Getting Started With Lots of Lines

Visualization Project

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Version 1.0

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Controls:

- left mouse: selection
- right mouse: pan camera around visualization
- F2 : view all visualizations

Note: All the on GUI actions can be done viewing all visualizations at once.
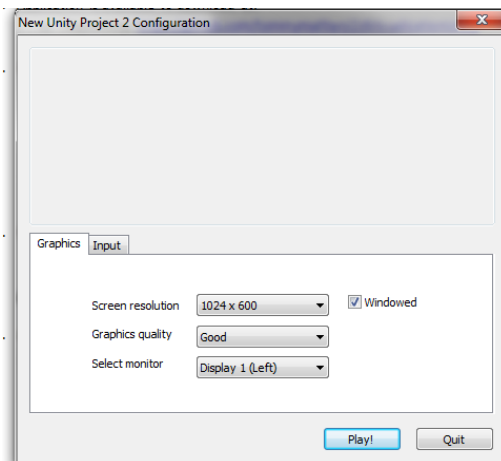
Opening Application

1. Application is available to download at:
    a. Repository: https://github.com/tommymathan/2dVisualizationUnity
    b. http://www.cwu.edu/~Imaglab/programs/index.html
    c. Web version at:
       www.cwu.edu/~Imaglab/programs/CS480_2015/WebBuild/WebBuild.html
2. Once downloaded, locate builds folder
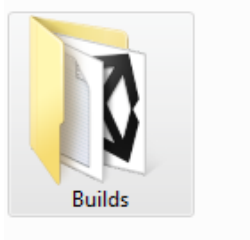
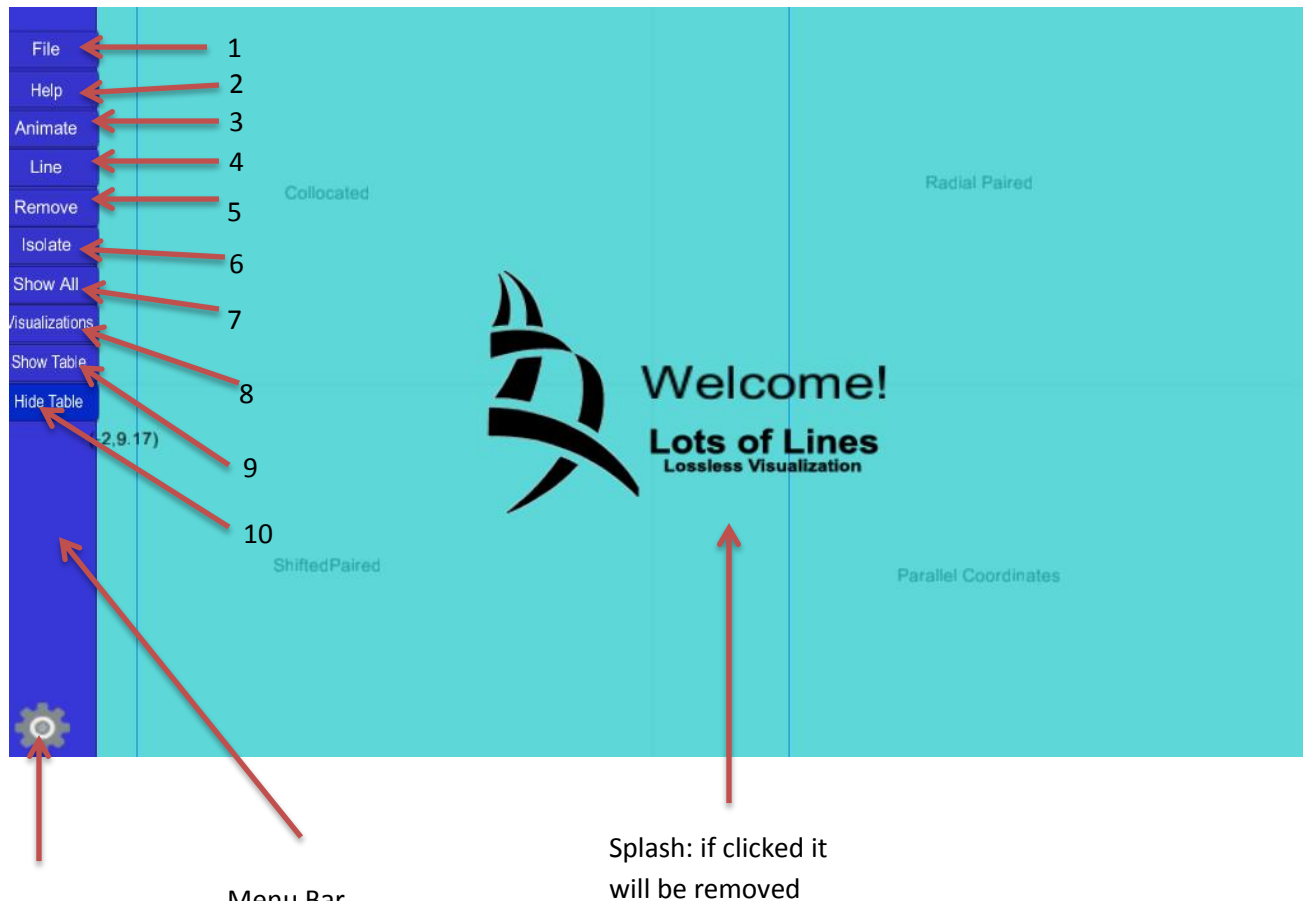3. Click on DVA.exe which will launch application.
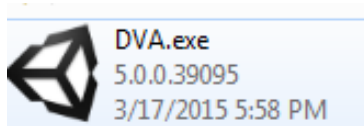
4. A window settings window will be displayed.
    a. Select a desired resolution
    b. Check the windowed check box
    c. Click play!

5. Application will launch.

Home Screen

Splash: if clicked it
will be removed

Menu Bar

Settings

1. File: Displays options to open a file and to close application.
2. Help: Launches the help documentation for the application.
3. Animate: With selected lines, it will animate them from starting to end point.
4. Line: Displays line settings including line color and line width.
5. Remove: Removes the selected lines from the screen.
6. Isolate: Removes all the lines except the selected lines.
7. Show All: If lines have been removed, it will display them.
8. Visualization: If in a current visualization, it will bring you to view all visualizations at once.
9. Show Table: Displays the data table of vectors.
10. Hide Table: If data table is displayed, it will remove it from the screen.

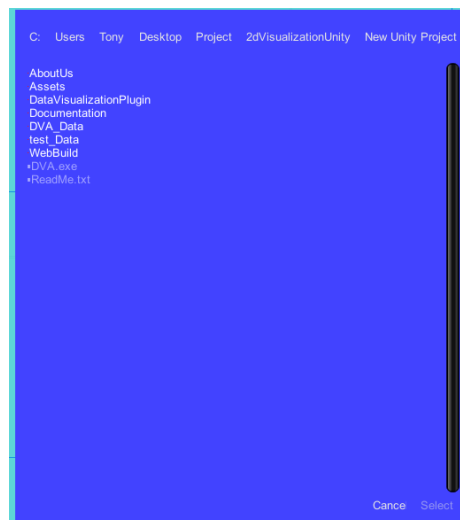## Opening Example Data Set

1. With the application open, click file located on the menu bar.
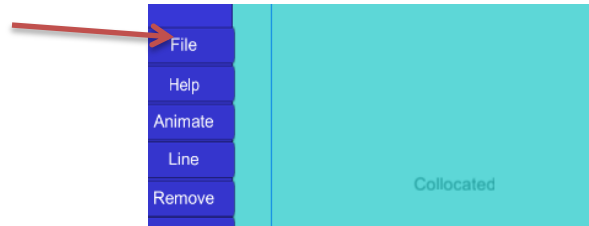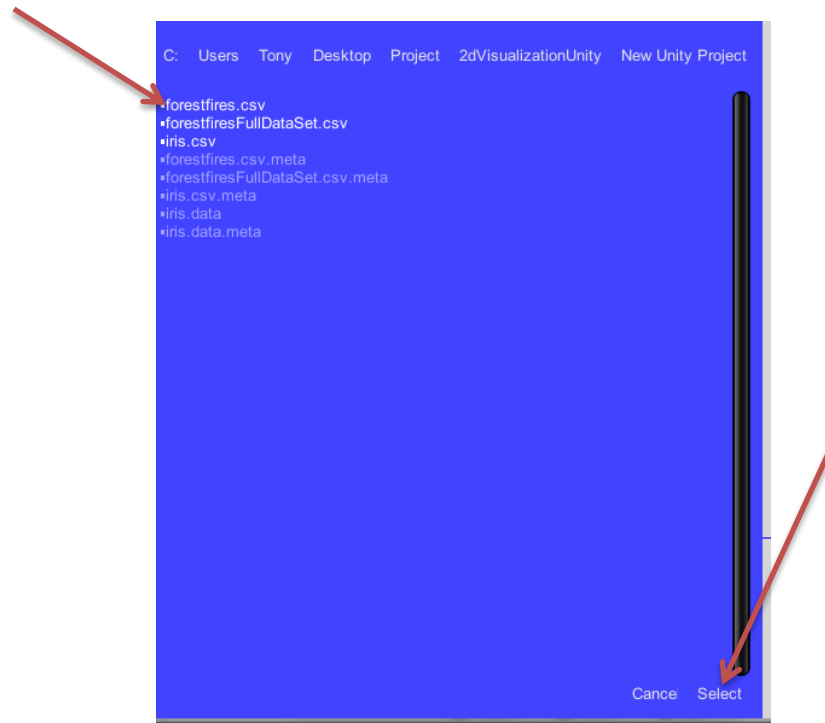

2. Another menu will pop up. Click Open.
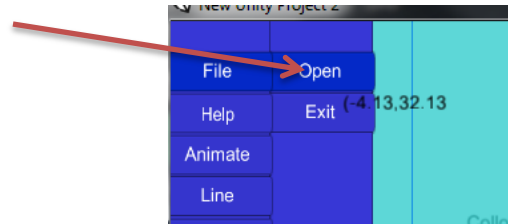
3. A file browser will be displayed.

4. Follow the Path by clicking on the name of the files.
   a. Assets
   b. DataSets
   c. forestfires.csv

5. Click forestfires.csv and click select.

C: Users   Tony   Desktop   Project   2dVisualizationUnity   New Unity Project

forestfires.csv
forestfiresFullDataSet.csv
iris.csv
forestfires.csv.meta
forestfiresFullDataSet.csv.meta
iris.csv.meta
iris.data
iris.data.meta

Cance   Select

6. The example data set is now open and displayed on each of the visualizations.

Selecting Views

1. If on a current visualization, click the Visualizations button on the menu bar.

File
Help
Animate
Line
Remove
Isolate
Show All
Visualizations
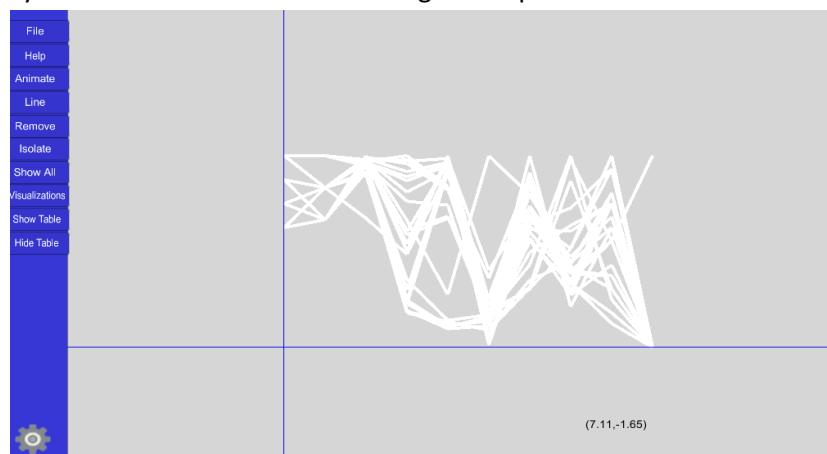Show Table
Hide Table

(2.66,2.87)

2. This will bring you to a screen with all four visualizations.
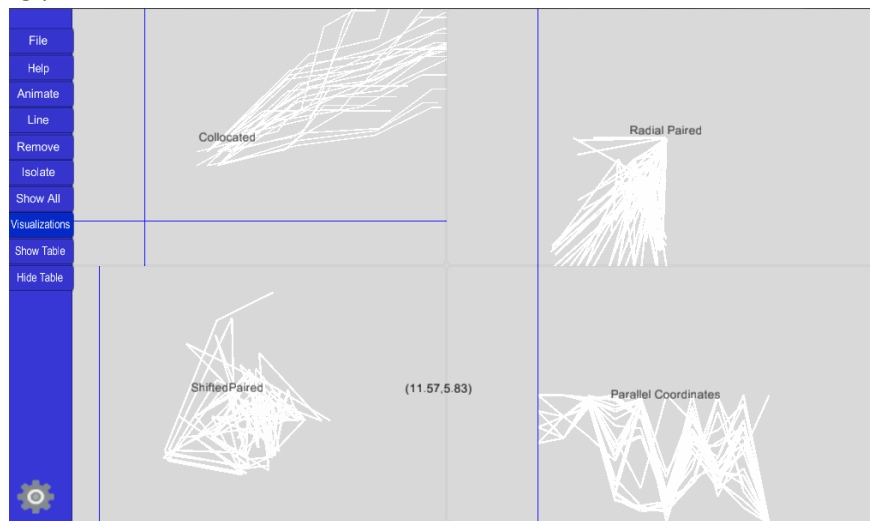
3. To view one of the Visualizations by itself, double click on it.
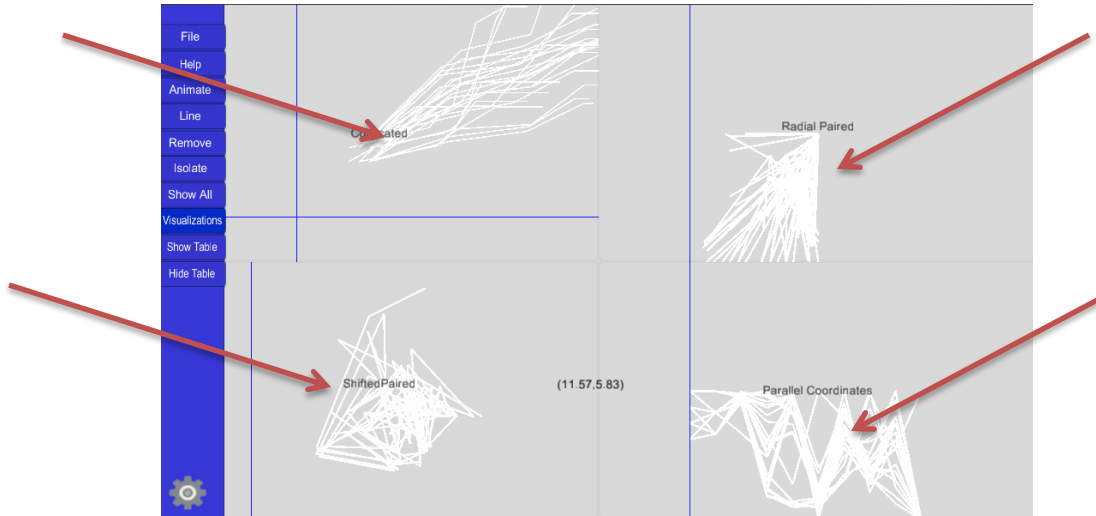
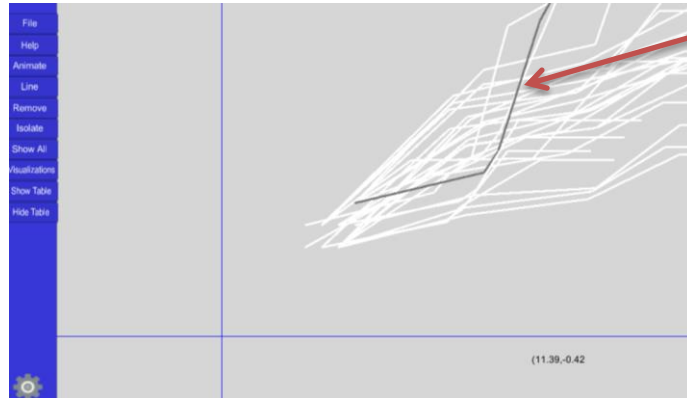4. This will display one of the visualizations in a larger viewport.

Selecting Data

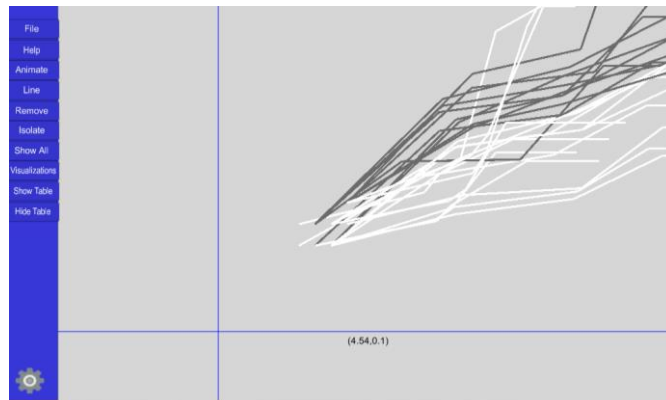Data can be selected in multiple ways.

1. By selecting vectors.
   a. Click on a line, this will make the line flash indicating it is selected.

2. Selecting multiple vectors.
   a. Click and drag mouse across desired lines to be selected.
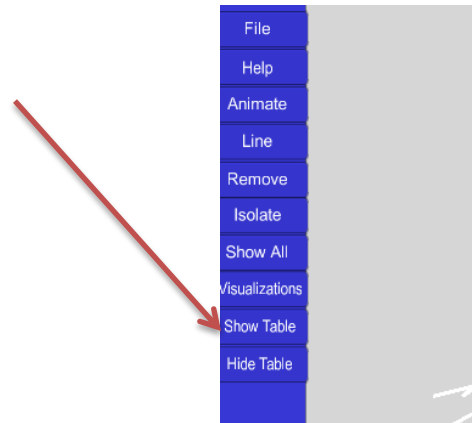   b. Selected lines will flash indicating they are selected.

3. Selecting data from table.
   a. Click show table on the menu bar. Then click on a desired vector row.
   b. Line will be selected will be that that corresponds to that vector.
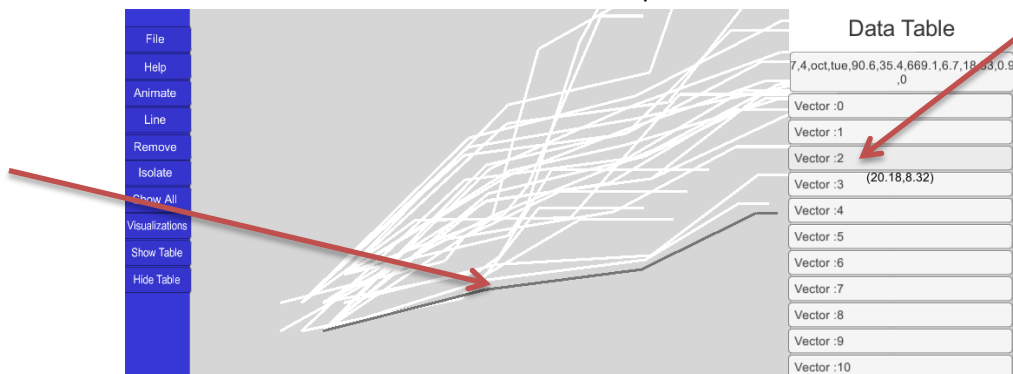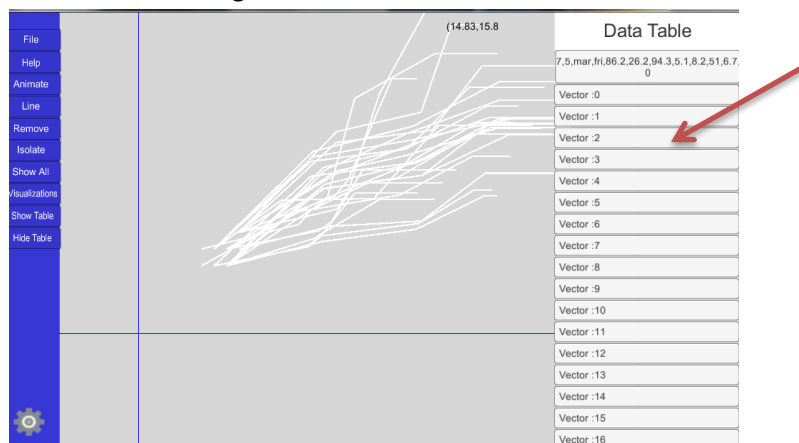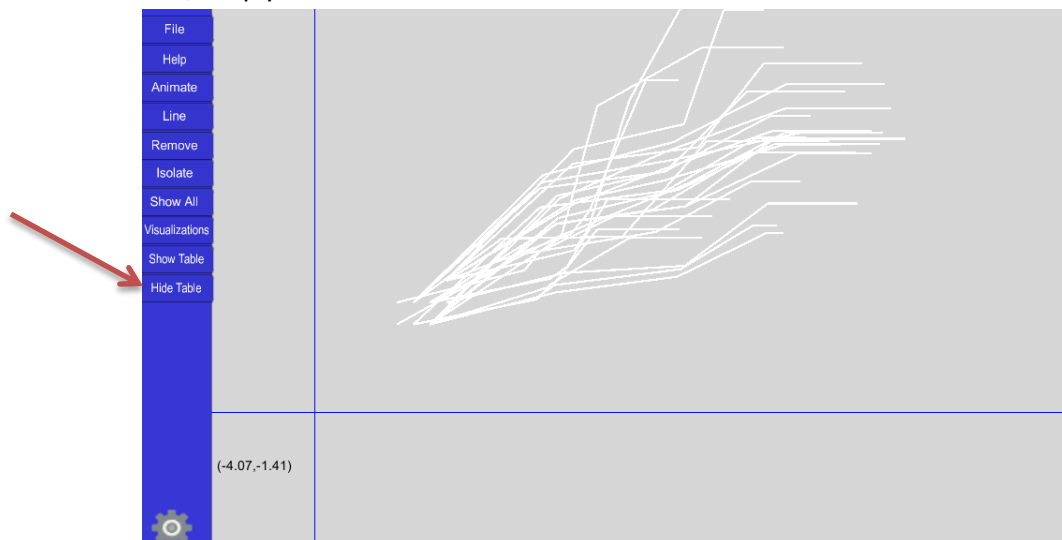
Display/Remove Data Table

1. To display data table click show table on the menu bar.

2. Data table will be slide in from the right.

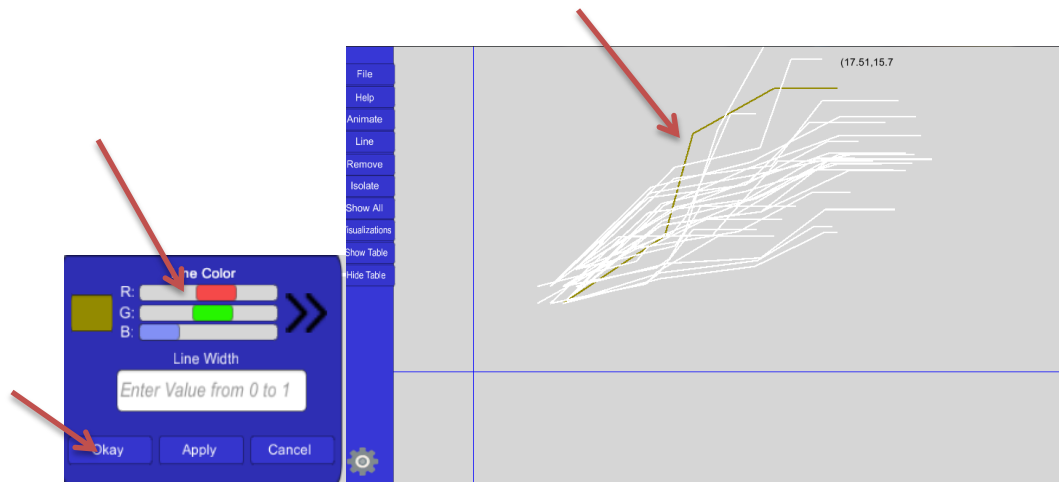3. To hide table, simply click hide table and the table will be removed from the screen.
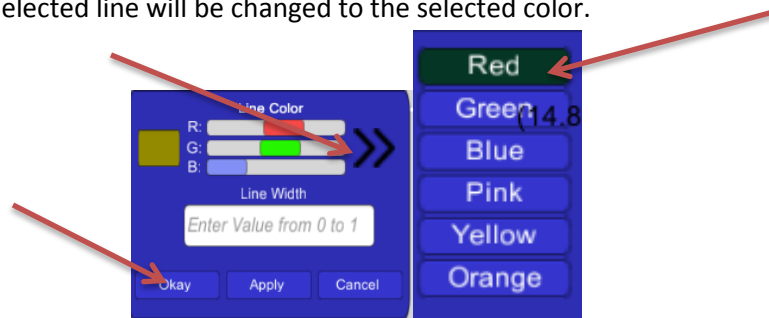
Changing Line Color

1. To change individual line color:
   a. Select a line.
   b. Click Line on the menu bar.

   c. A line settings window will pop up displaying options for color and width. Move the line color sliders and click apply or okay.
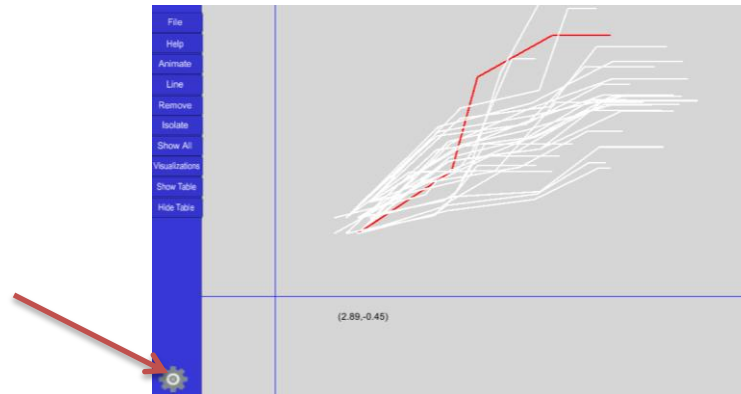

   d. Alternatively, the black arrows have predefined colors. Select one and click apply or okay and the selected line will be changed to the selected color.
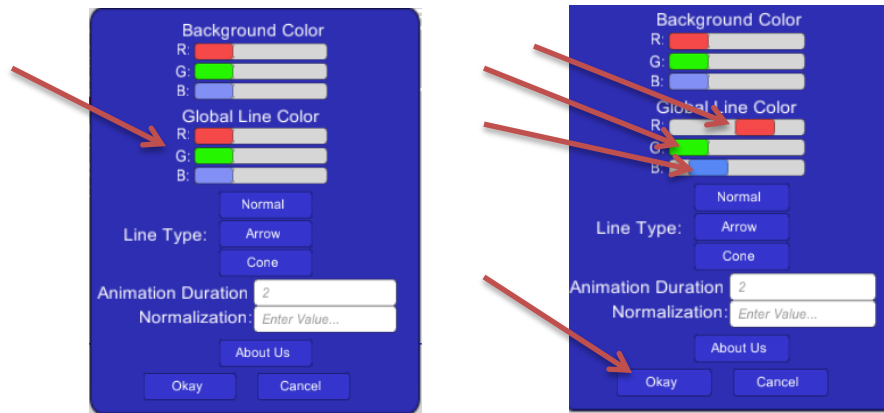
2. Changing the color of all lines.
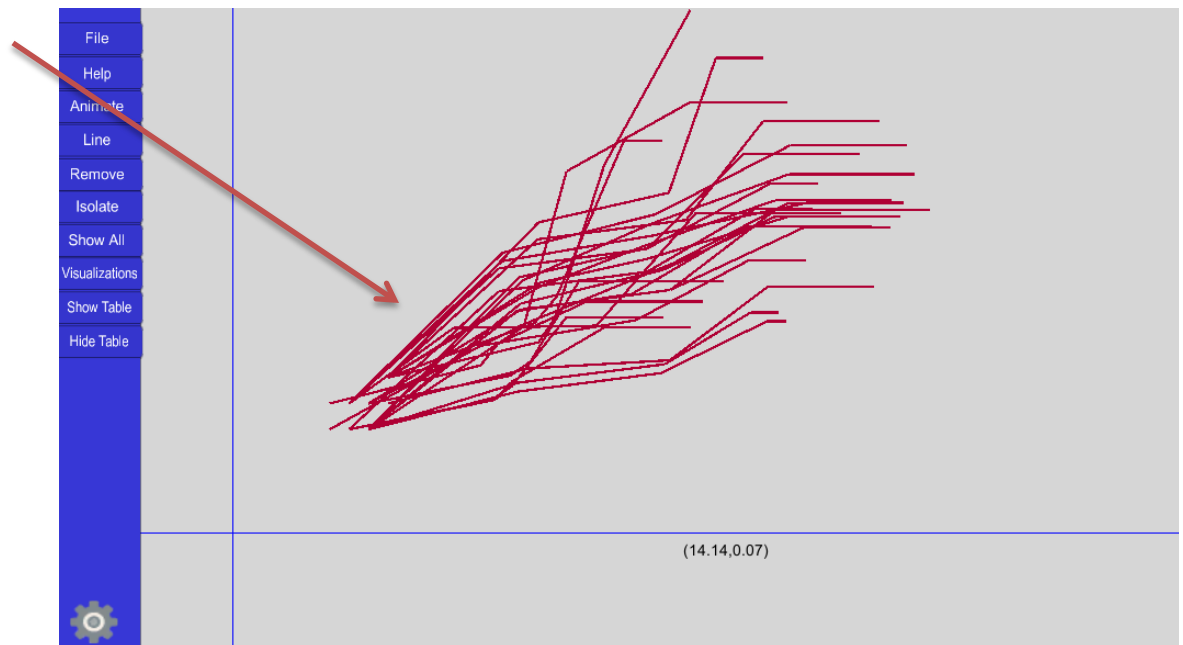   a. Click settings icon.

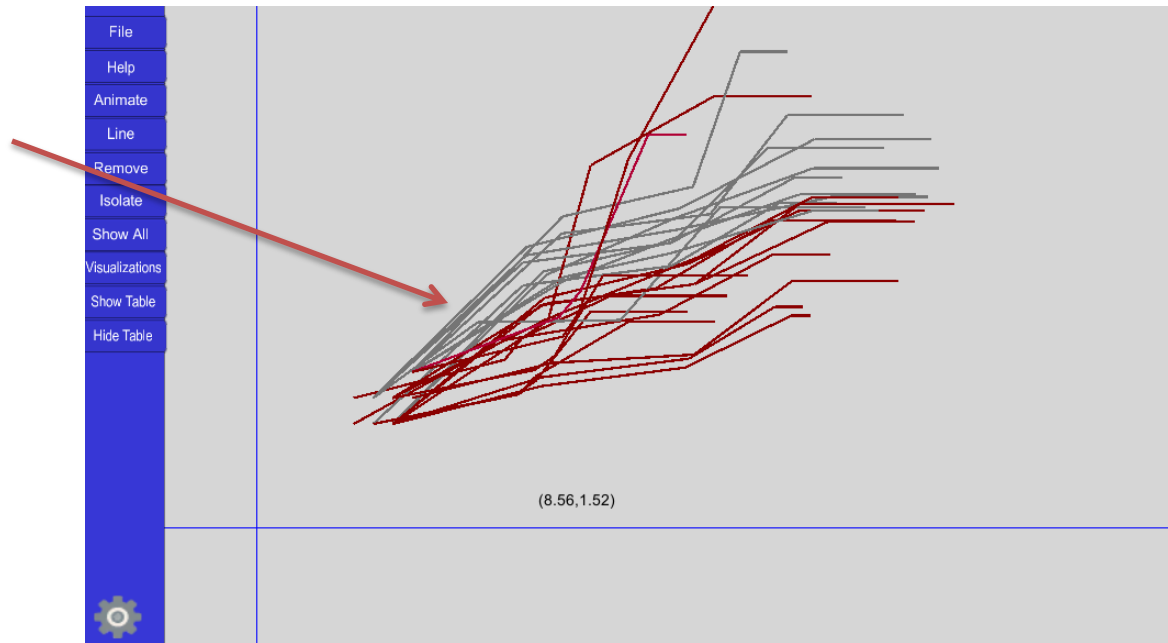   b. A meny will pop up. Move the Global Line Color sliders to the appropriate color and click okay.

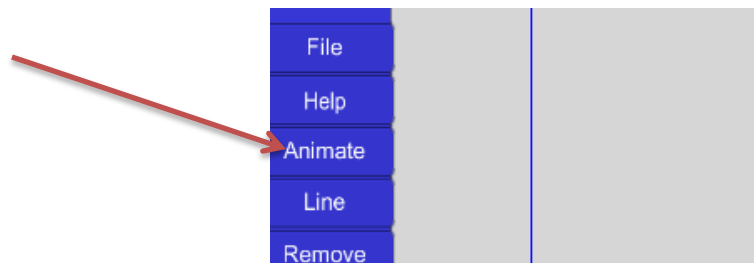   c. All the lines will be changed to the desired color.

Animate Lines

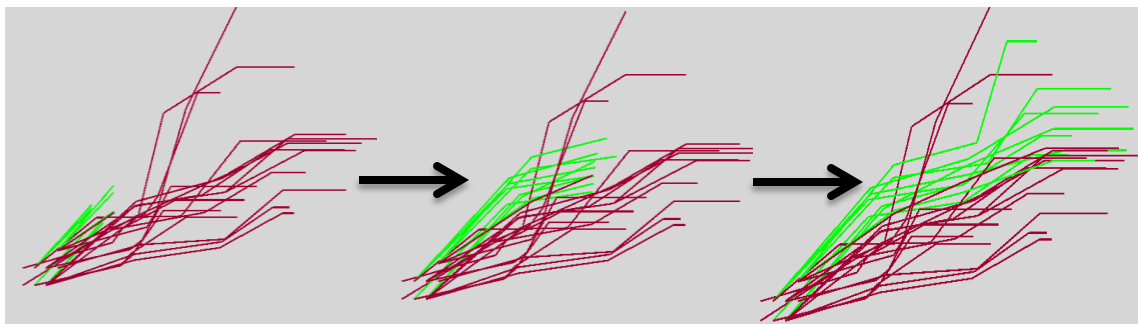Note: Animation can be done with a single line selected, multiple and all of them.

1. Select lines.

2. Click Animate on the menu bar.

3. Lines selected will be animated from their starting point until their end point.
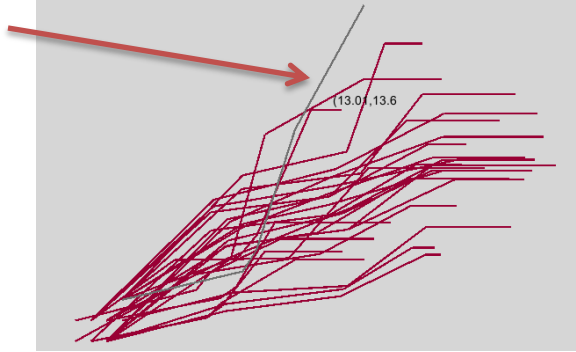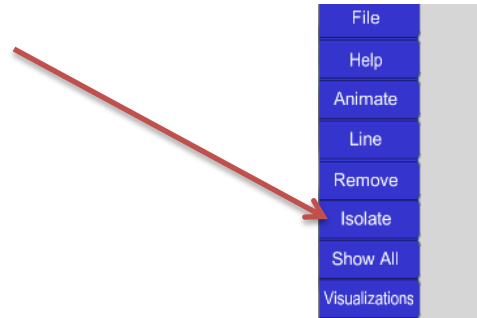
Isolate/Remove/Show All Lines

Note: Selecting all lines all multiple lines and clicking remove will remove the lines from the screen.

1. Isolate:
    a. Select a line.
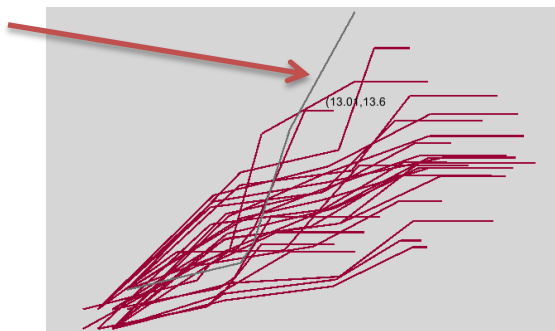

    b. Click Isolate on the menu bar.

    c. Line will be isolated, all other lines will be removed.
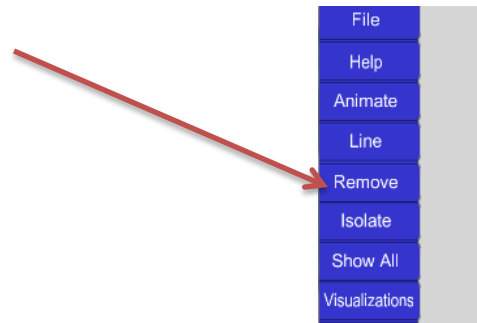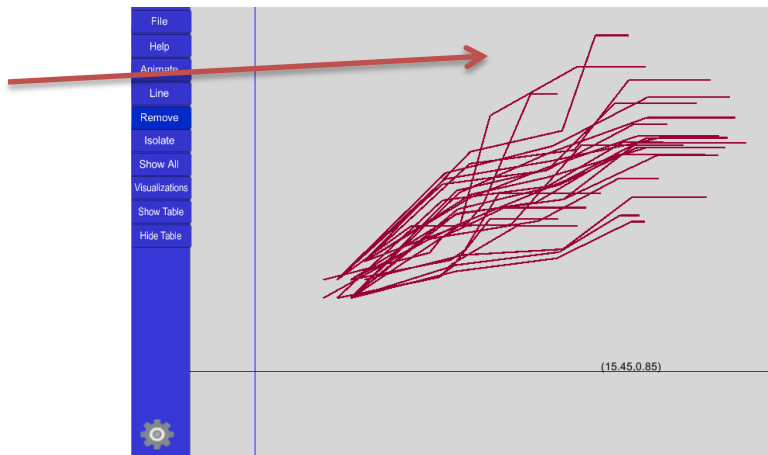

2. Remove:
    a. Select a line.
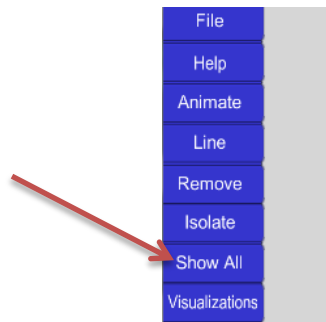
b. Click Remove on the menu bar.

c. Line will be removed.

3. With lines removed.

   a. Click Show All.

   b. All removed lines will appear.