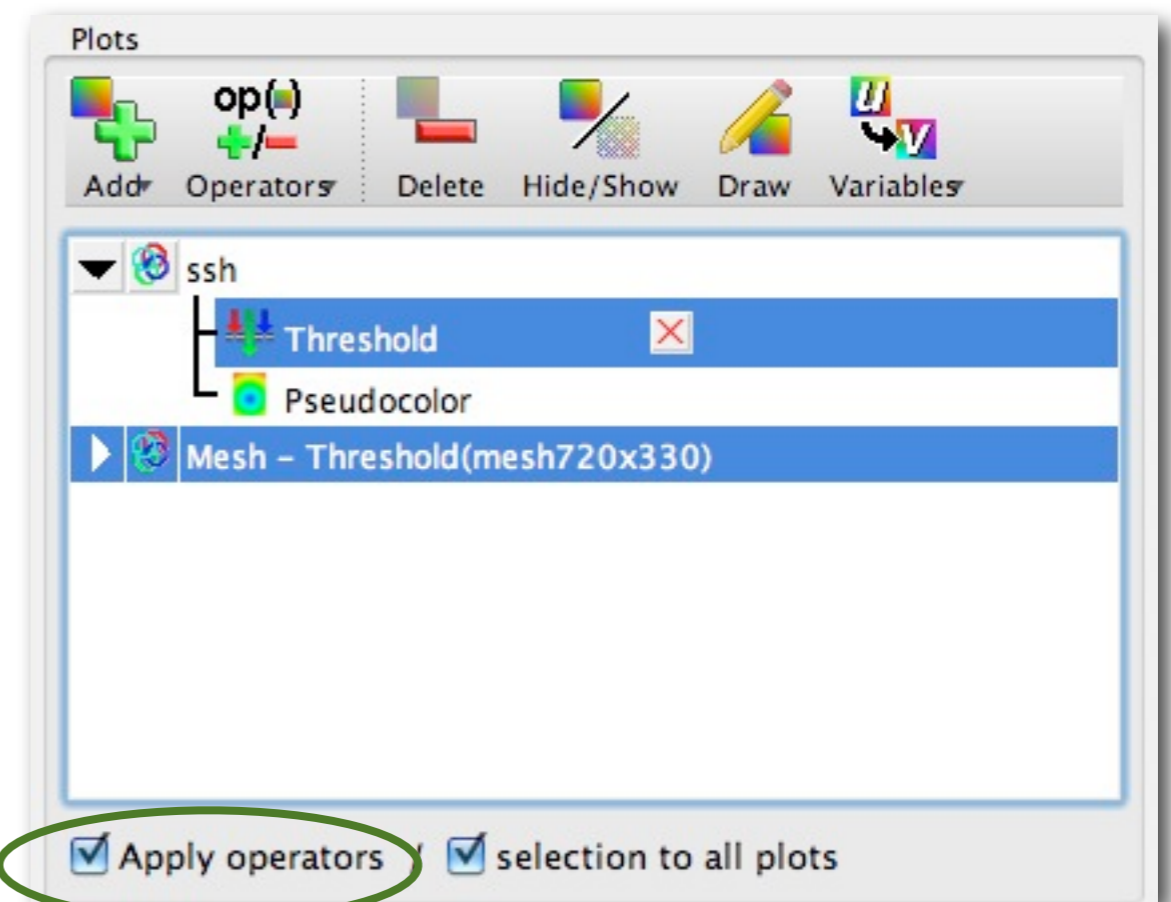
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



Picks

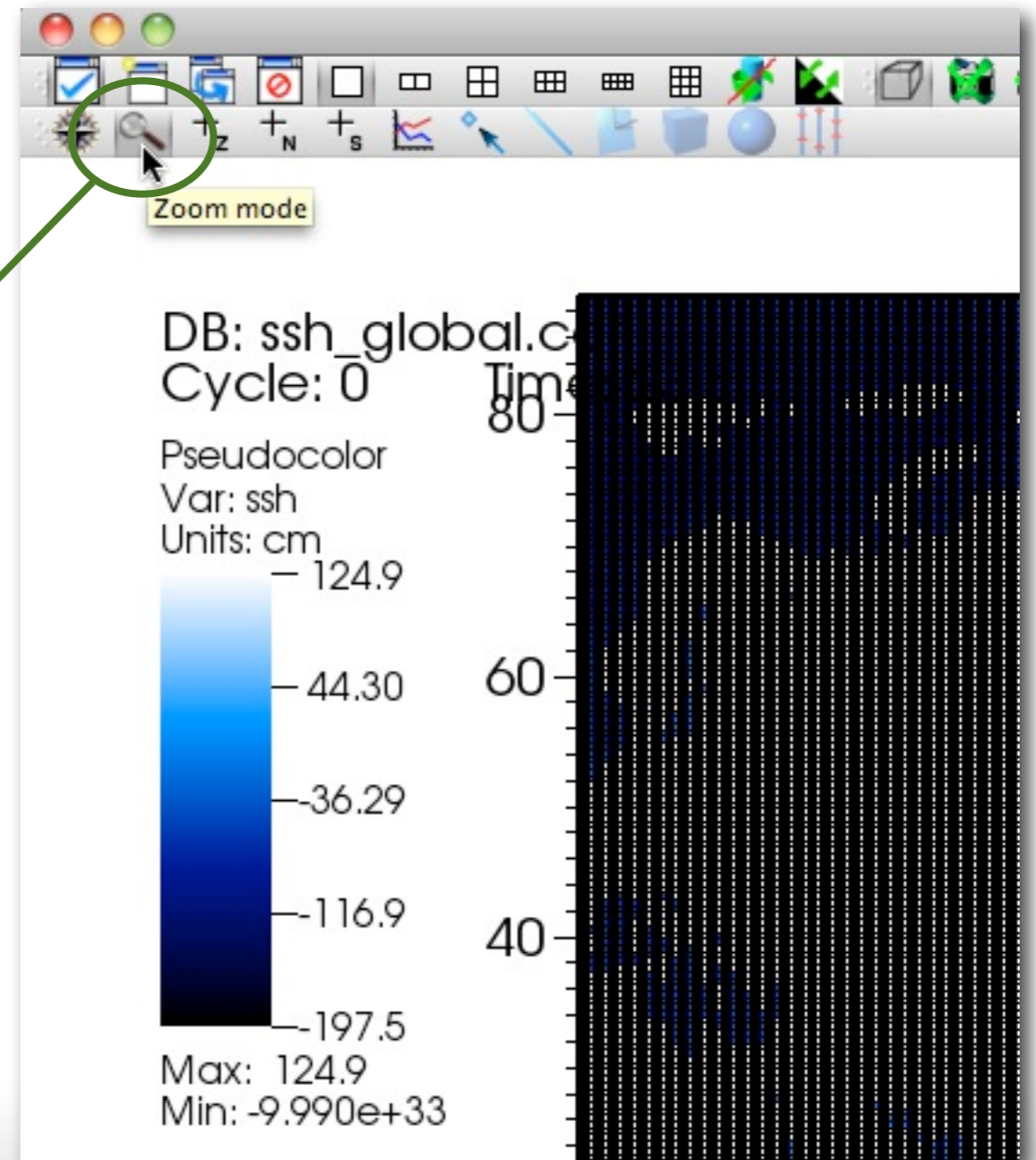
- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



Uncheck 'Apply ops. to all plots'

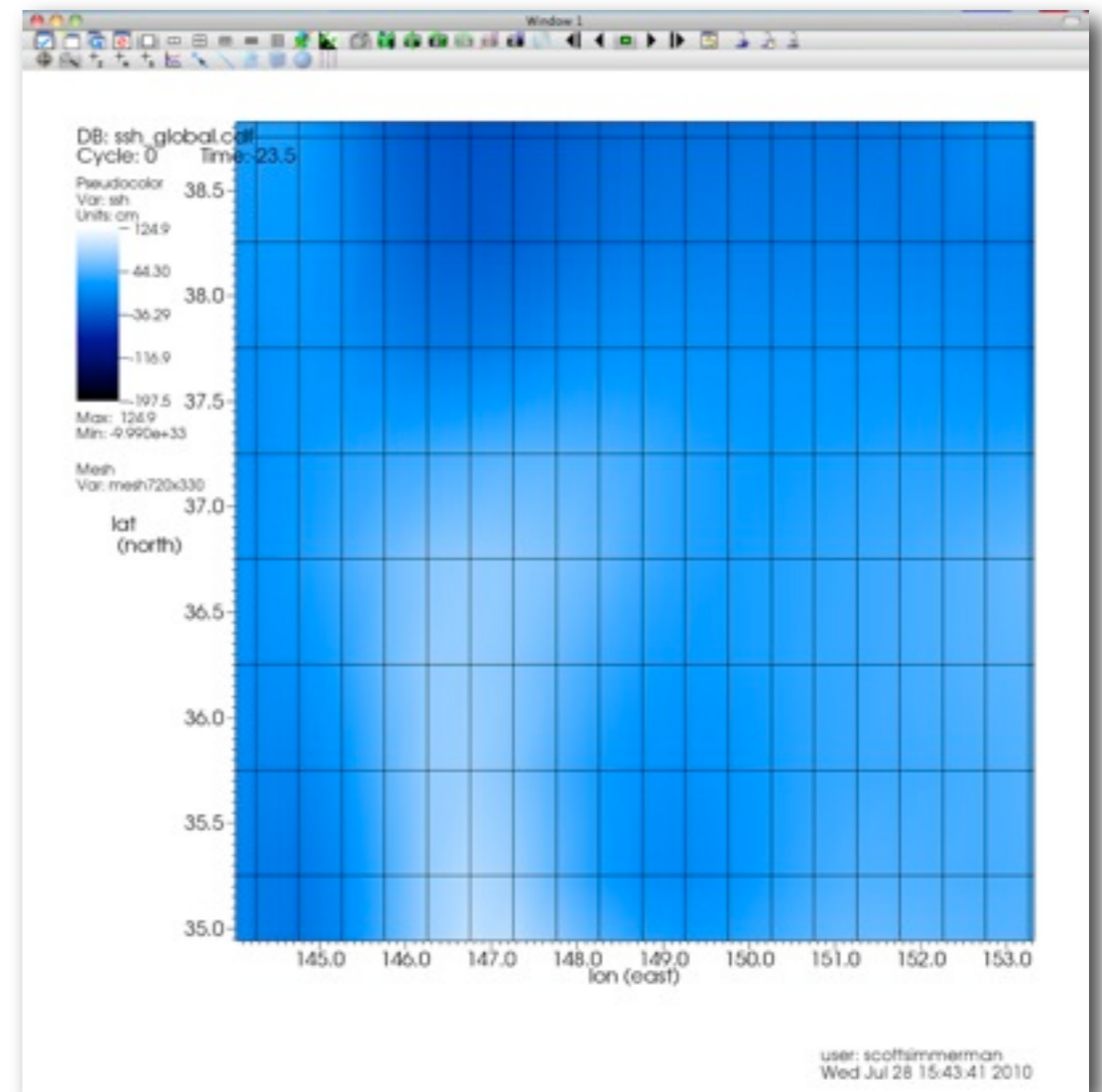
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- **Select Zoom mode**
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



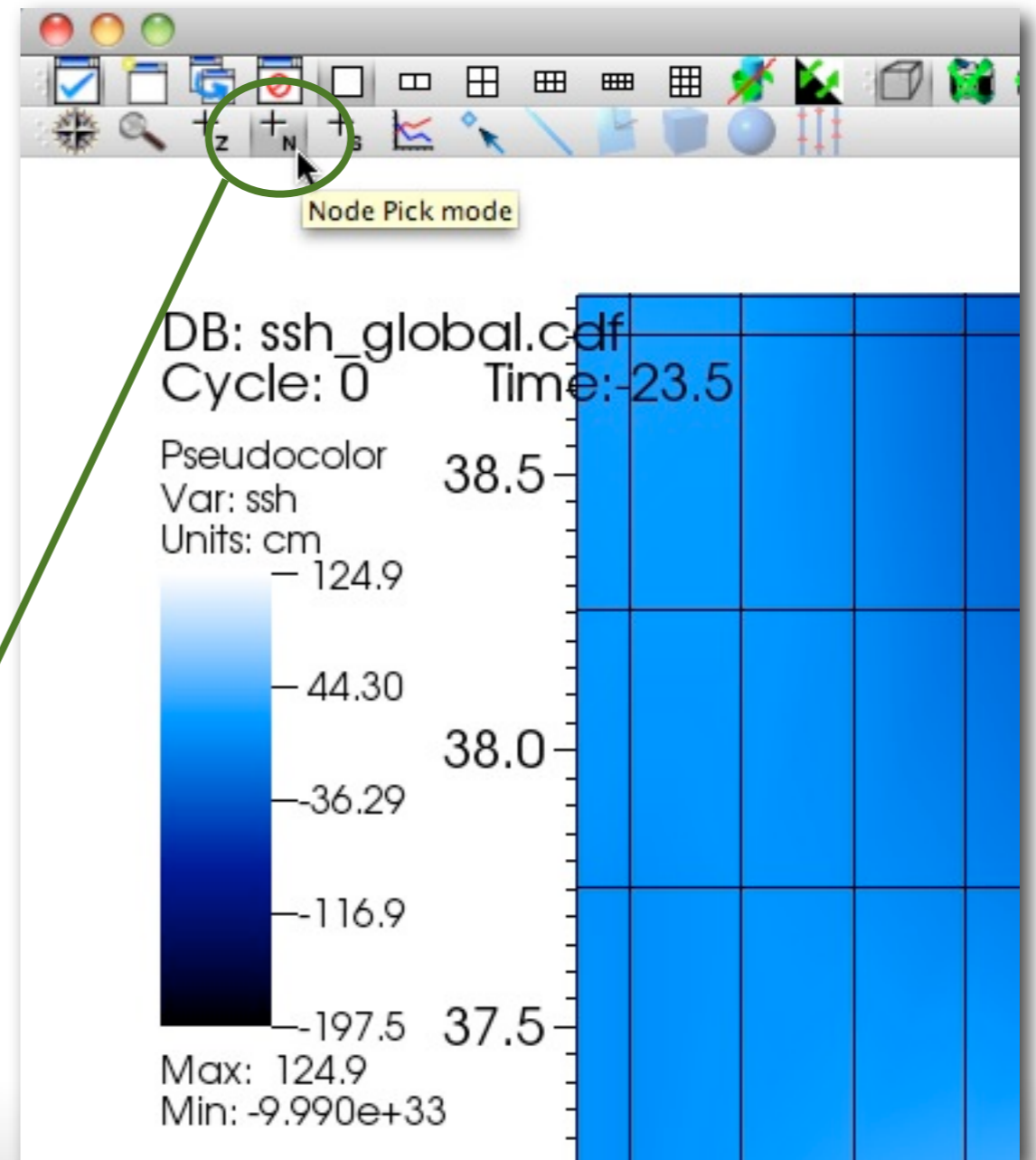
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



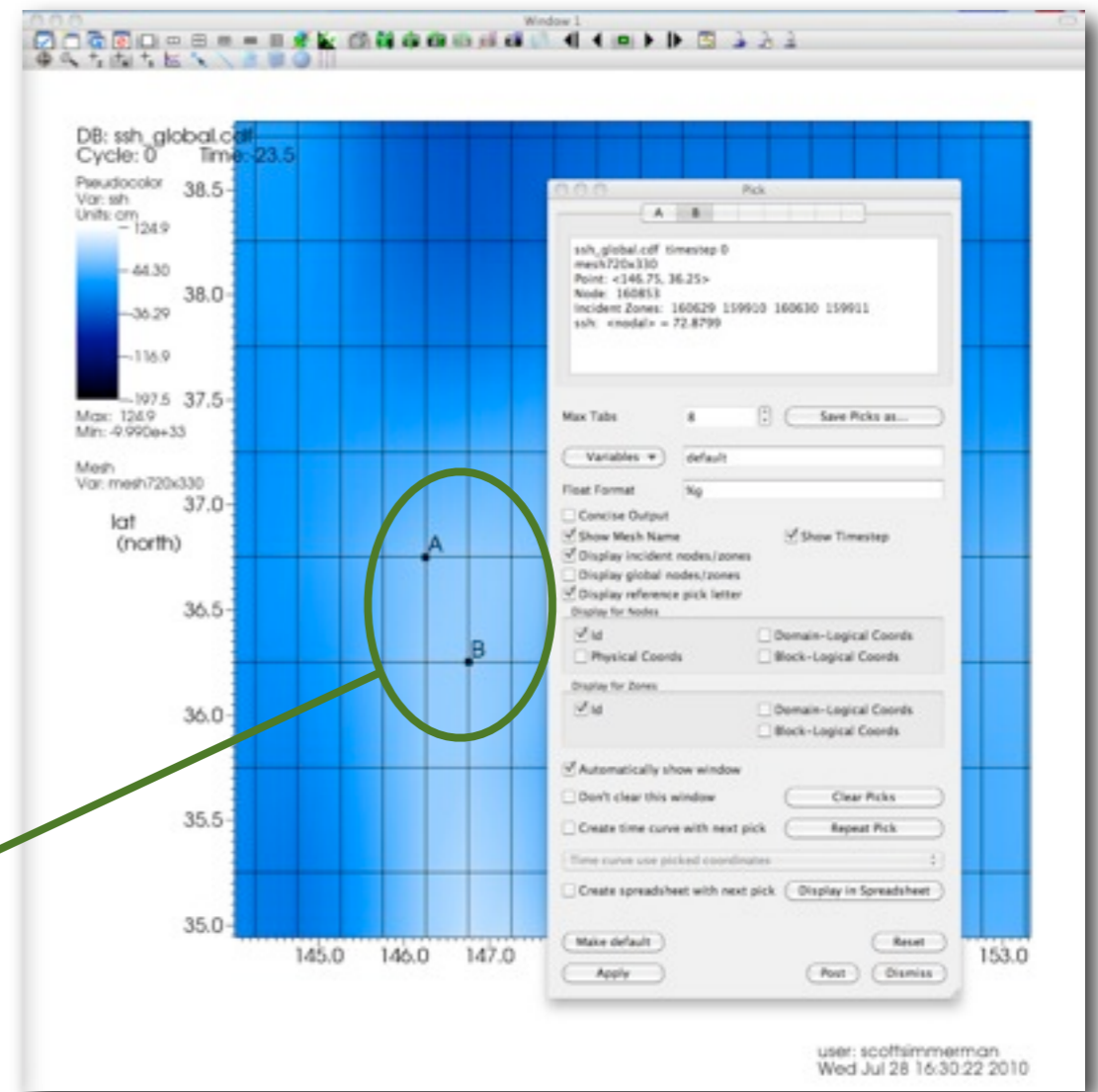
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- **Select Node Pick mode**
- Click on nodes
- Try Zone Pick mode



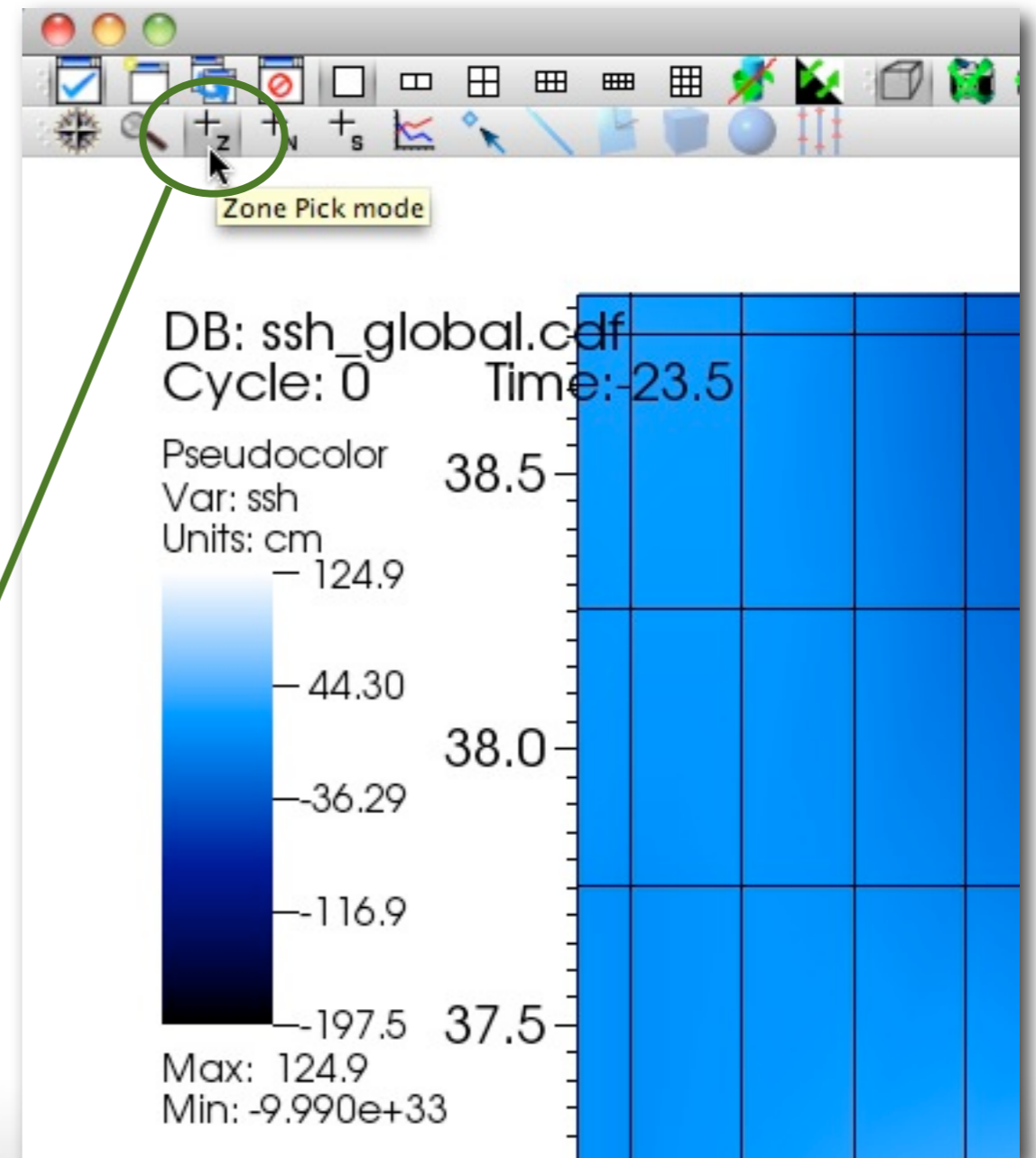
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



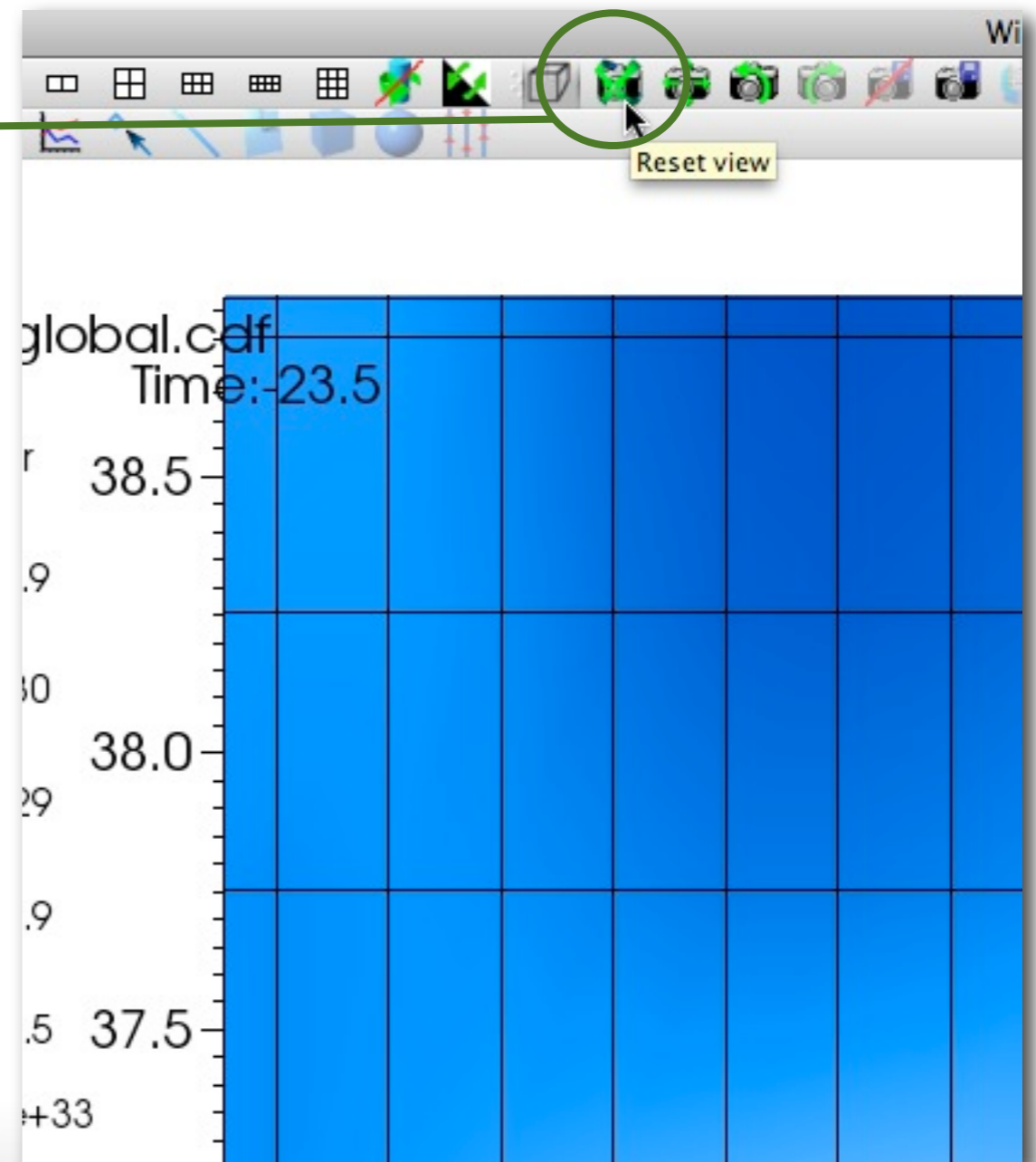
Picks

- Delete Transform, Elevate
- Click 'Draw'
- Add Mesh plot, Draw
- Select Zoom mode
- Click & drag box to zoom
- Select Node Pick mode
- Click on nodes
- Try Zone Pick mode



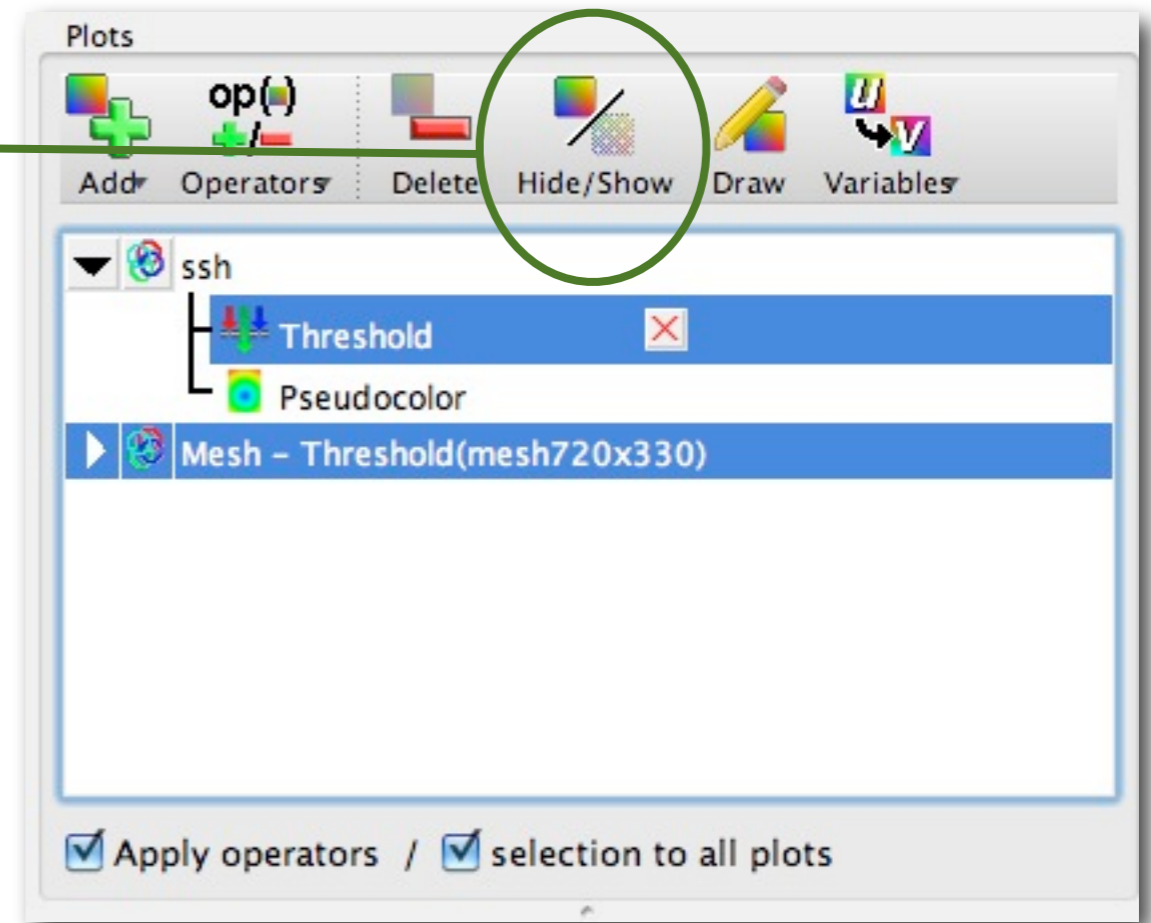
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



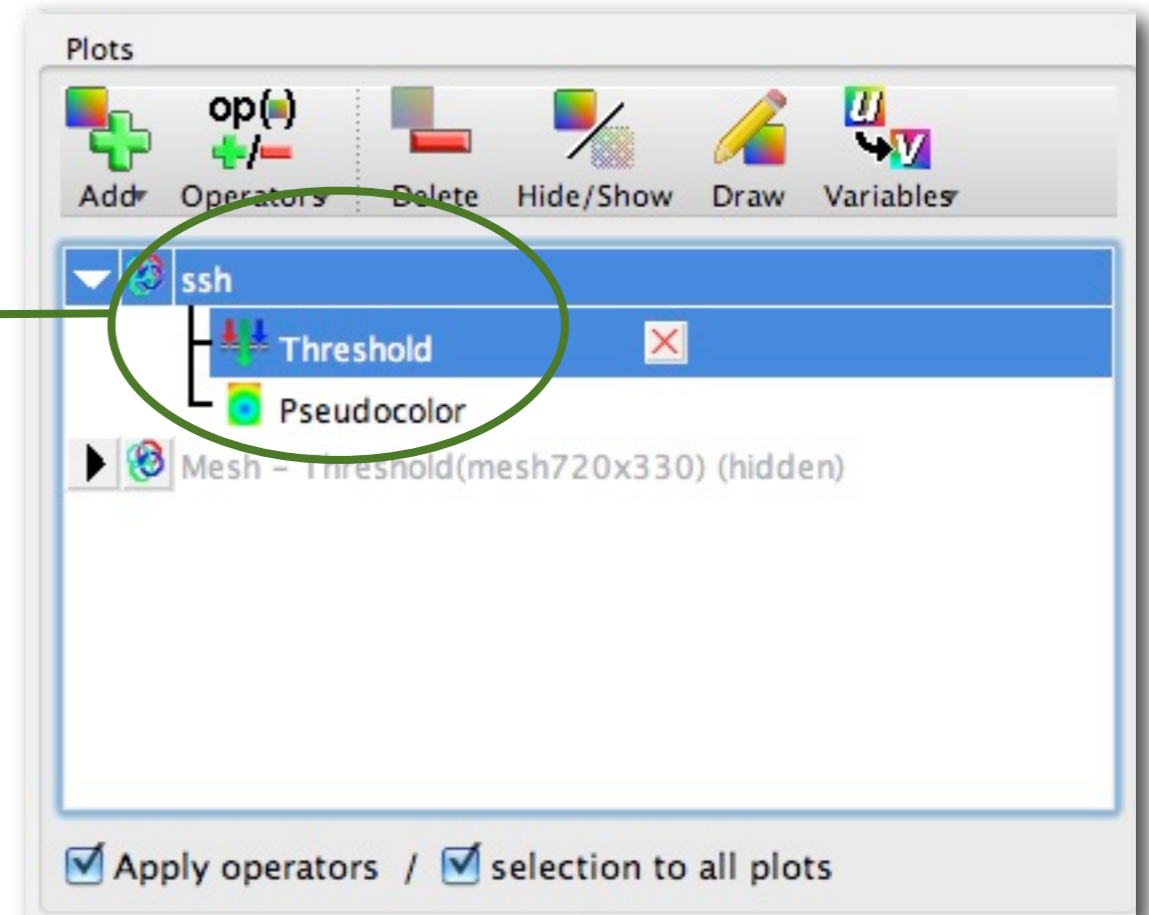
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



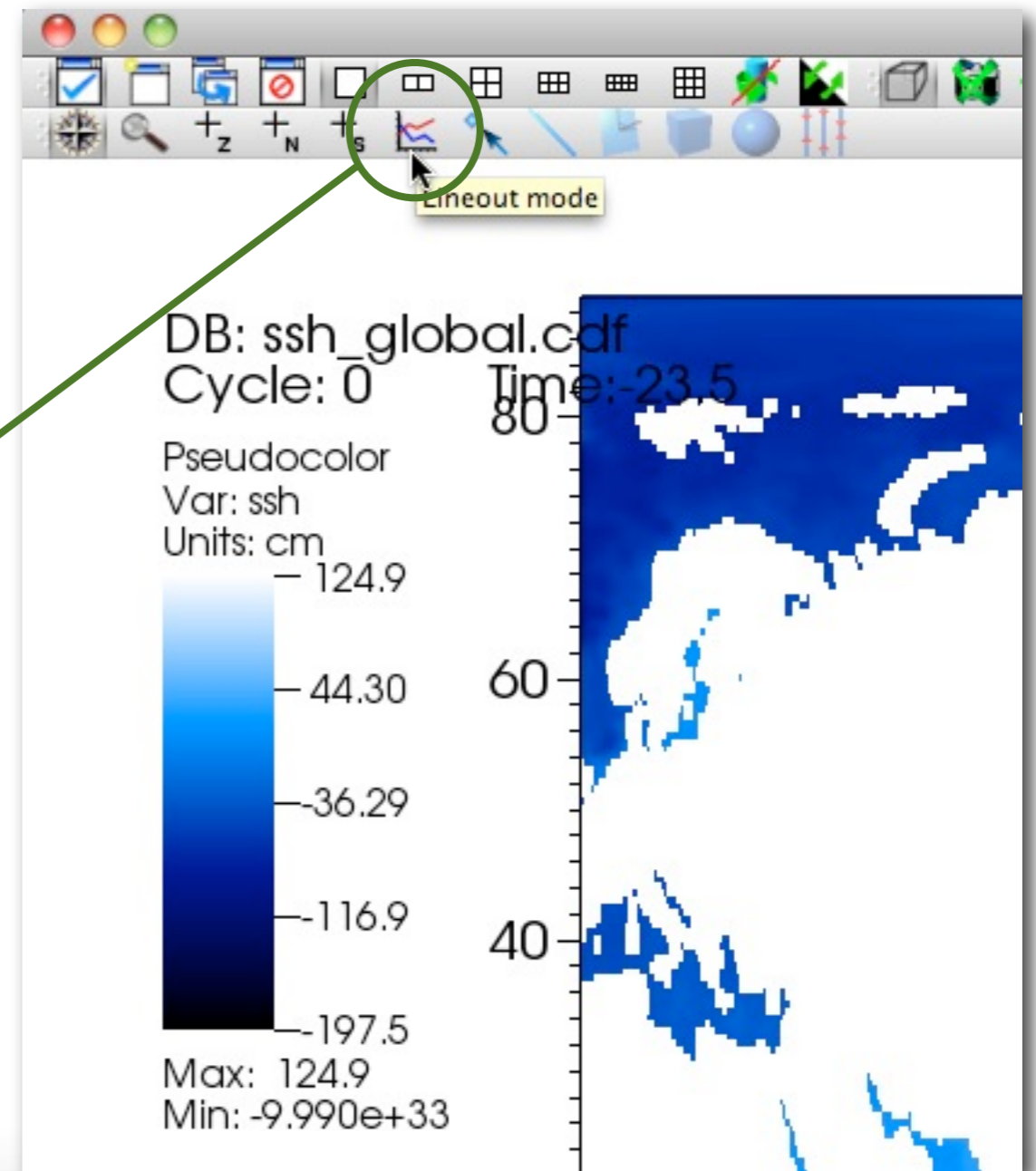
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



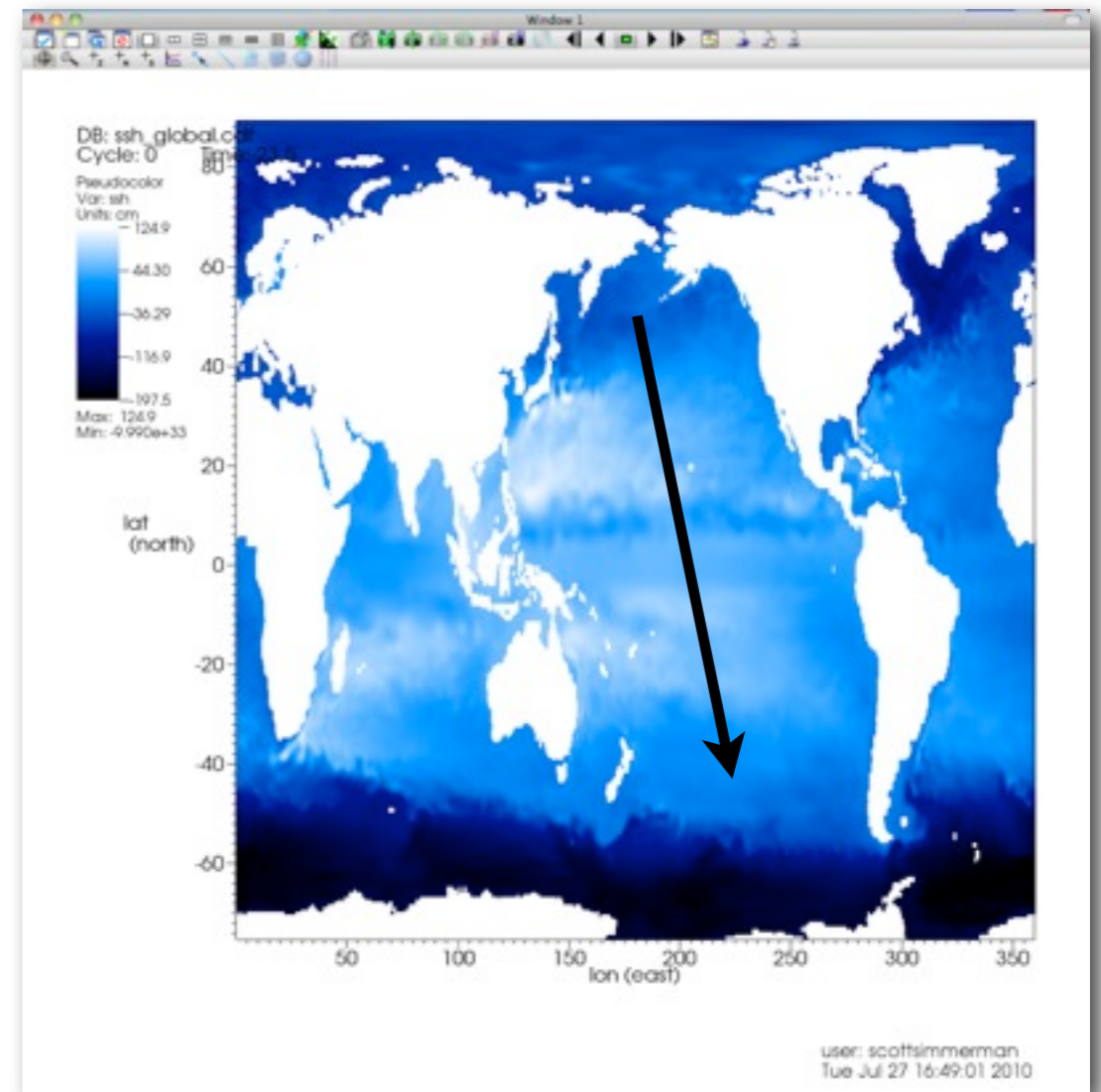
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



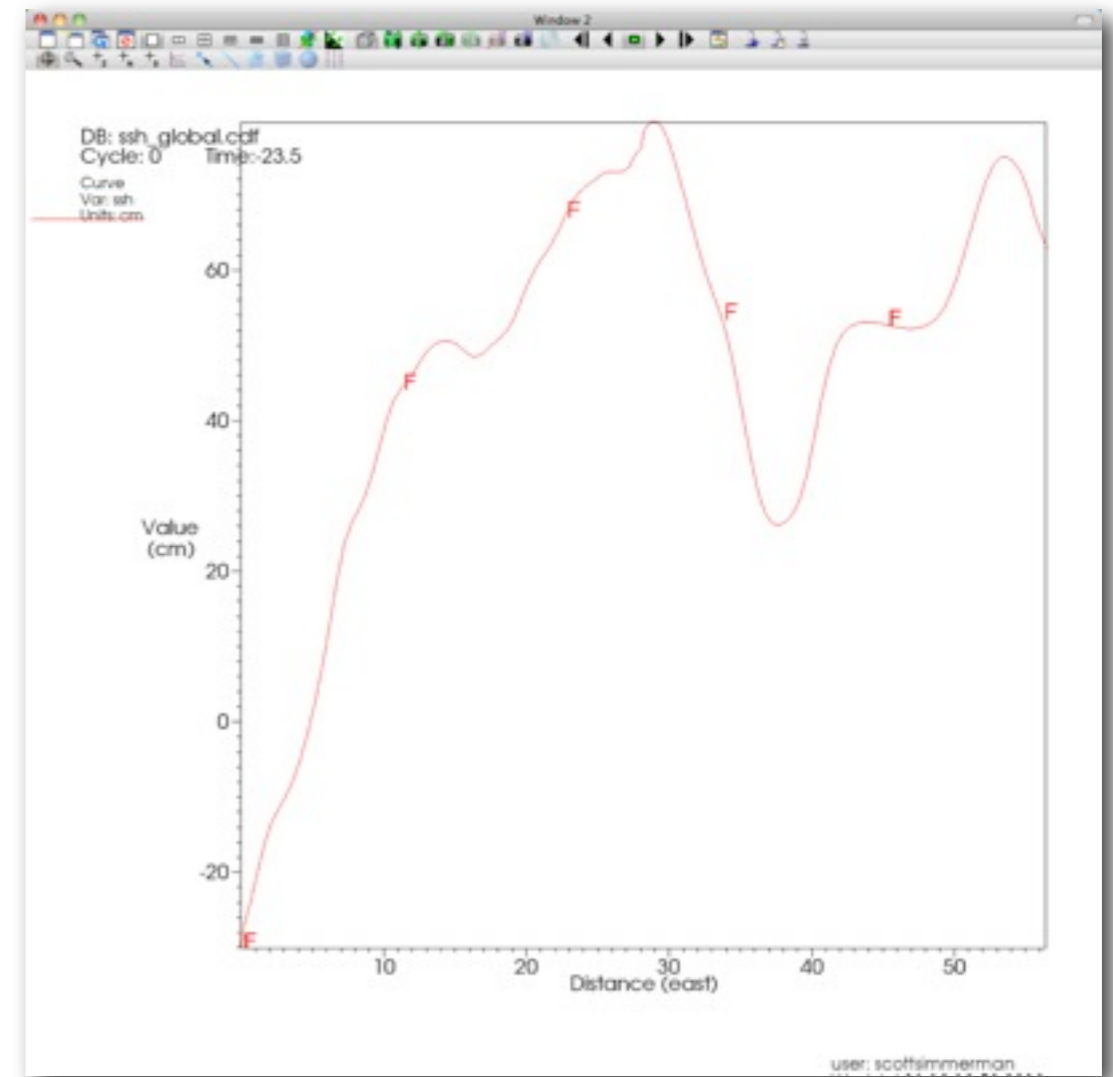
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



Lineouts

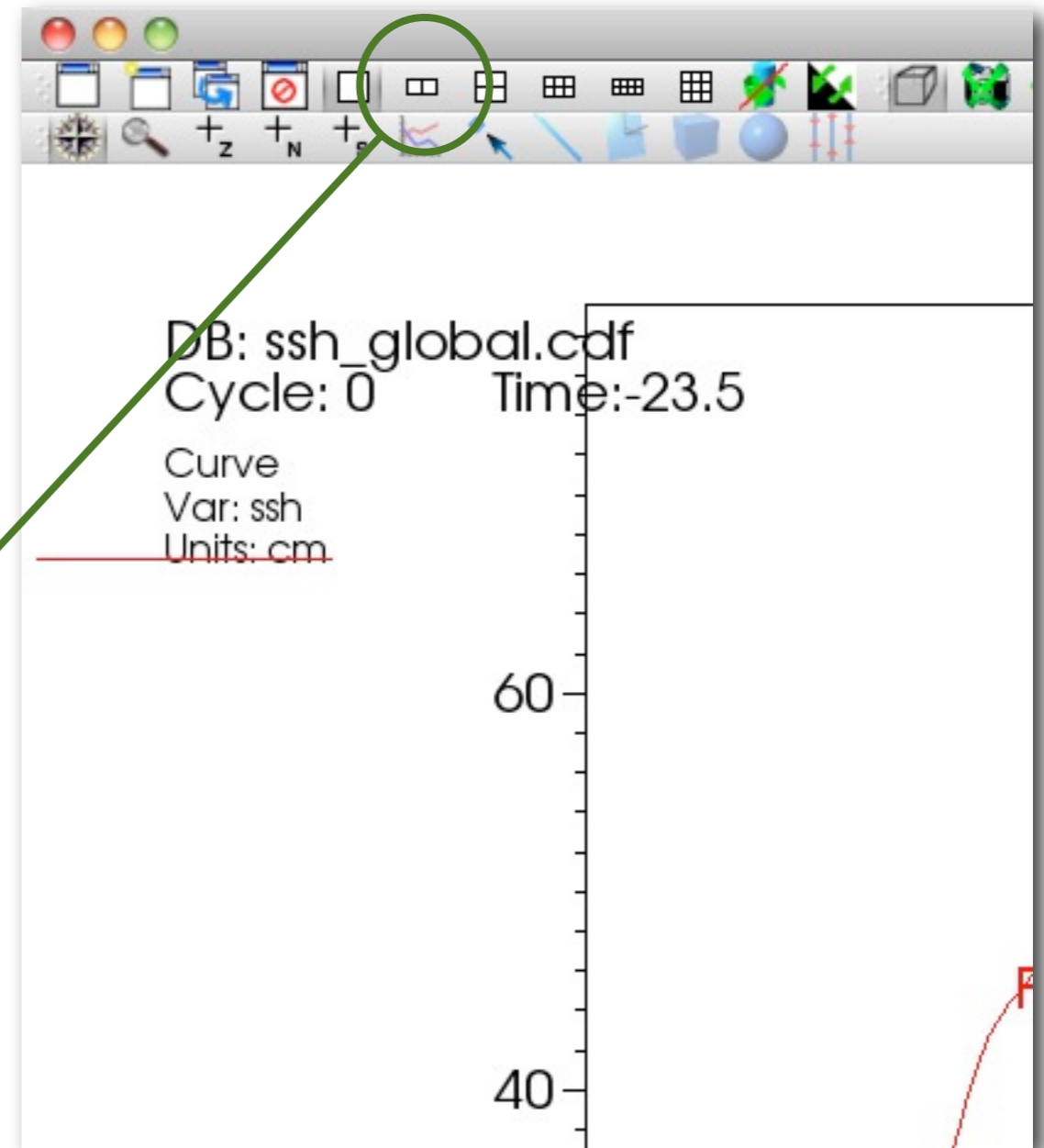
- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



Curve plot in new window

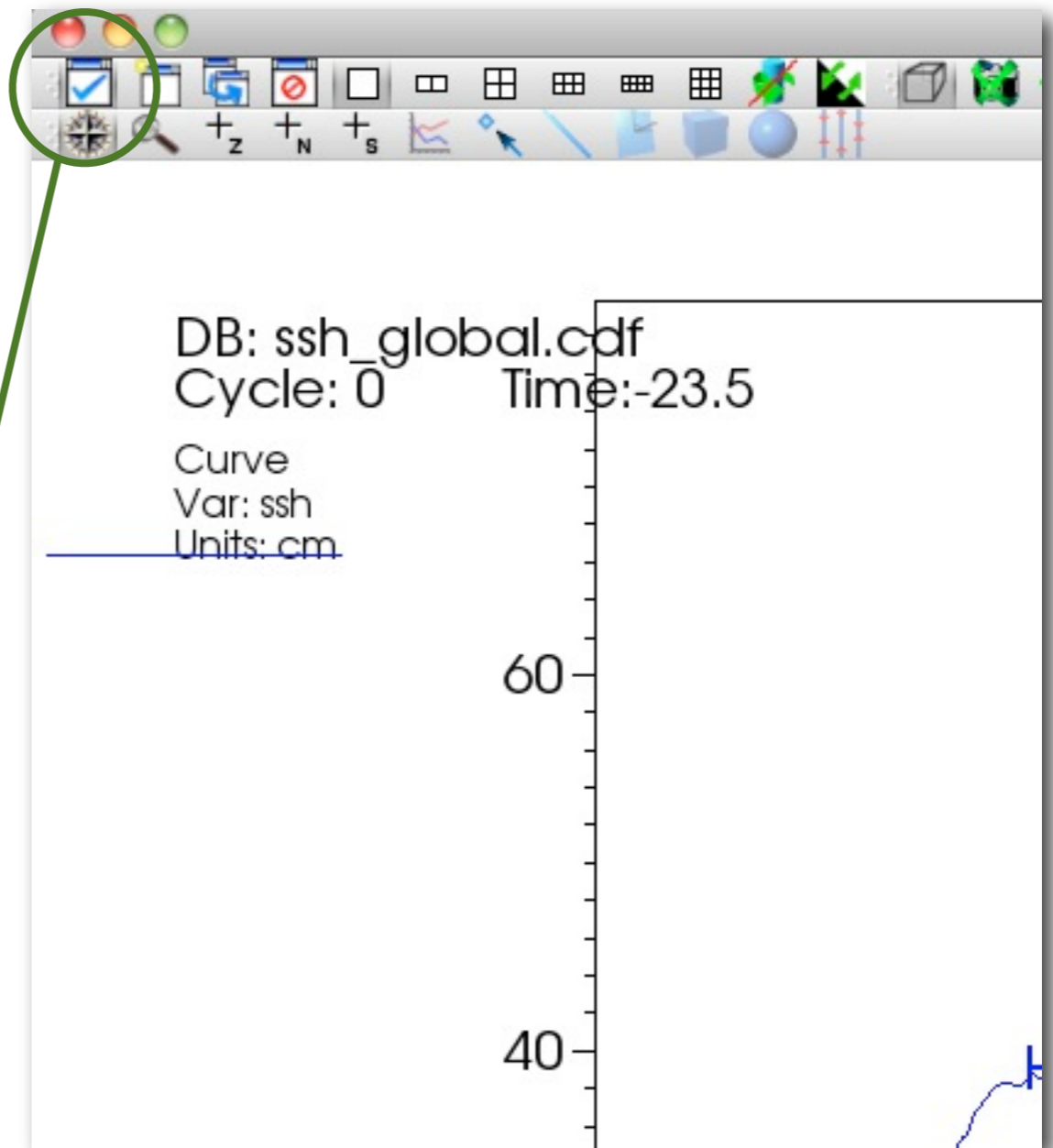
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



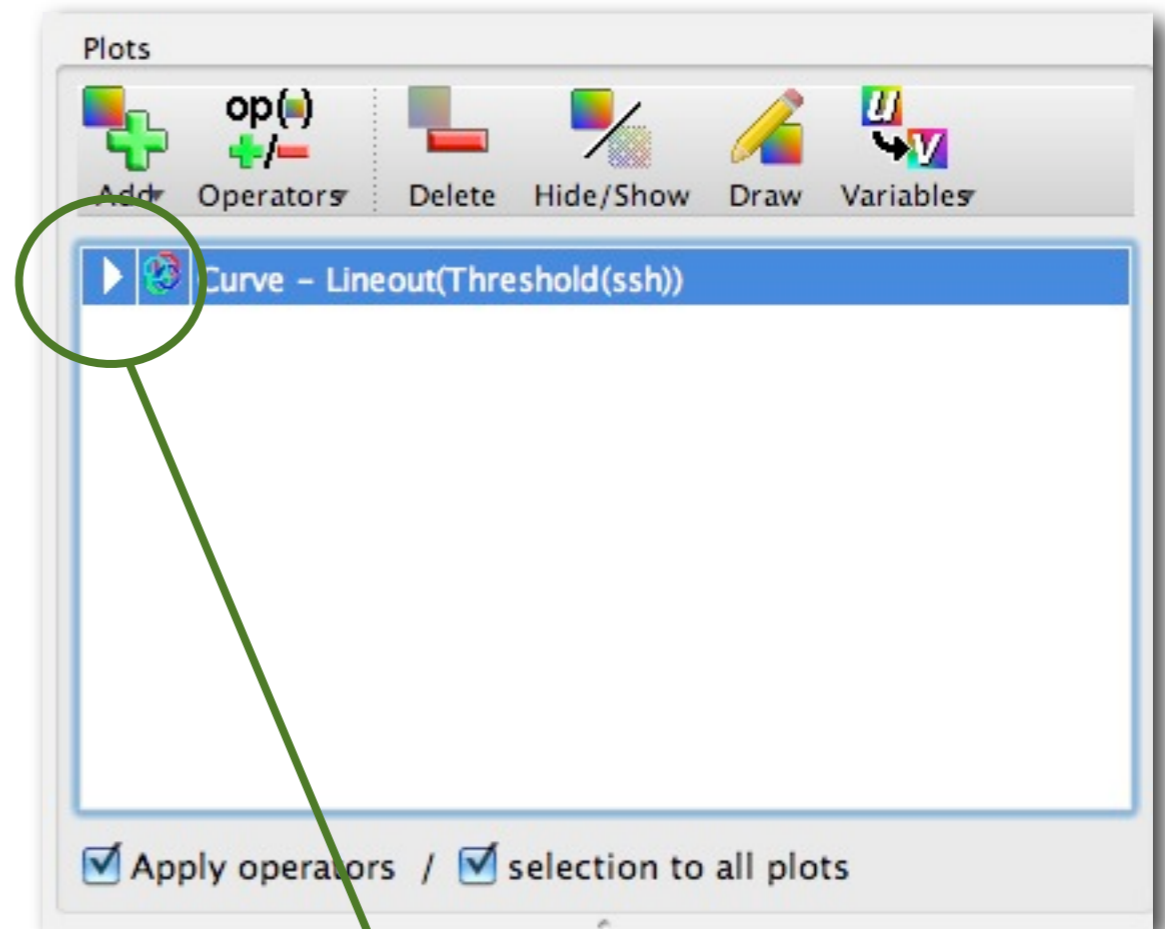
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



Lineouts

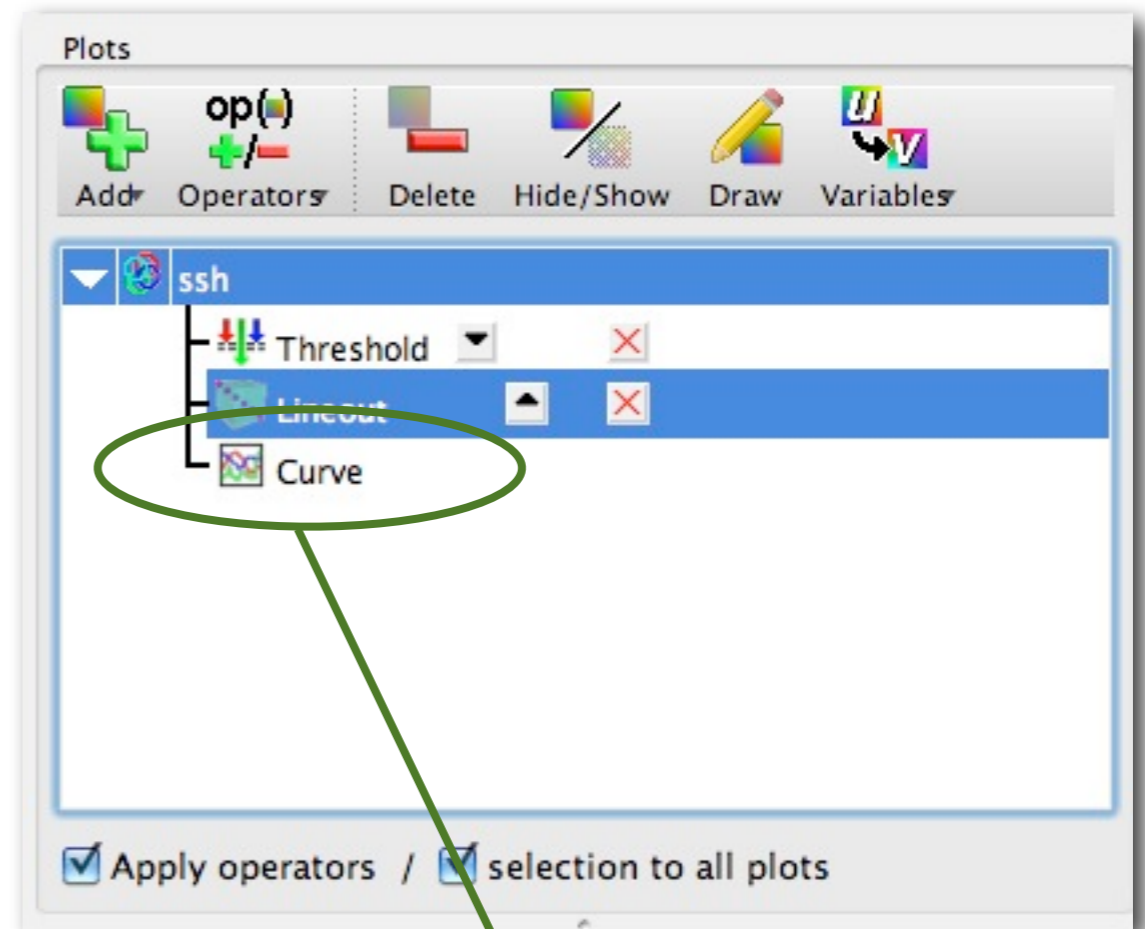
- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



Click triangle

Lineouts

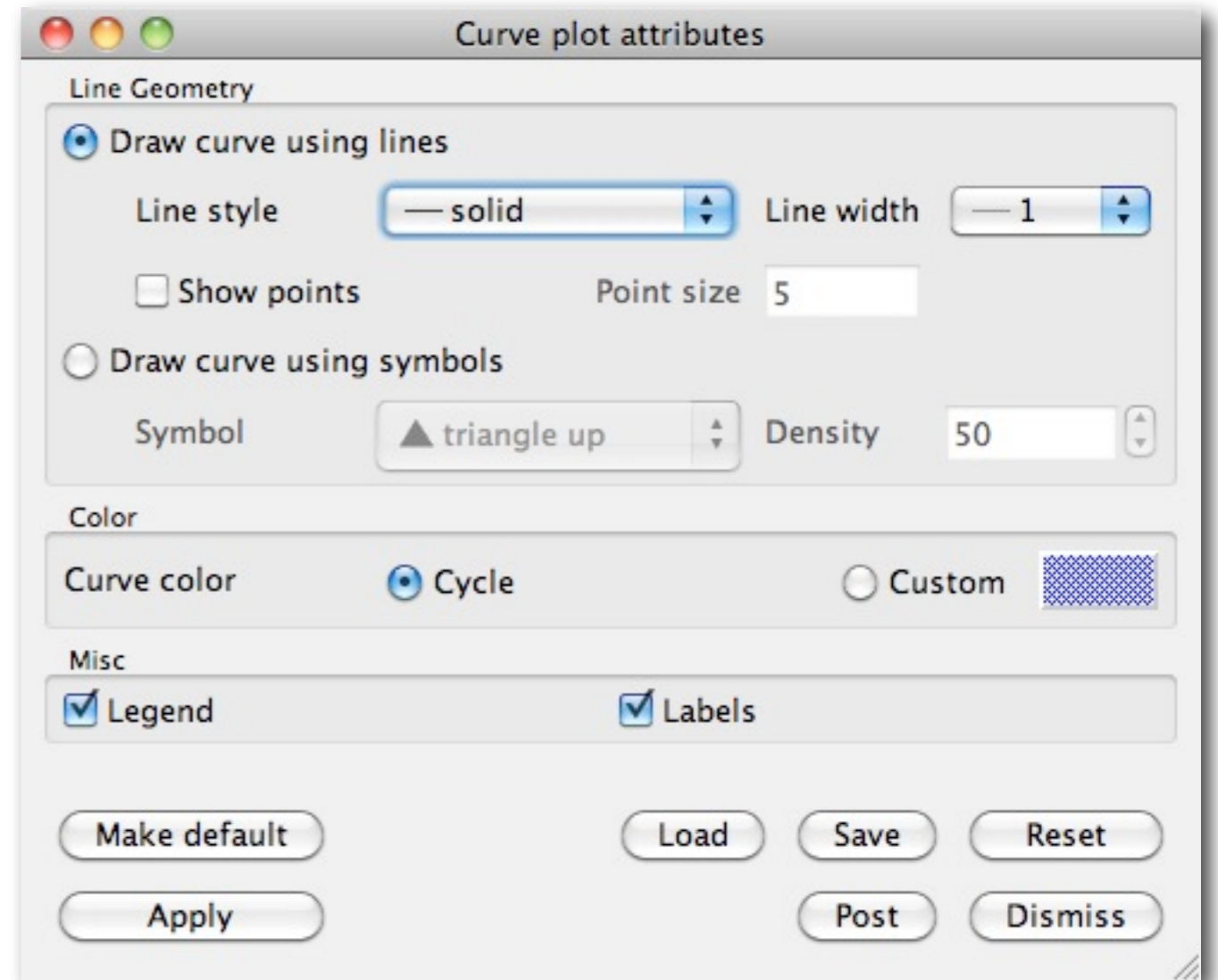
- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



Double-click on plot

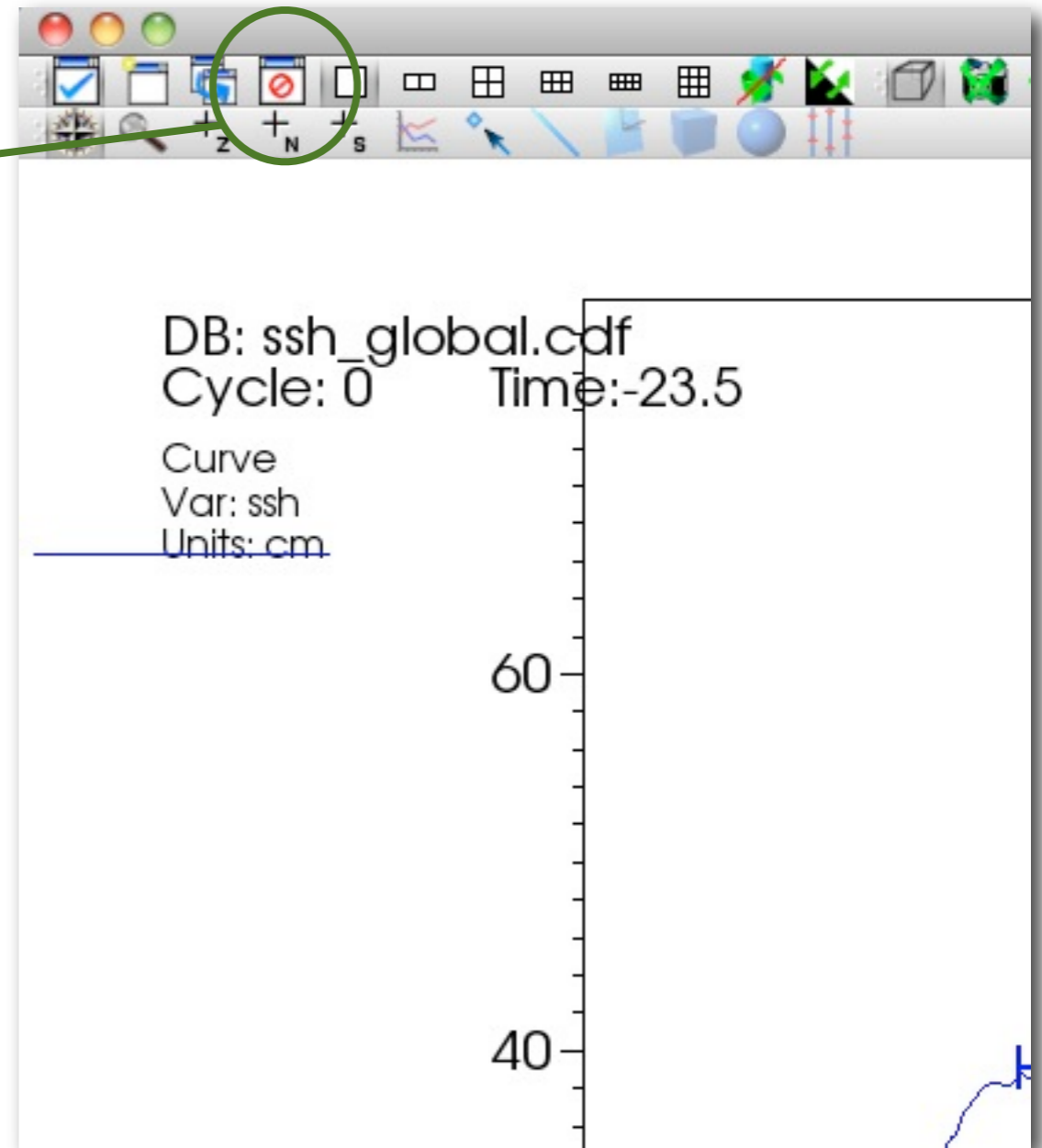
Lineouts

- Reset view
- Hide mesh plot
- Select Pseudocolor
- Select Lineout mode
- Click and drag line
- Click '1x2' layout
- Make window 2 active
- Change curve attributes



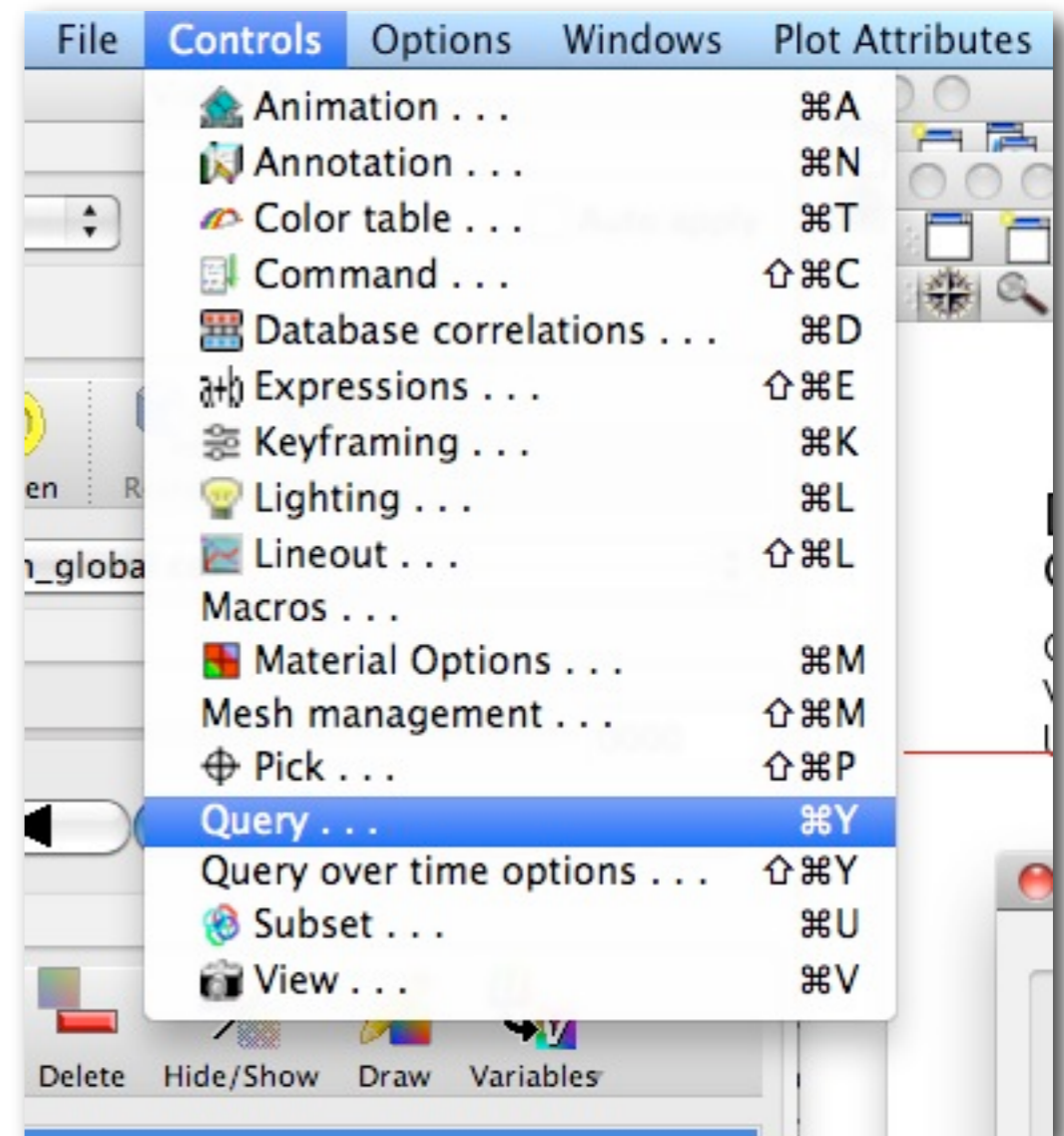
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



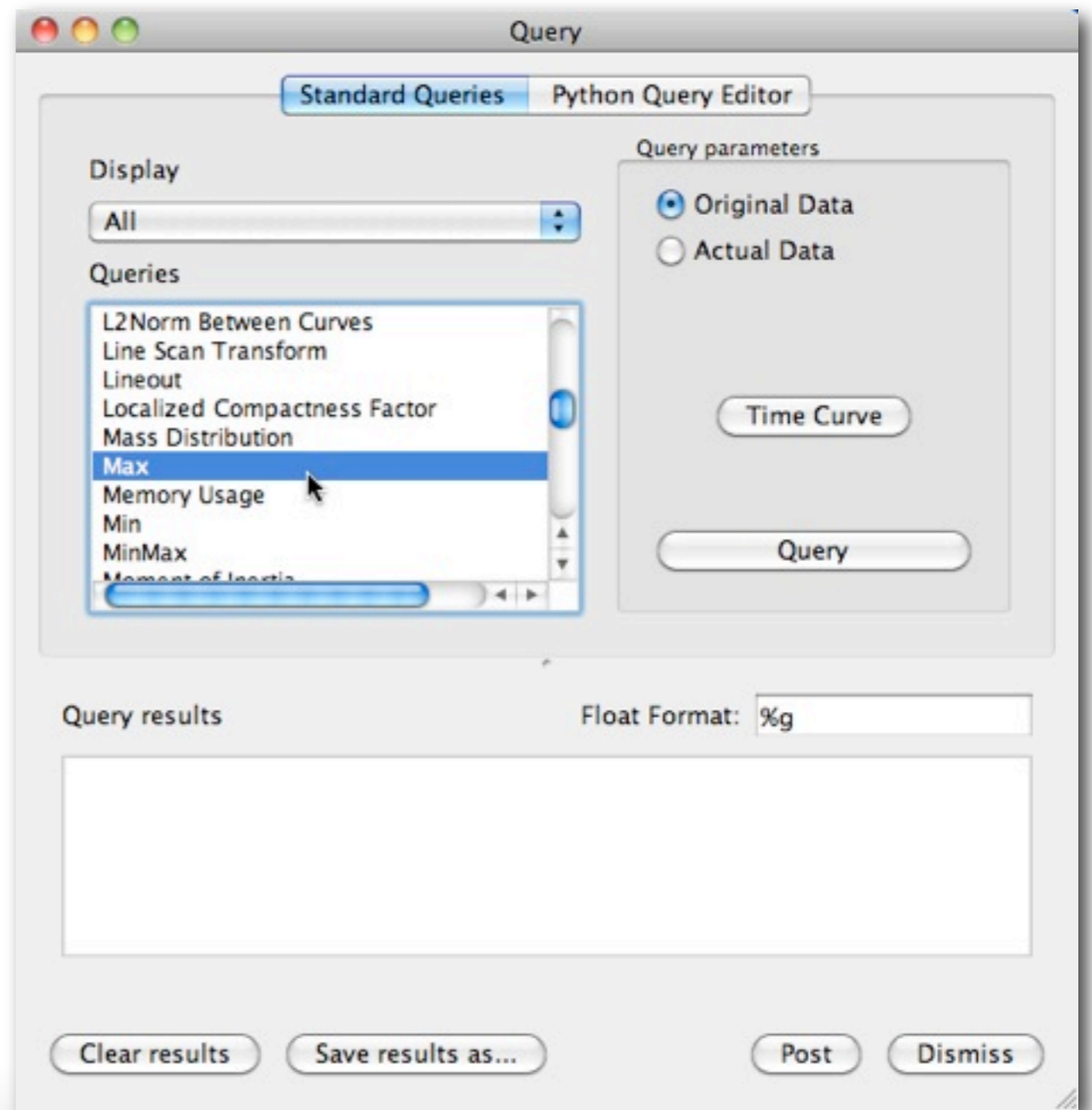
Queries

- Delete Curve plot
- **Controls->Query**
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



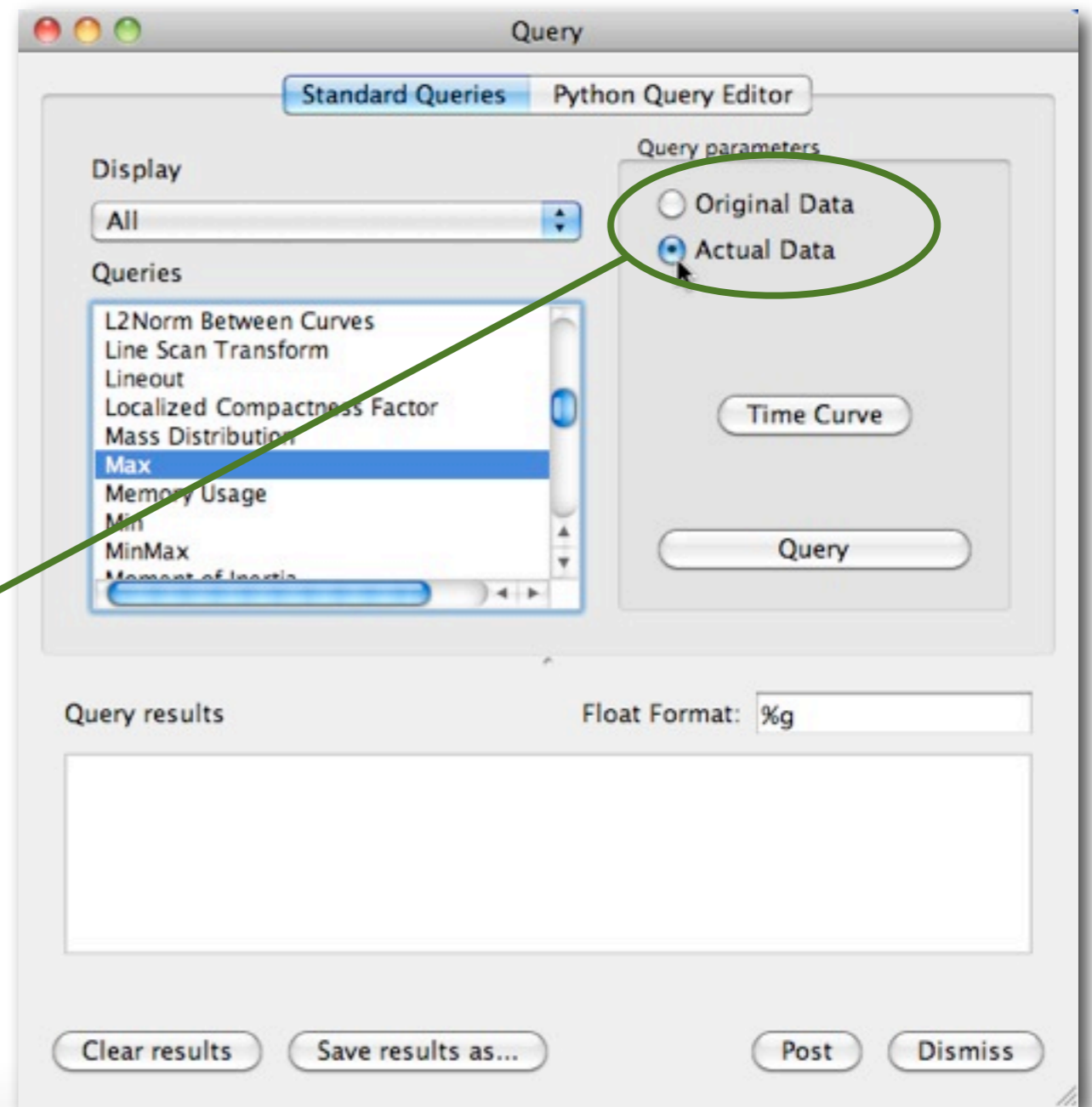
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



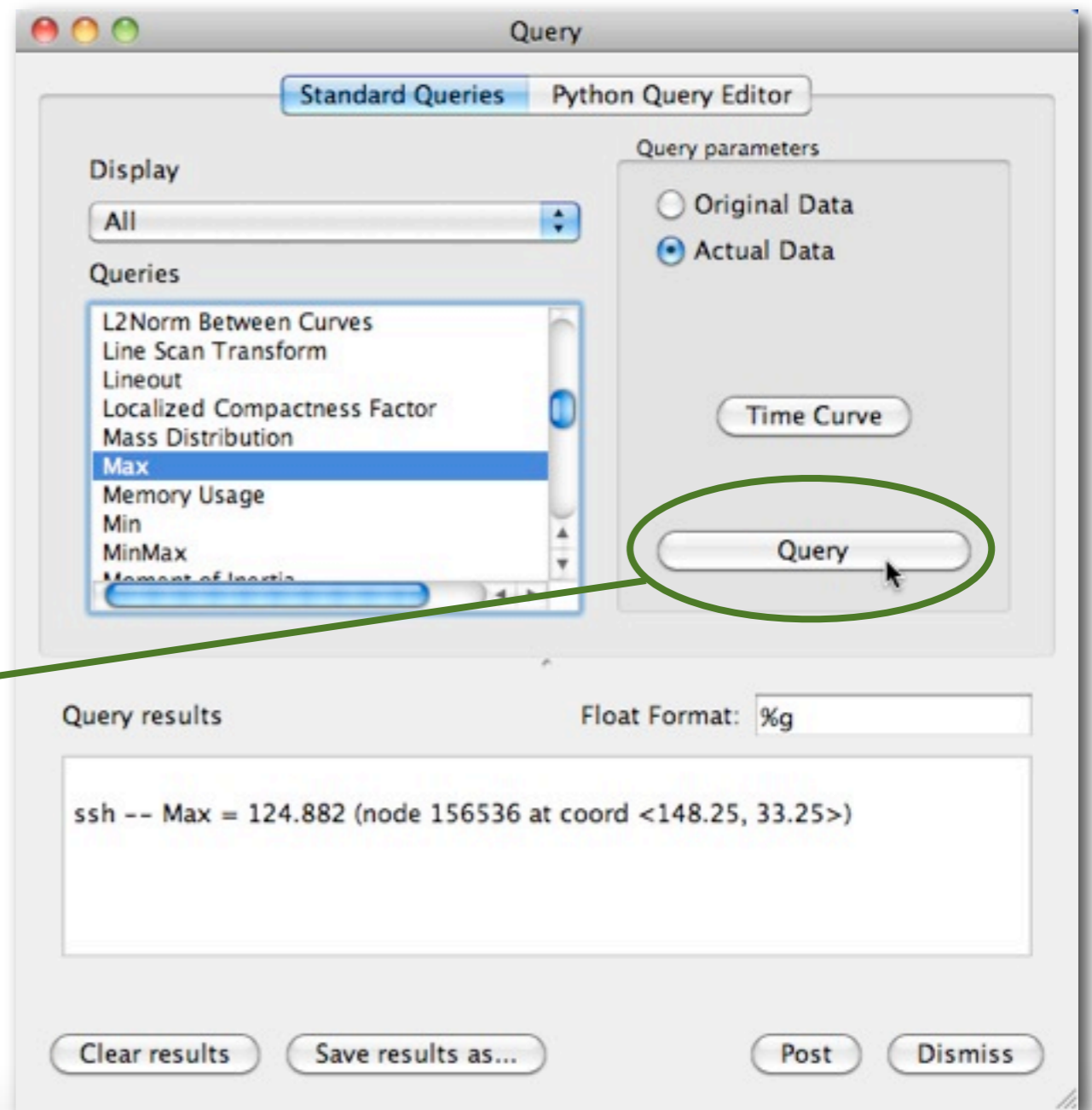
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



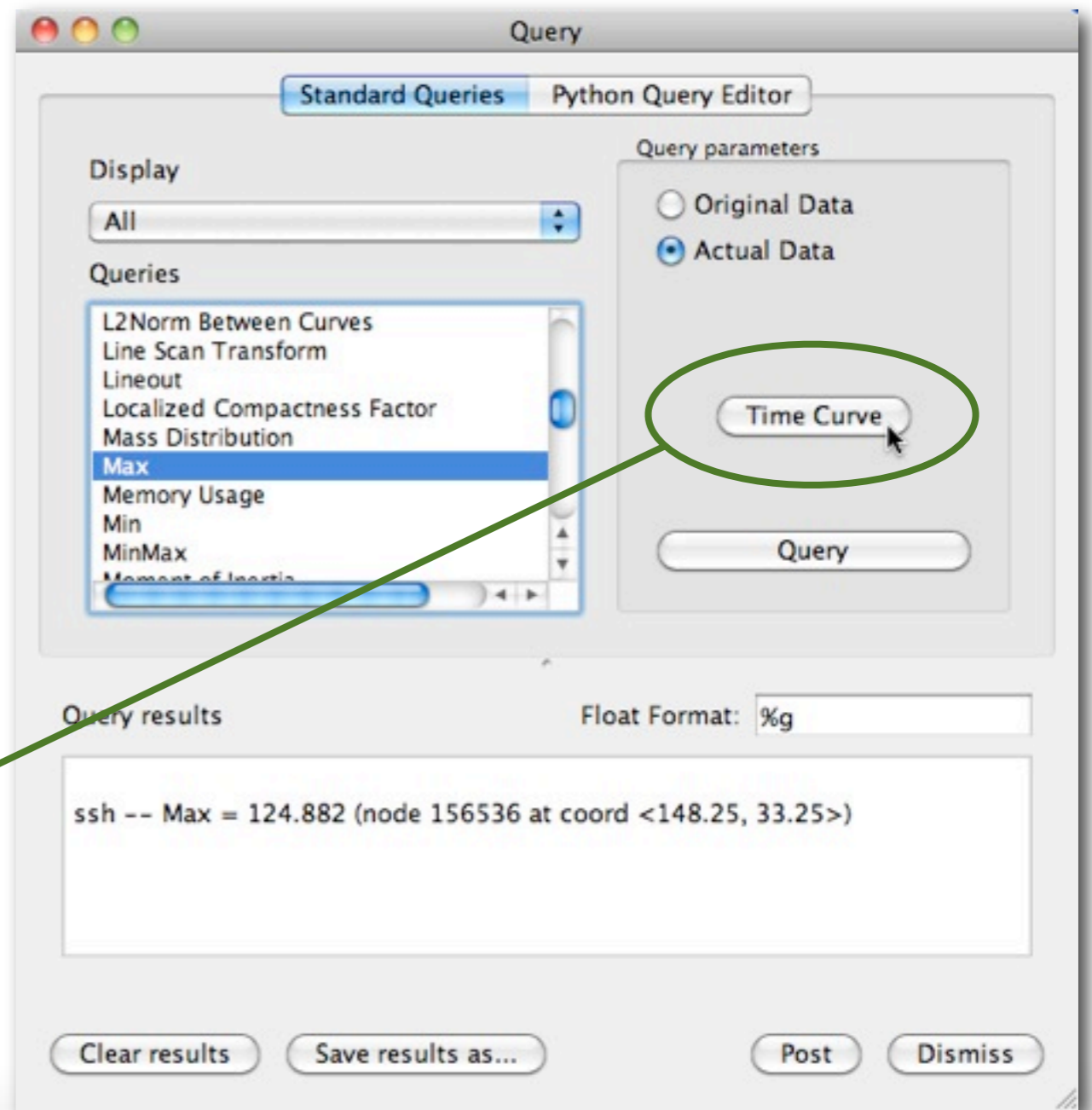
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



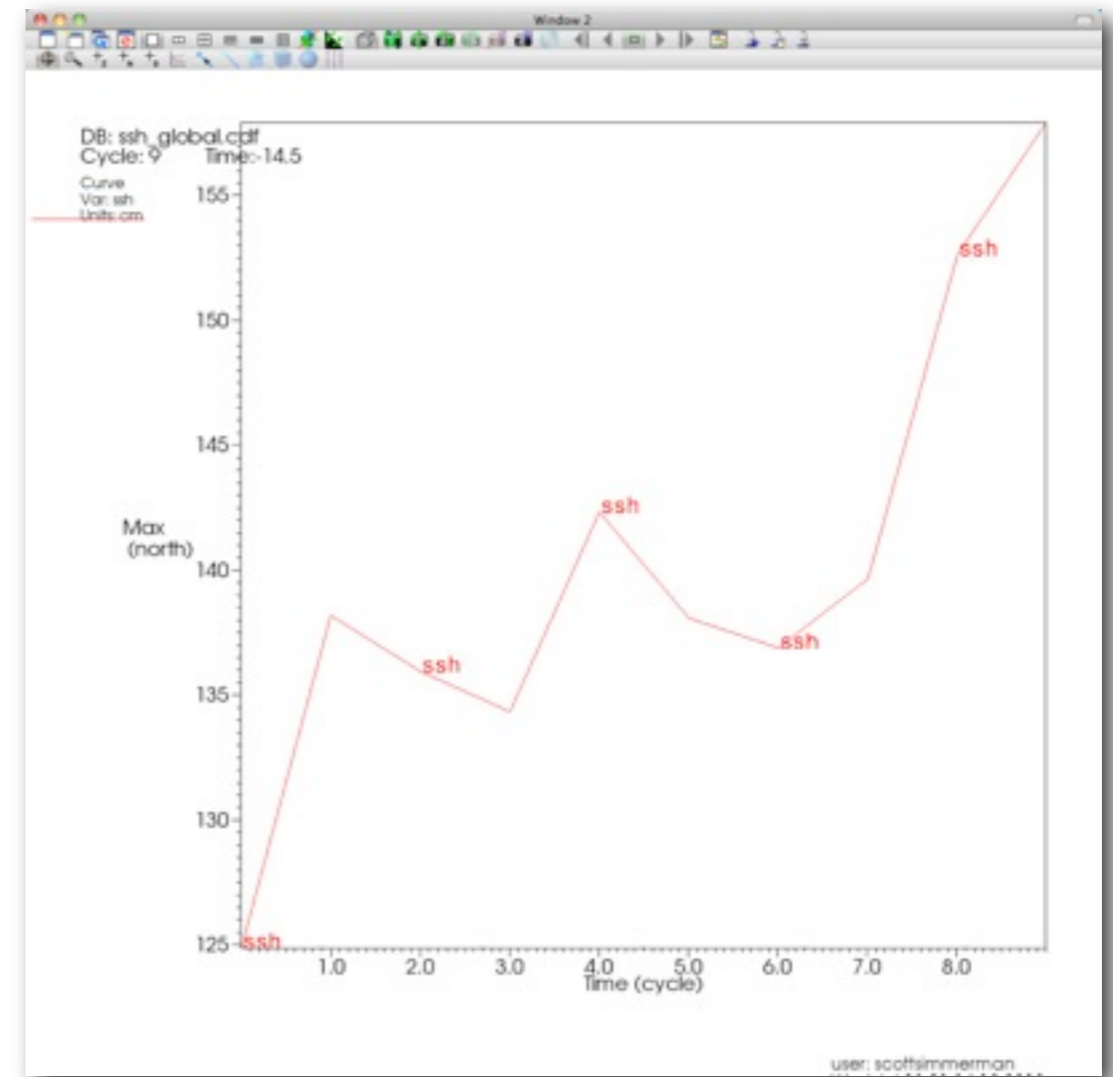
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



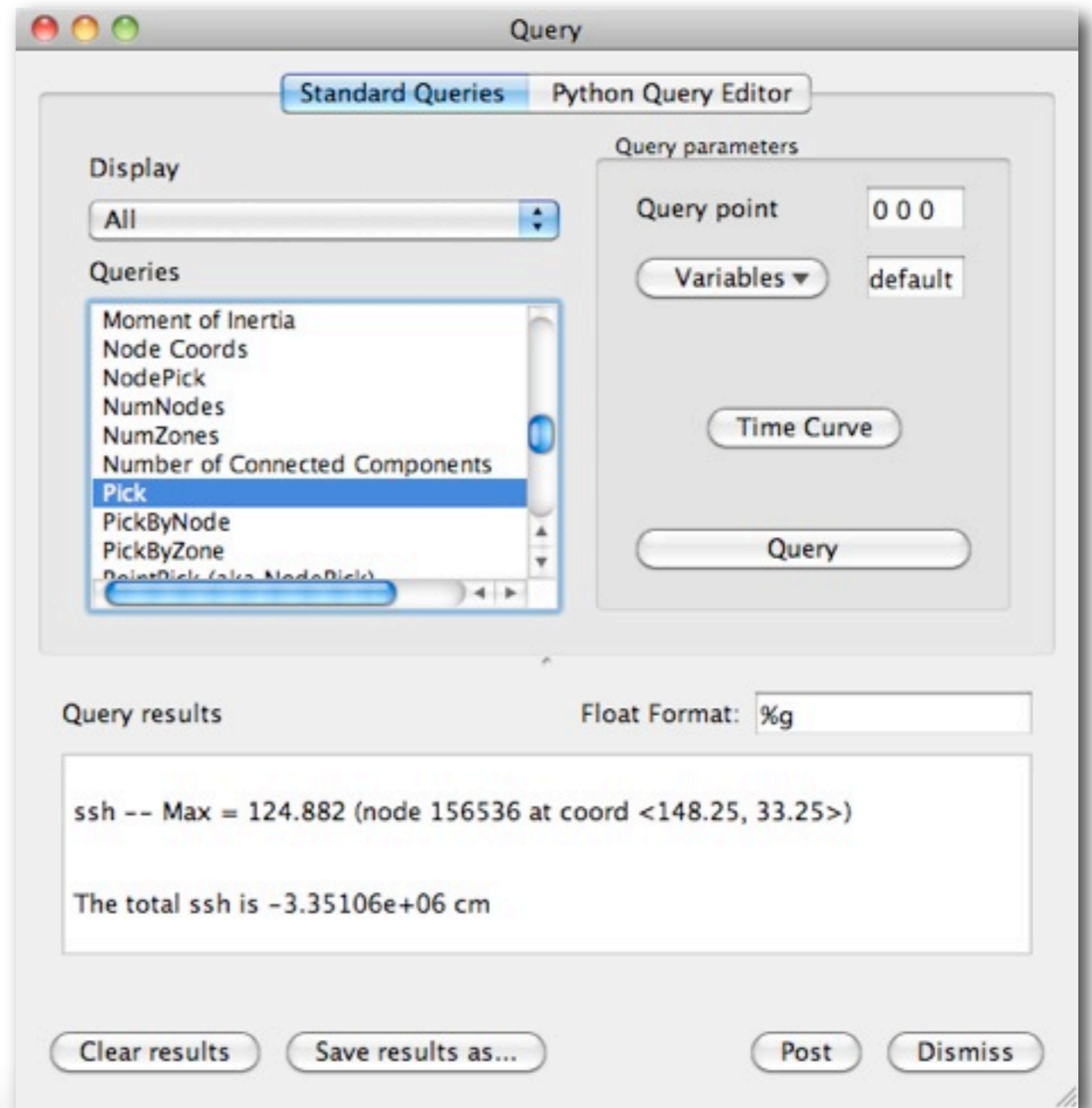
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



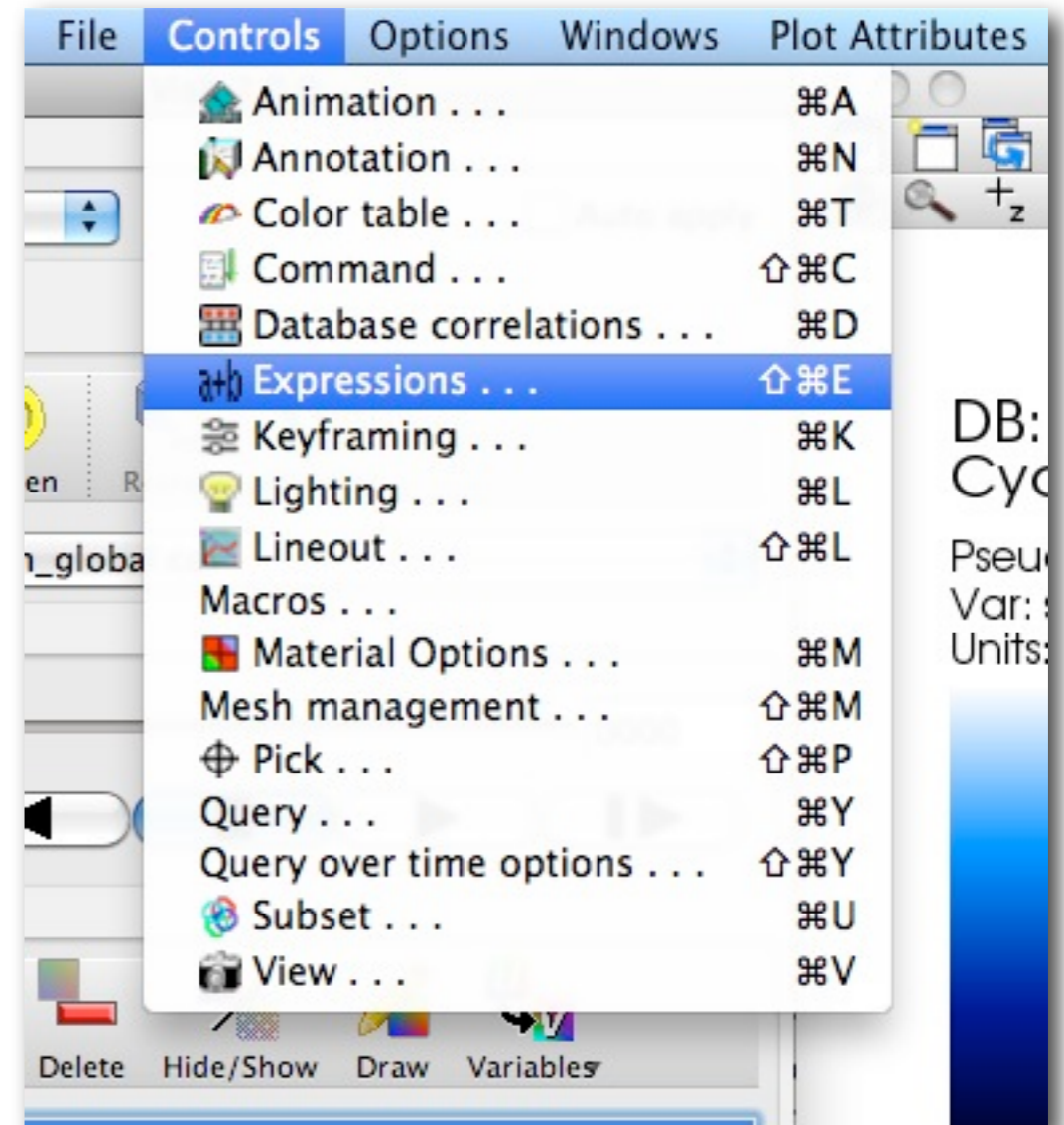
Queries

- Delete Curve plot
- Controls->Query
- Select 'Max'
- Select 'Actual Data'
- Click 'Query'
- Click 'Time curve'
- Variable sum, stats, etc.



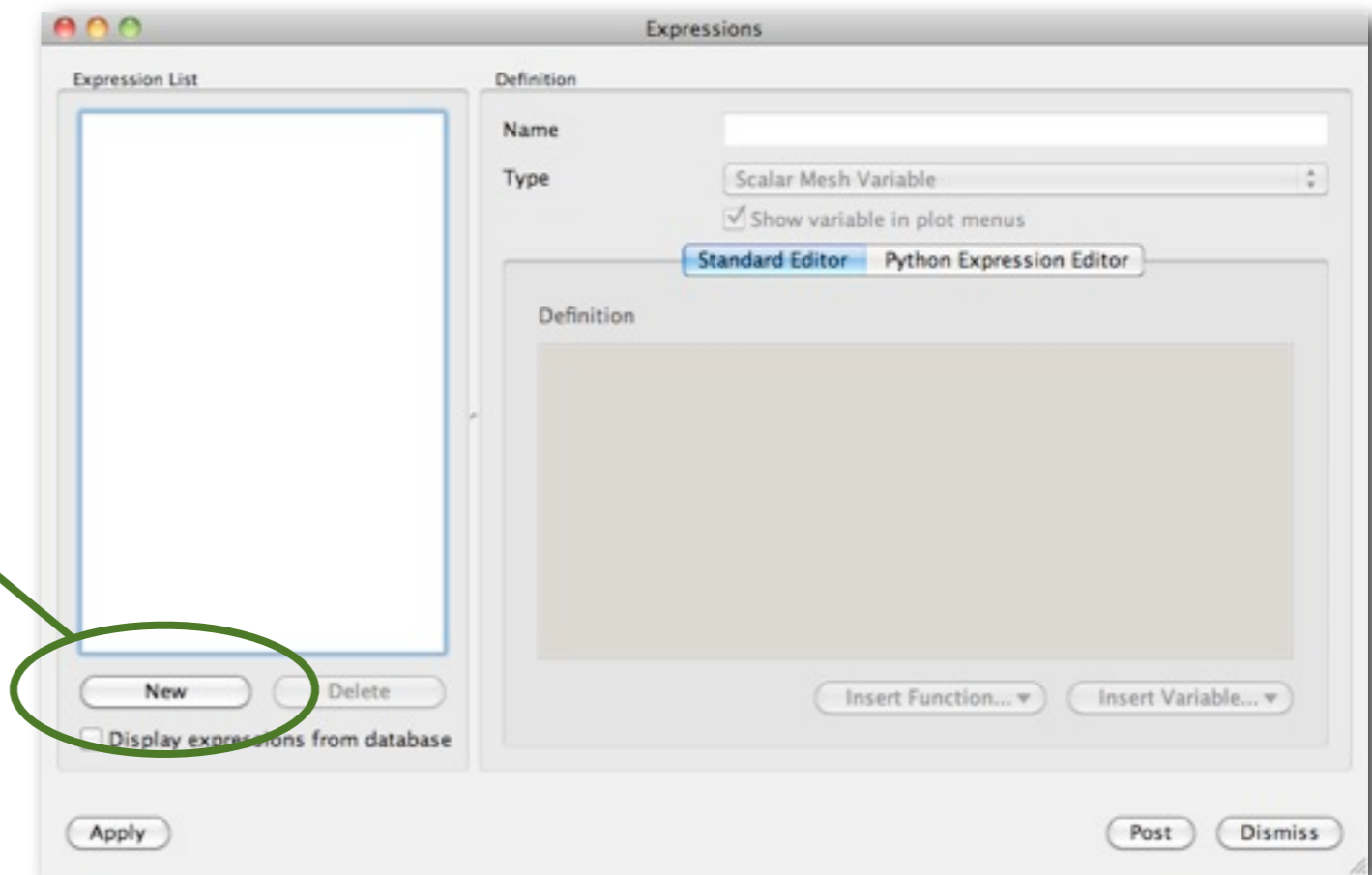
Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- New expression in list
- Cmfe expressions



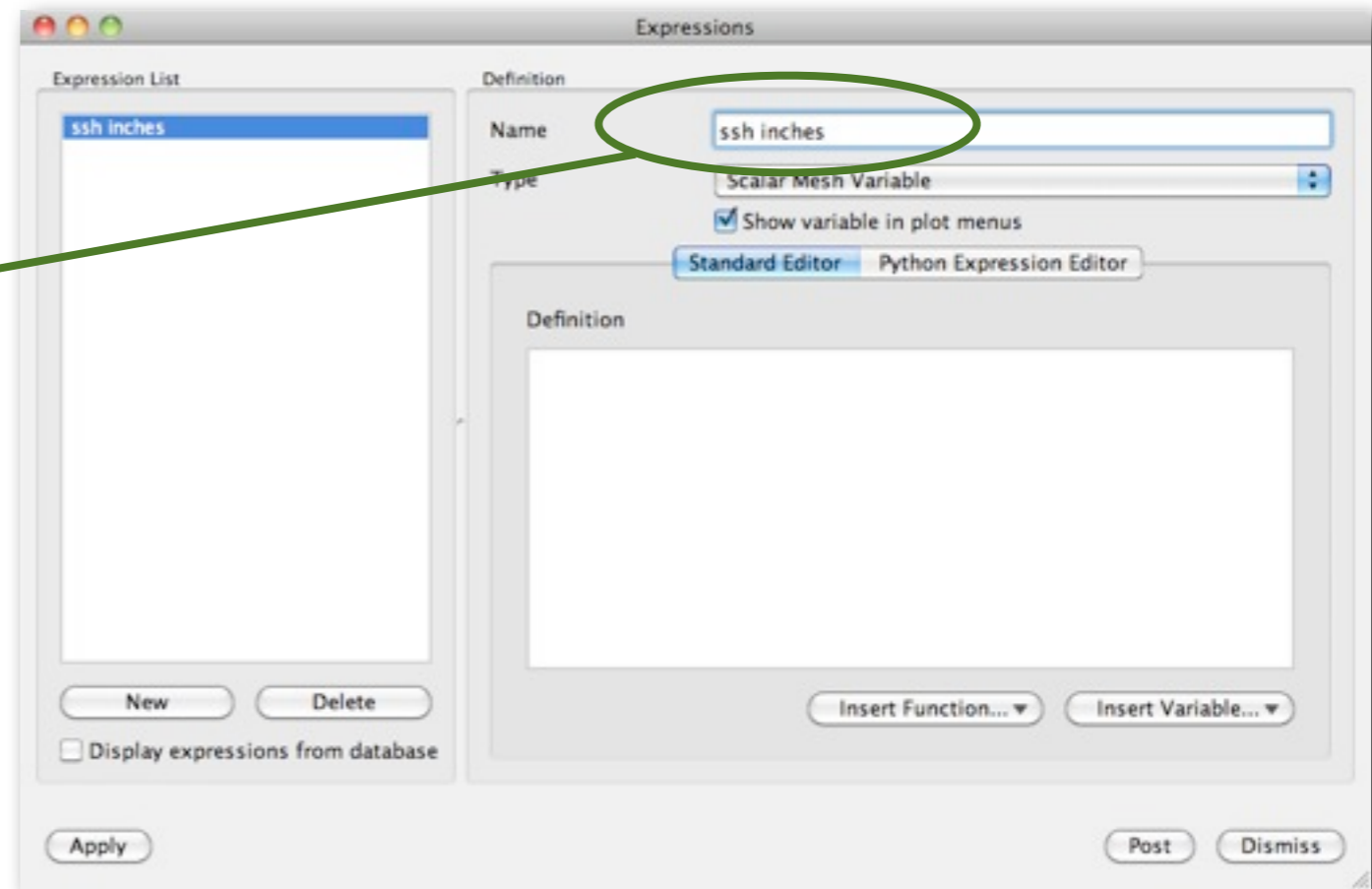
Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- New expression in list
- Cmfe expressions



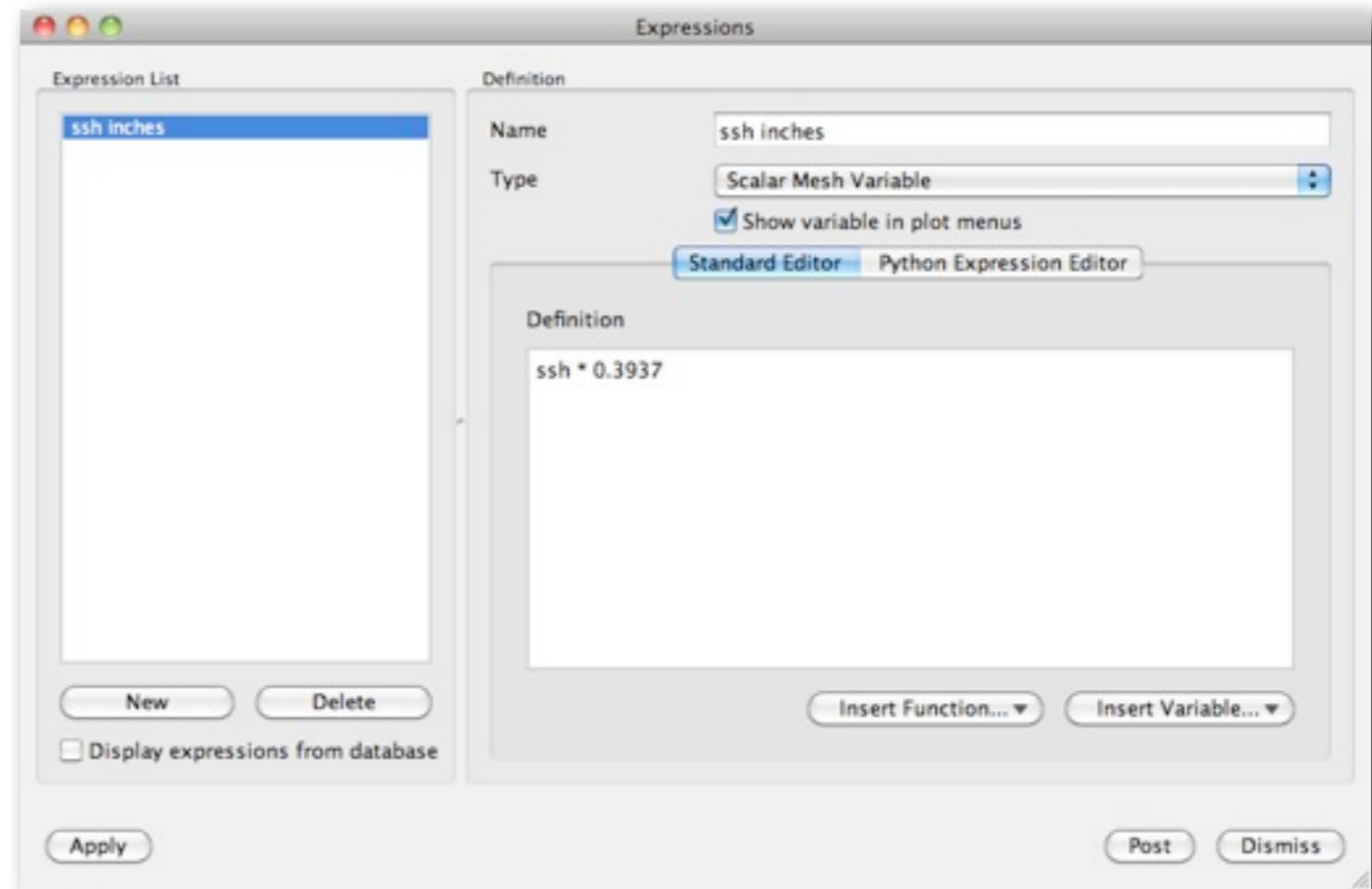
Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- New expression in list
- Cmfe expressions



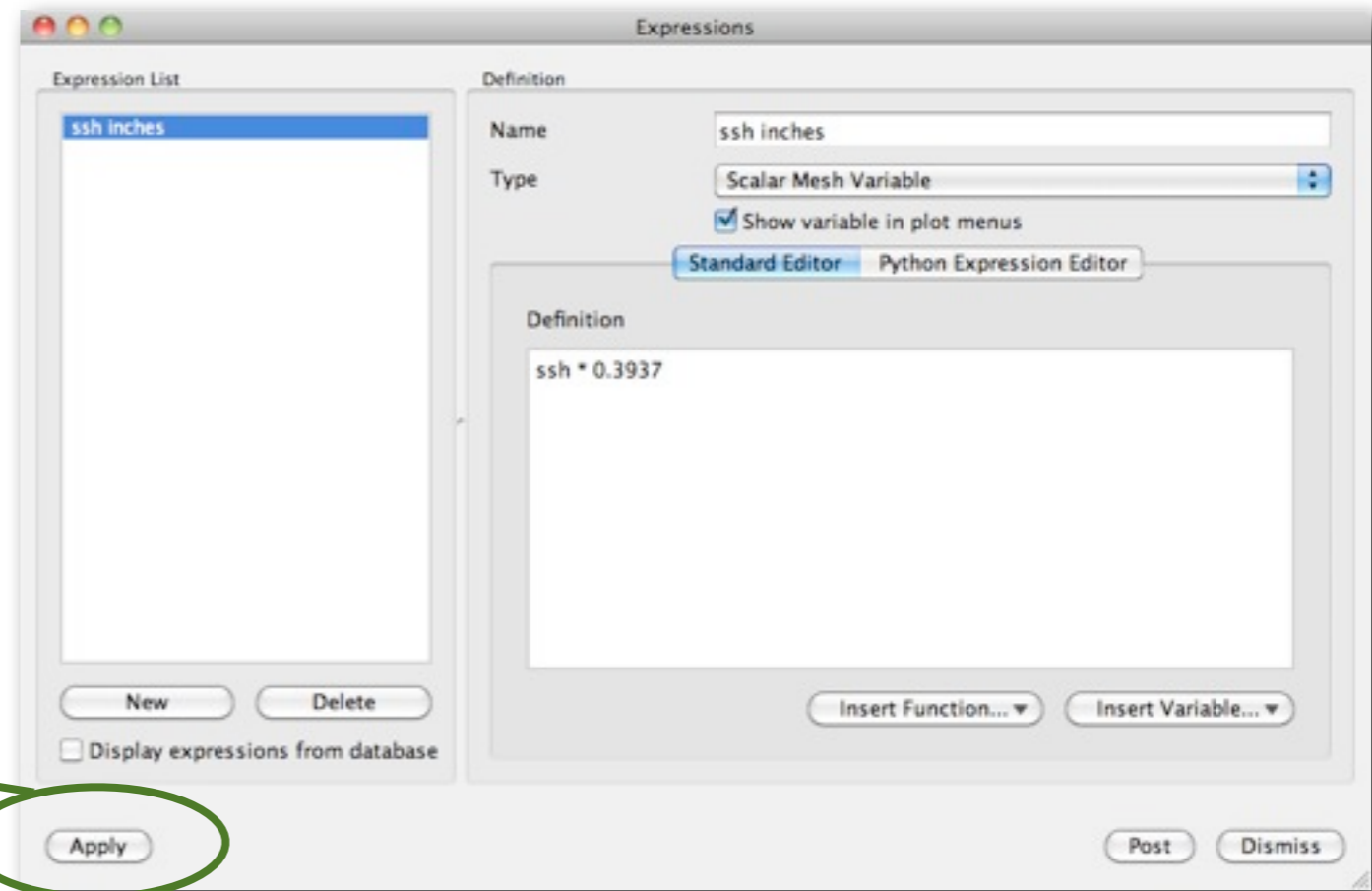
Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- New expression in list
- Cmfe expressions



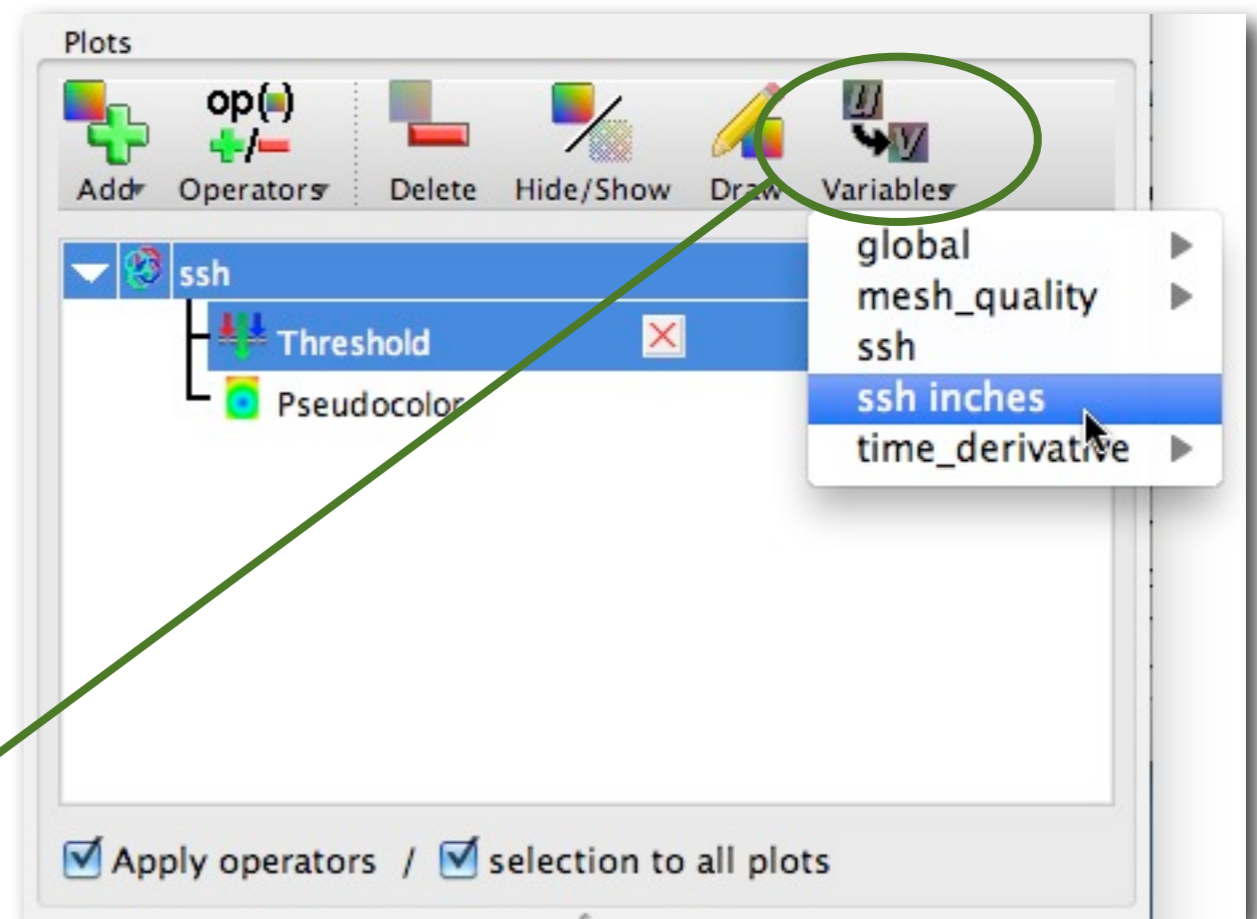
Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- New expression in list
- Cmfe expressions



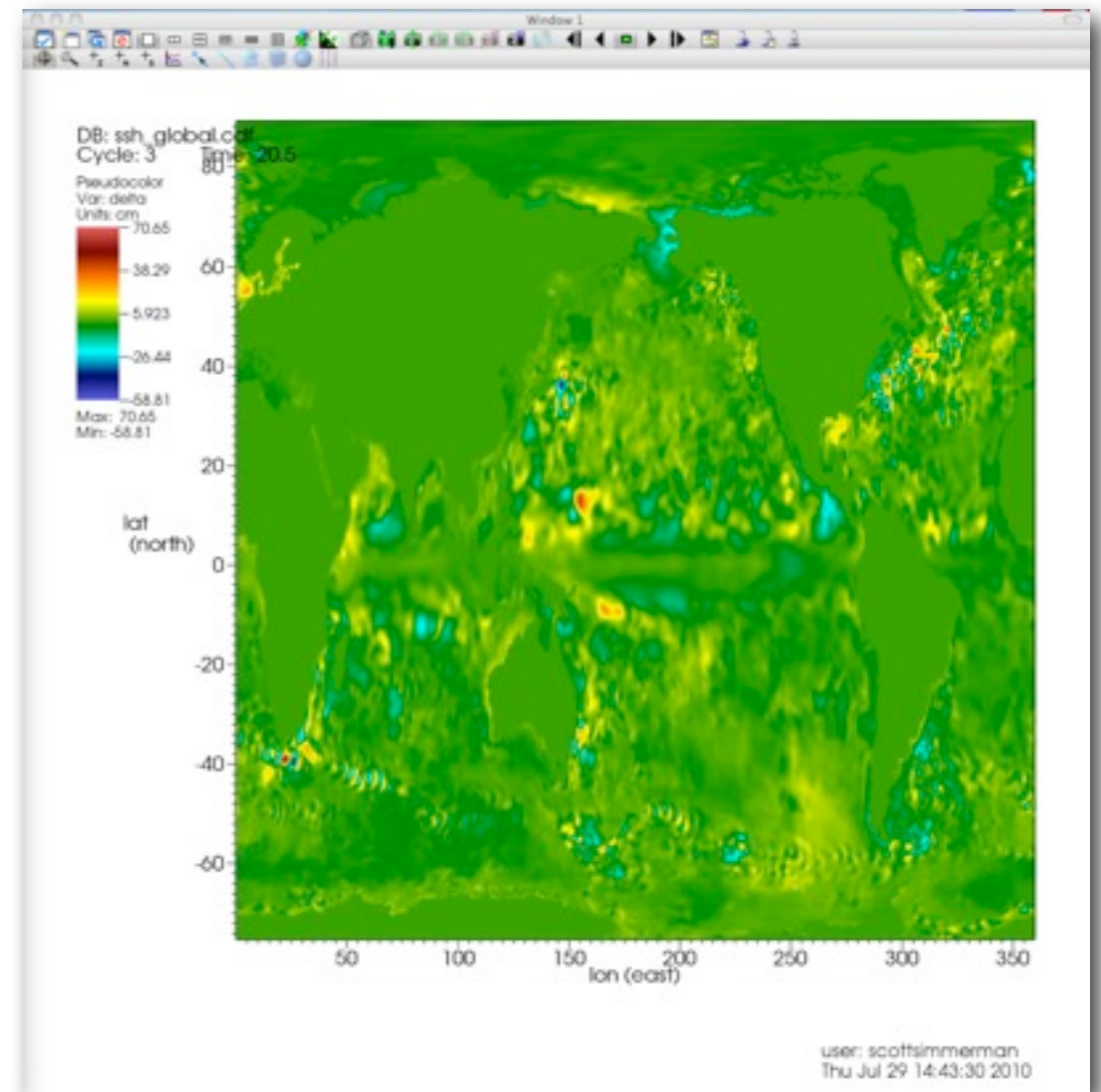
Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- **New expression in list**
- Cmfe expressions



Expressions

- Controls->Expressions
- Click 'New'
- Enter name
- Create expression
- Apply
- New expression in list
- Cmfe expressions



Difference between timesteps

VisIt With Python

- VisIt has built-in Python interpreter called CLI
 - CLI with vis window

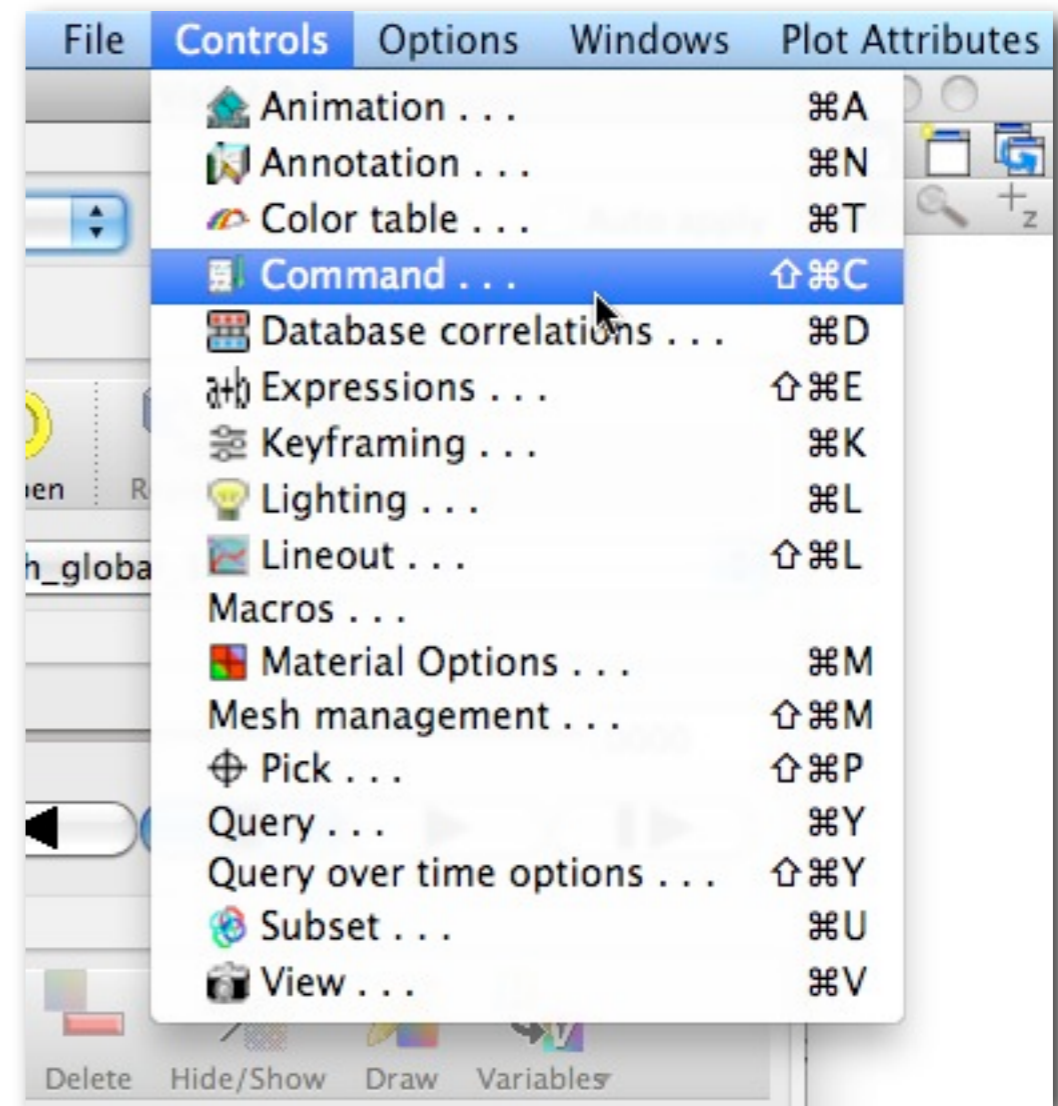
```
> visit -cli
```
 - CLI alone

```
> visit -cli -nowin
```
 - Run VisIt with a script (for batch mode)

```
> visit -cli -nowin -s script.py
```
- Lots of example scripts at <http://visitusers.org>

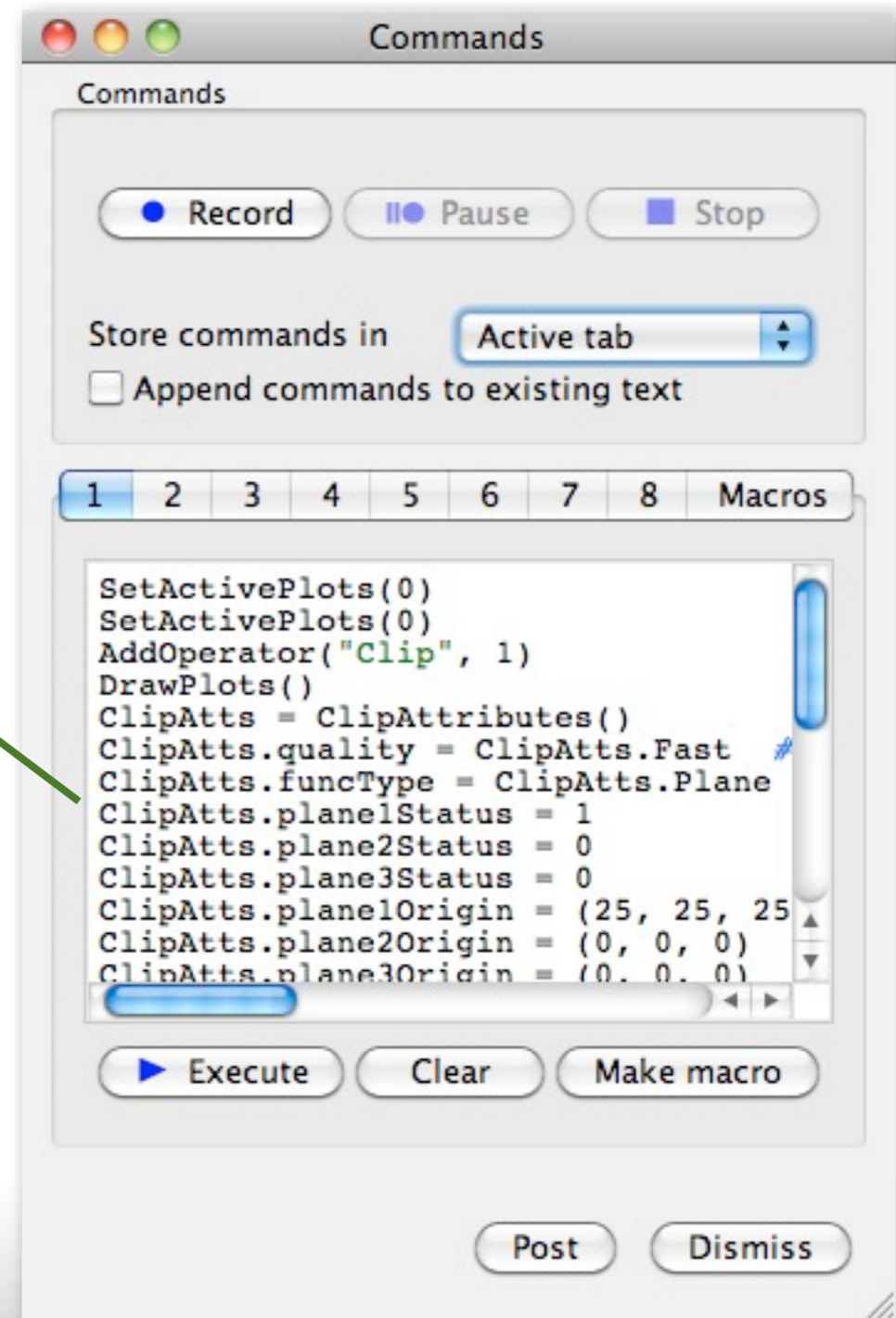
Python Within GUI

- Controls->Command
- Enter Python code
- Click 'Execute'
- Record actions
- See Python code



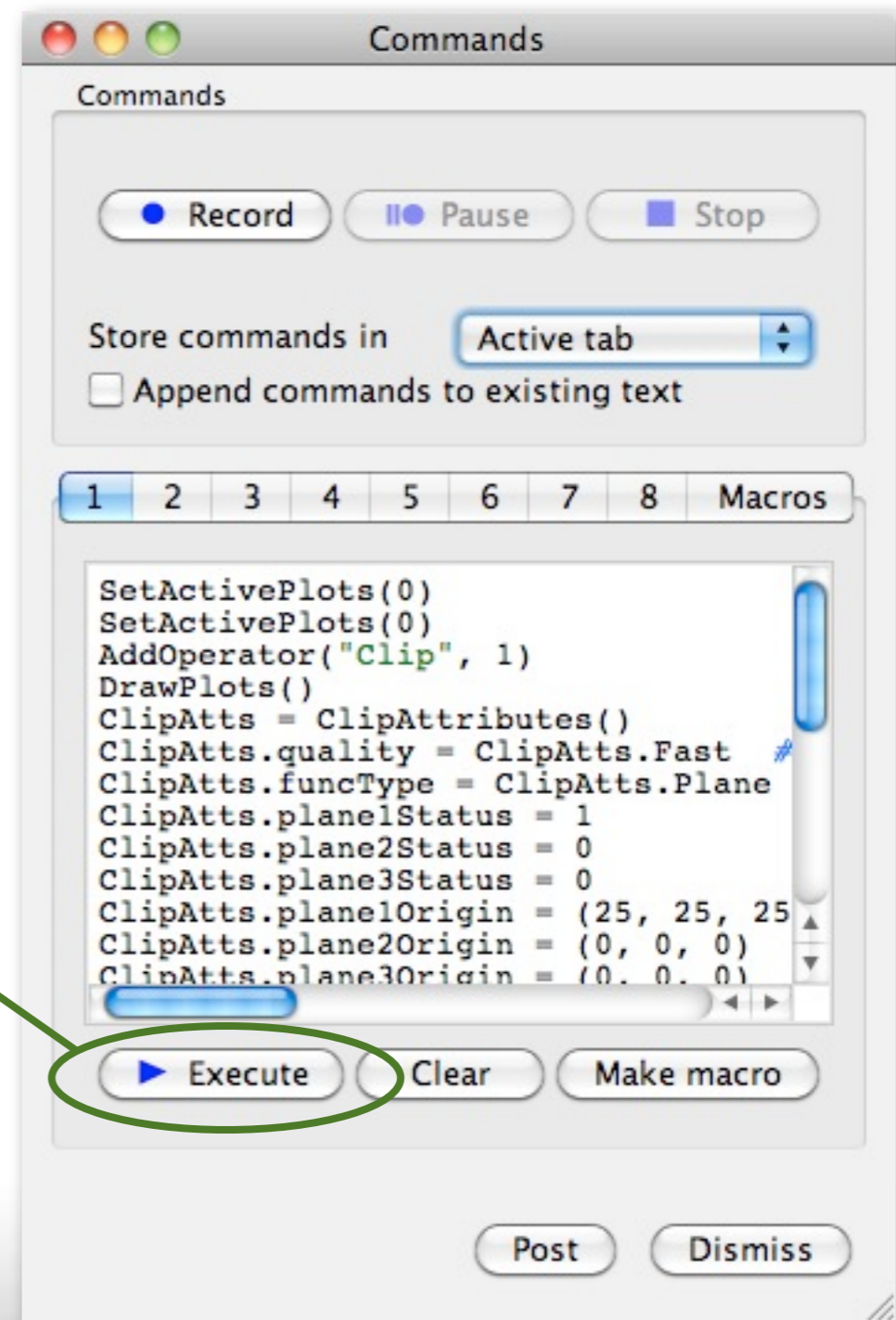
Python Within GUI

- Controls->Command
- Enter Python code
- Click 'Execute'
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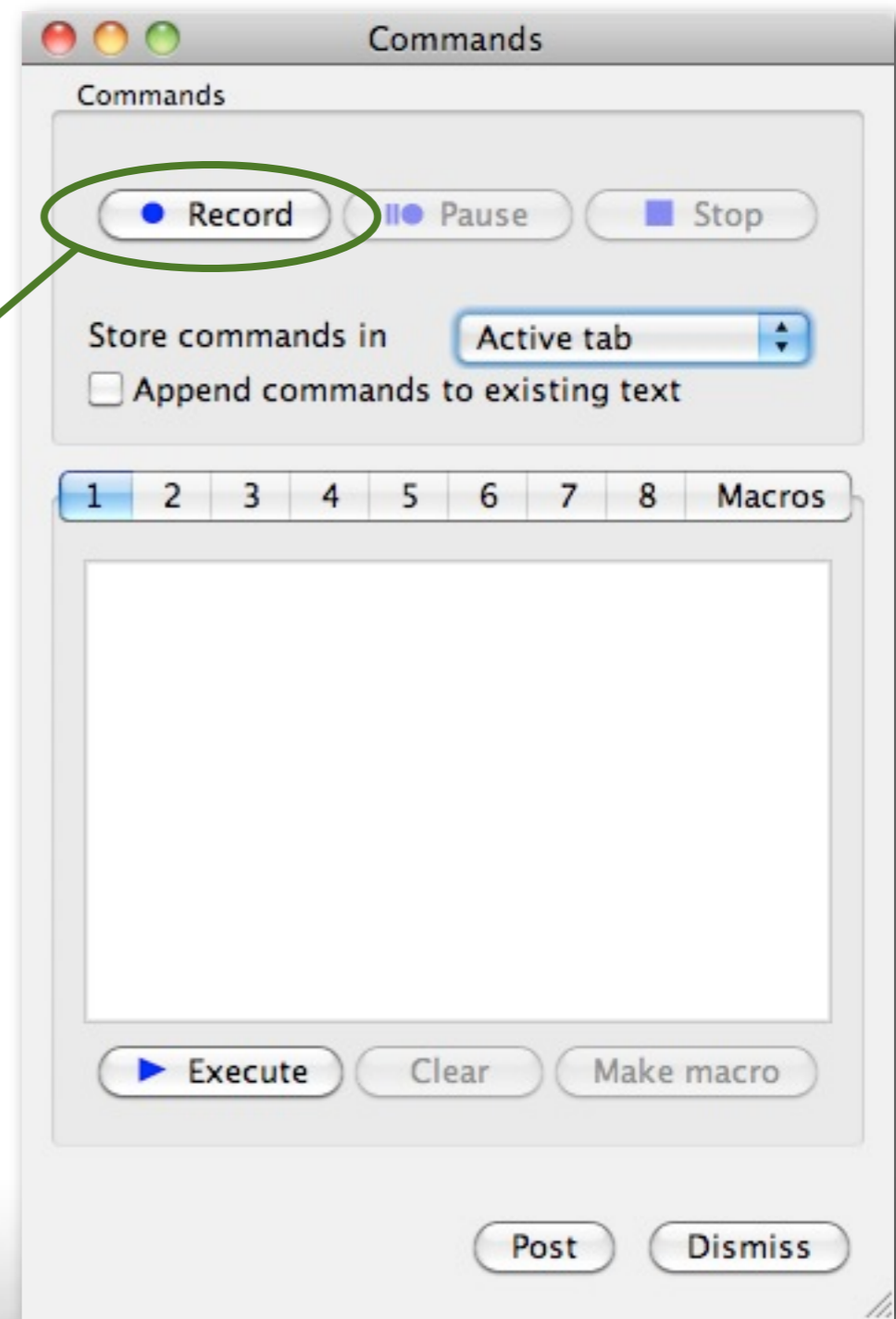
Python Within GUI

- Controls->Command
- Enter Python code
- Click 'Execute'
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- See Python code



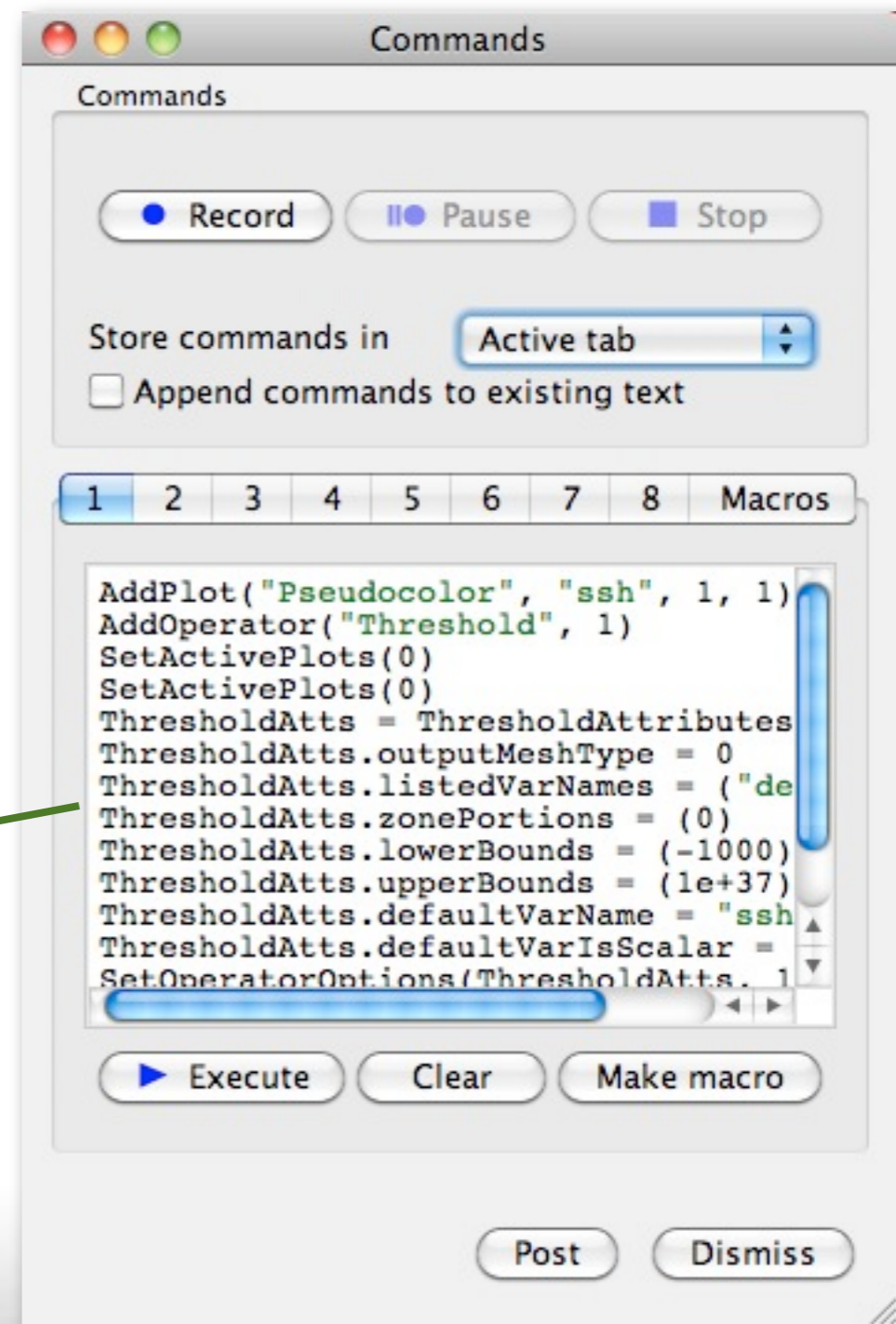
Python Within GUI

- Controls->Command
- Enter Python code
- Click 'Execute'
- Record actions
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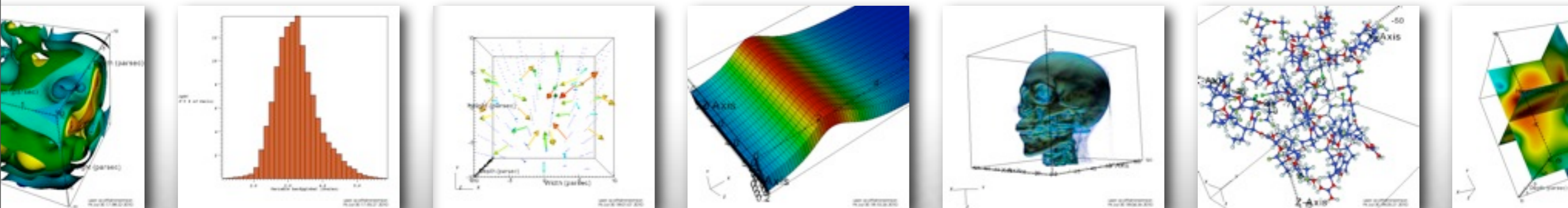
Python Within GUI

- Controls->Command
- Enter Python code
- Click 'Execute'
- Record actions
- See Python code



Lots more...

- Histograms, Scatter Plots, Parallel Coordinates
- Contour, Molecule and Volume Plots
- Vector, Streamline and Tensor Plots
- Animation and Movie Wizard
- Support for creating your own Plot, Operator or Database reader plugins



VisIt

- VisIt Website:

<http://visit.llnl.gov>

- VisIt Wiki

<http://visitusers.org>

- RDAV Website

<http://rdav.nics.tennessee.edu>

