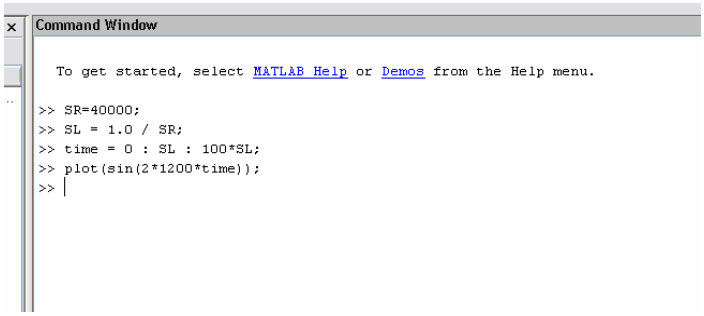
Written by Kenny Neal Sept. 15th 2005

Zooming Plots in MATLAB 7

1. Open up MATLAB 7, generate some sort of plot (I used the first example from Lab #1), you can copy and paste the following code into the command window.

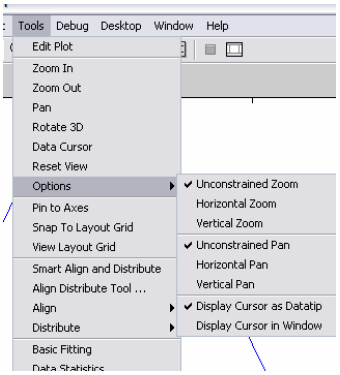
   ```
   SR=40000;
   SL = 1.0 / SR;
   time = 0 : SL : 100*SL;
   plot(sin(2*1200*time));
   ```



2. **Zooming:**

   In the plot window that opens up, click on the Zoom In feature  , and then simply click on the plot somewhere to zoom in. Press the alt key while clicking to zoom back out (Or use the Zoom Out  key).

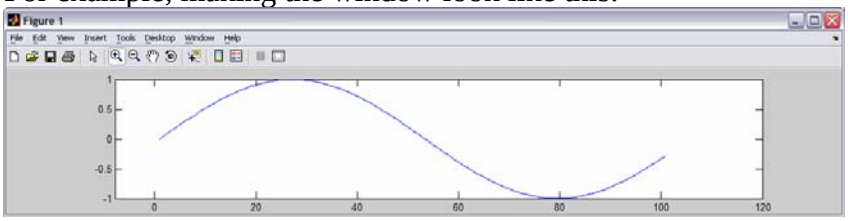
   NOTE: When you zoom in, the plot is also centered to where you clicked. This can take a bit of practice to get used to. You can change this behavior under Tools -> Options. See Step 4 for more info.



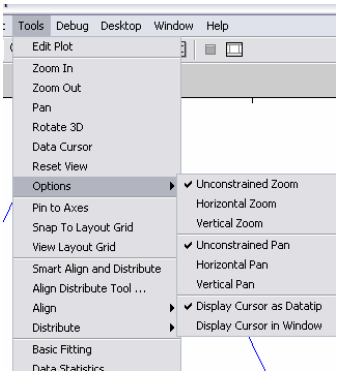
3. **Resizing your plots:**

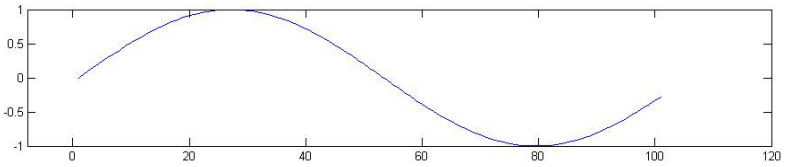
   This is actually a really easy thing to do in MatLab, simply resize the entire Figure 1 window. Whatever size you have the window, the saved JPG will be the same. (FYI, it actually just takes a screen shot of the window you look at and saves it.)

   For example, making the window look like this:



   Will give a saved JPG that looks like this:



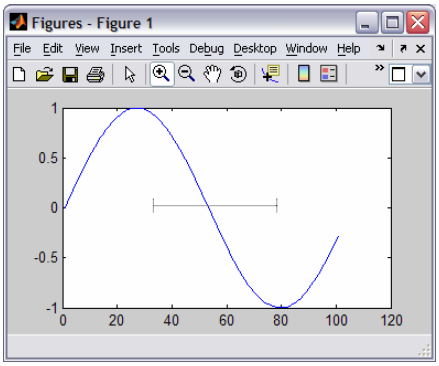


4. Custom Zooming:

As show above, there are a few different options you can use to get the Zoom feature to do what you want.

a. Horizontal Zoom

This lets you select a portion of the plot that you want to take up the entire window.

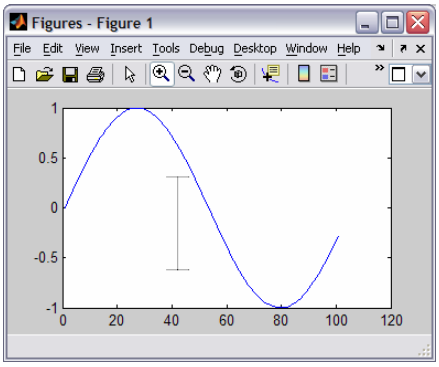


This trick with this is to click and drag over (the gray line will appear) the area you want to zoom to. You can alternatively use the  *and*  *features as well, they will act in the same way as in the 'unconstrained zoom' except that it only zooms in (or out) in the one selected direction.*

b. Vertical Zoom

Same as above; select the vertical section you want to fill the window.

You can alternatively use the  *and*  *features as well, they will act in the same way as in the 'unconstrained zoom' except that it only zooms in (or out) in the one selected direction.*



c. Horizontal Pan

This works on a single click, just point to the general area you want to zoom in on, it will just stretch the image horizontally (it locks the vertical zoom).

d. Vertial Pan

Same as above; just point to the general area you want to zoom in on, it will just stretch the image vertically (it locks the horizontal zoom)

Questions? Comments? Corrections? Email me @ NeoGeek83@hotmail.com