

# DataGrabber (beta) Tutorial

S. Roxburgh, December 2006

*\*warning\**

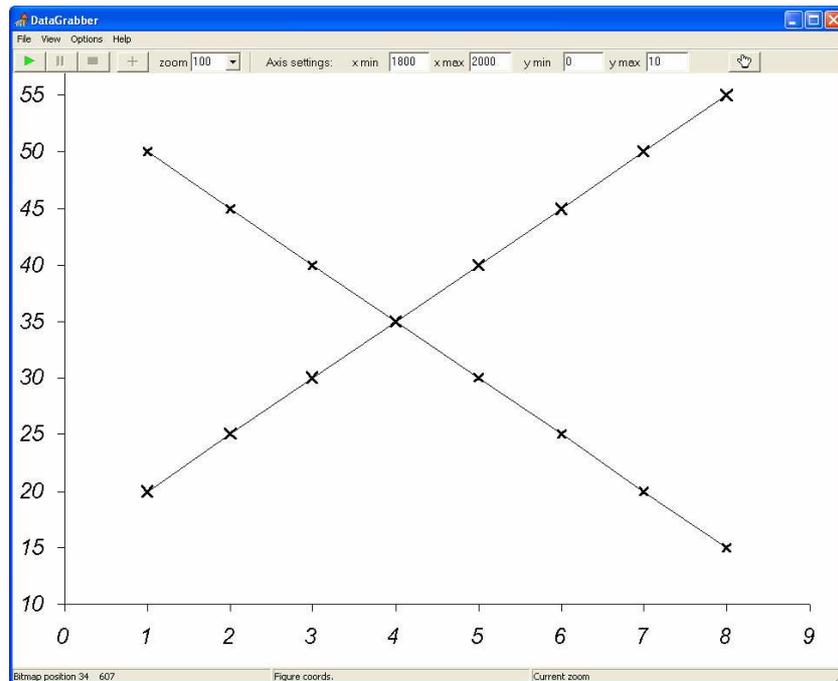
DataGrabber is still under development, and is quite buggy (though still useable).  
Don't be surprised if it crashes on you!

## Step 1.

Either scan your figure (as a \*.bmp file) or locate the provided test figure (test.bmp).  
When scanning your figure you DO NOT have to keep the figure axes square with the margins of the scanner – DataGrabber will internally account for any rotation.

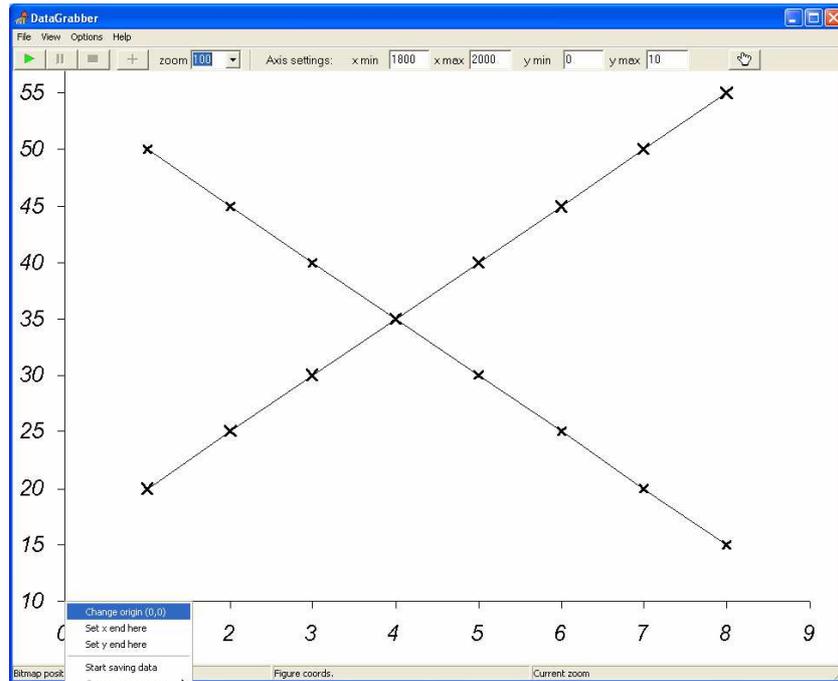
## Step 2.

Run DataGrabber. Under the 'File' menu open the bitmap of the figure. The interface should look something like that below. Note you can alter the magnification at this stage to improve precision.

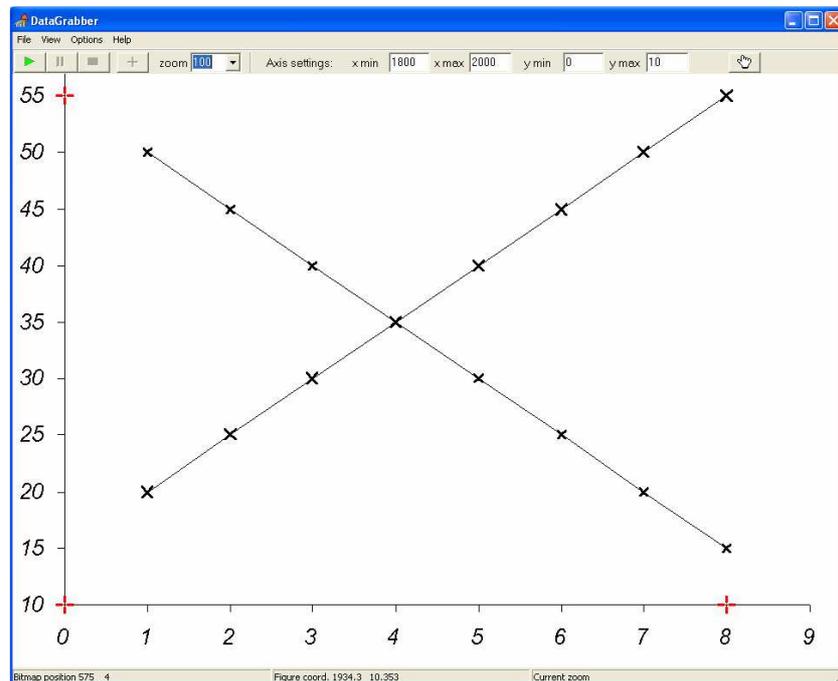


## Step 3.

Next you need to tell DataGrabber where the x- and y-axis end-points are, and the origin. To do this point the mouse cursor (which should be a cross) at the origin of the figure and right-mouse-click, then select 'Change origin':



Next do the same for a point near the end of the x- and y-axes, selecting 'Set x end here' and 'Set y end here' from the pop-up menu respectively. These three locations should now be marked with a red cross:



Step 4.

Next you need to tell DataGrabber the axis values that you have selected. In the above example the x-minimum is 0, and the maximum is 8; the y minimum is 10, and the y maximum is 55. These can be entered in the toolbar:

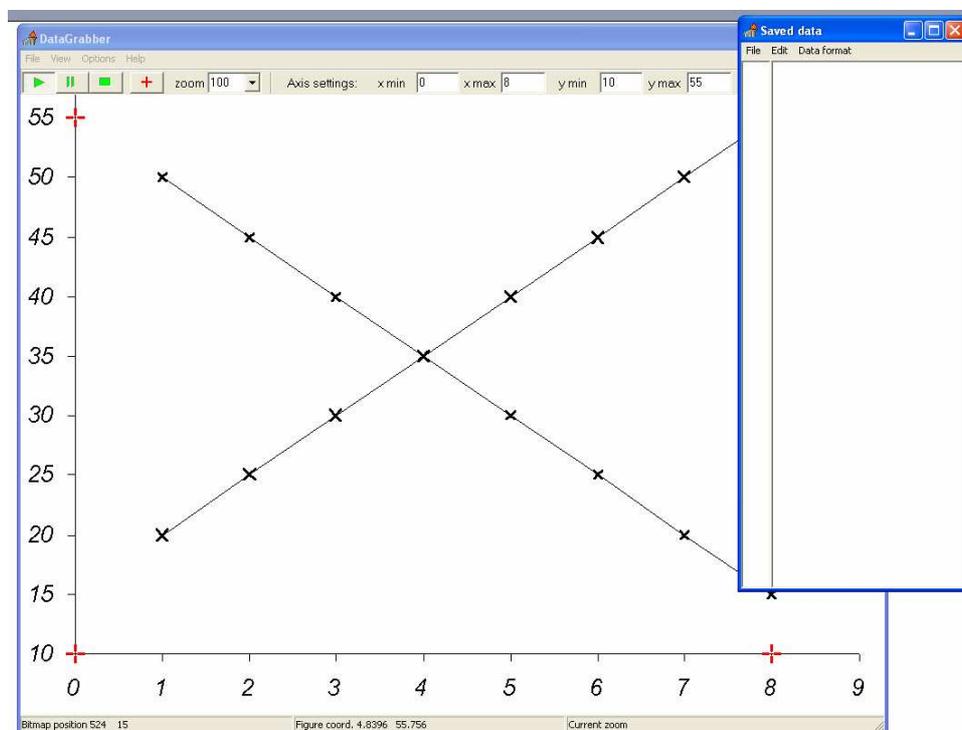
Axis settings: x min 0 x max 8 y min 10 y max 55

When entering these values make sure the maximum value is always greater than the minimum!

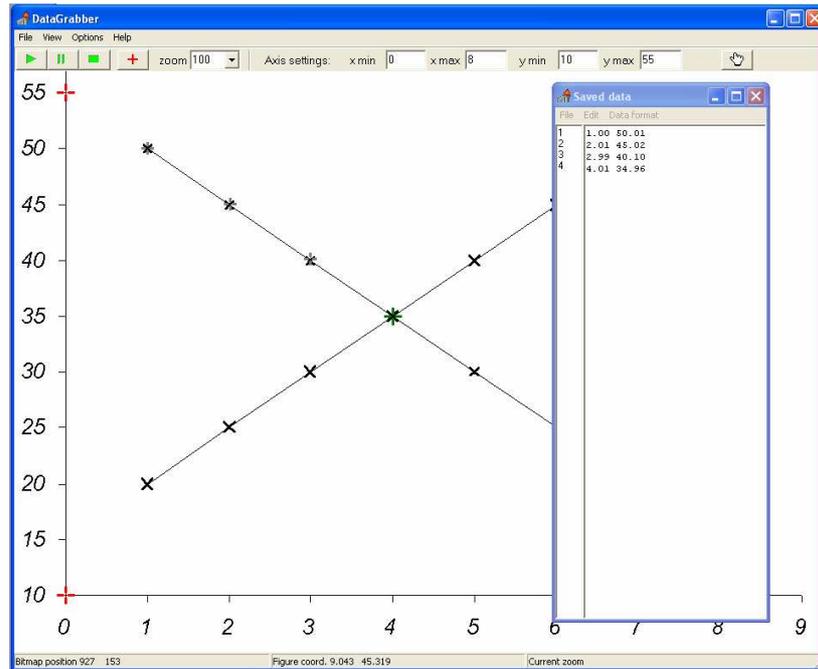
Step 5.

Now it is time to start extracting the data. Before doing that, first move the mouse over the figure and watch the values change on the status bar at the bottom of the screen, and check to make sure that the calculated values make sense (the values beside 'Figure coord.').

OK, press the green arrow on the toolbar and DataGrabber will be ready to start recording, and the 'Saved data' memo box will appear ready to show you the data values. This box can be moved around so it doesn't get in your way.



Note there are two recording modes, selectable under the options menu. In continuous mode, data will be save whenever you right mouse-click on the figure. In manual mode you can click anywhere on the figure, but the point will only be recorded if you press the 'enter' key. Click on a few datapoints:



Here I have selected four datapoints sitting on one of the lines. The most recent position is marked with a  $+$ , and previously selected points are marked with a  $+$ . In the 'Saved data' box the x and y locations of each of these four points are recorded. To save your results click on the File  $\rightarrow$  Save menu button on the 'Saved data' box, and save to a text file in the normal way.



That's pretty much it! There are some other options available in the menu. Some of these work, and some don't, and some only half work. Also, if you have multiple figures it seem to be more stable if you close the application and then re-start for each new file. One day I'd like to go back and fix the bugs and finish this program off properly. One day....