

Troubleshooting for Kgraph tutorial:

1) The current version of Kaleidagraph is 4.5.2, which installs when we purchase. Users must go to the Synergy Software website for updates:

http://www.synergy.com/wordpress_650164087/support/updaters/

2) OS X students may get an error upon installation:

["Your security preferences allow installation of only apps from the Mac App Store and identified developers"?](#)

Solution from Synergy:

- By default Apple has changed the security settings to only allow installation of apps from the Mac App Store and identified developers.
- To temporarily get around the error message, control-click the application and choose Open. Click the Open button in the warning dialog that appears.
- To change this permanently go to System Preferences > Security & Privacy. On the General Tab click the little lock in the lower left corner to unlock the general preference pane. Then select the Anywhere radio button beneath Allow applications downloaded from.

3)

The Sandia link has an error in the pdf, which reoccurs with copy/past into a browser.

http://www.sandia.gov/polymer-properties/T1-%20master_curve.html

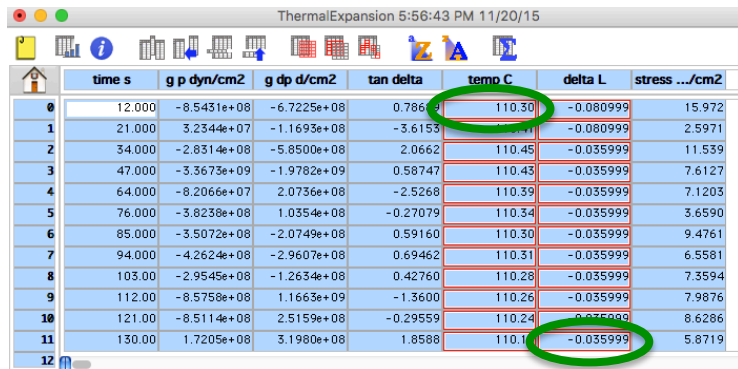
Safari thinks there is a space (in red) in the URL.

That's all it is. Delete to correct:

http://www.sandia.gov/polymer-properties/T1-master_curve.html

5) Lesson 5, step 2 “clear masked data”

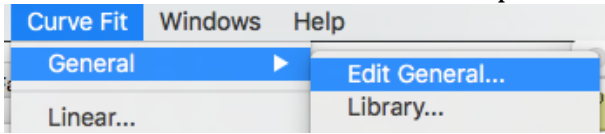
Do not clear all the data only the masked data. The masked data is the data in the red boxes. Click on the top left data point (110.30) which is circled here. Then scroll down to the bottom of the red boxed data and “click shift” on the lower right box. This should select ONLY the red boxed data (I have circled the lower right in the figure, but there will be more further down that you will need to scroll to get to). At this point the red-boxed data should be the only blue data. At this point proceed to clear the data.



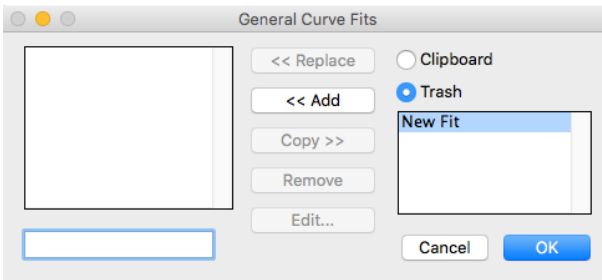
The screenshot shows a software window titled "ThermalExpansion 5:56:43 PM 11/20/15". The window contains a data table with the following columns: time s, g p dyn/cm2, g dp d/cm2, tan delta, temp C, delta L, and stress .../cm2. The table has 12 rows, numbered 0 to 11. The data in the table is as follows:

	time s	g p dyn/cm2	g dp d/cm2	tan delta	temp C	delta L	stress .../cm2
0	12.000	-8.5431e+08	-6.7225e+08	0.7862	110.30	-0.080999	15.972
1	21.000	3.2344e+07	-1.1693e+08	-3.6153	110.30	-0.080999	2.5971
2	34.000	-2.8314e+08	-5.8500e+08	2.0662	110.45	-0.035999	11.539
3	47.000	-3.3673e+09	-1.9782e+09	0.58747	110.43	-0.035999	7.6127
4	64.000	-8.2066e+07	2.0736e+08	-2.5268	110.39	-0.035999	7.1203
5	76.000	-3.8238e+08	1.0354e+08	-0.27079	110.34	-0.035999	3.6590
6	85.000	-3.5072e+08	-2.0749e+08	0.59160	110.30	-0.035999	9.4761
7	94.000	-4.2624e+08	-2.9607e+08	0.69462	110.31	-0.035999	6.5581
8	103.00	-2.9545e+08	-1.2634e+08	0.42760	110.28	-0.035999	7.3594
9	112.00	-8.5758e+08	1.1663e+09	-1.3600	110.26	-0.035999	7.9876
10	121.00	-8.5114e+08	2.5159e+08	-0.29559	110.24	-0.035999	8.6286
11	130.00	1.7205e+08	3.1980e+08	1.8588	110.1	-0.035999	5.8719
12							

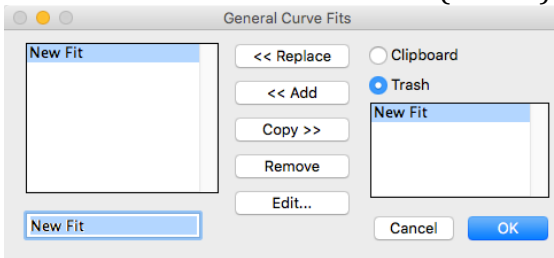
6) Lesson 5, step 9 – if you don't have a "general curve fit" available you need to create a new "general curve fit"
Select "Edit General" from Curve Fit pull-down menu



You will see:

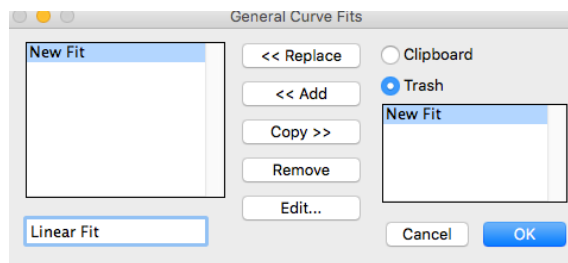


Make sure "New Fit" is selected (is blue) and click "add". You will see:



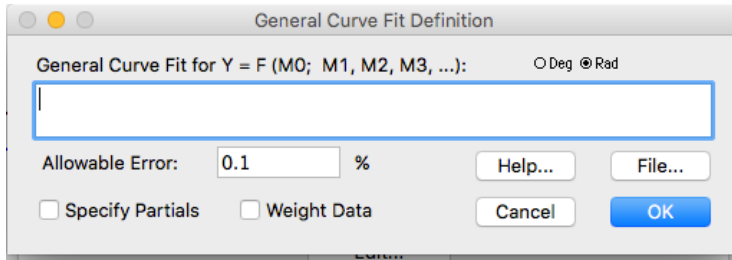
Type "linear fit" or any other name you wish

You will see:

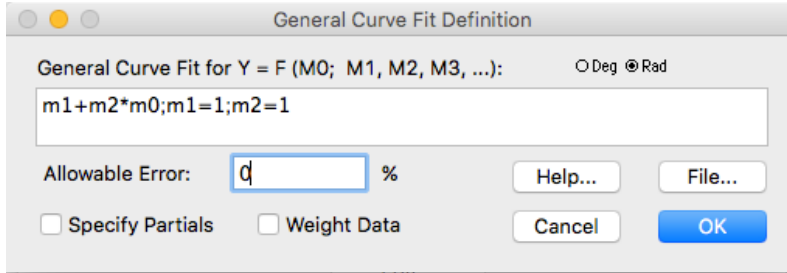


Click "edit"

You will see:



Make it look like:



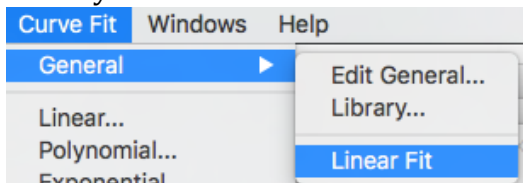
m_0 (or M_0) is the “x value” on your x-y plot
 $m_1, m_2, \text{etc.}$ are the fit values that the program will adjust to give you the best fit (least squares fit, since you ask).

$;m_1=1;m_2=1$ are the initial guesses for the fit parameters.

Note: powers are denoted with “^” as in m_0^2 for m_0 squared

Now click Ok and OK again The cure fit will be saved.

When you now select curve fit from the pull down menu you will see:



At this point you should be able to follow the directions in Lesson 5.