

## **GSYS Digitizer (Ver. 2.4.0) Quick Practice** (Naohiko Otsuka n.otsuka@iaea.org)

### **(1) Install**

- 1-1. Obtain Gsys2.4.0.exe from <http://www.jcprg.org/gsys/> and save it (e.g., on Desktop).
- 1-2. Start Gsys2.4.0 by clicking the exe file icon.
- 1-3. If it does not work, install Java Runtime Environment from <http://Java.com/>.

### **(2) Customize Properties**

- 2-1. Select **Edit**, then **Properties**.
- 2-2. Set Unmarked data= **Green** and Point size=**2**.
- 2-3. Click **Apply**.

### **(3) Load Graph Image to GSYS**

- 3-1. Obtain Material 6a, 7a on [http://www-nds.iaea.org/nrdc/wsin\\_2011/](http://www-nds.iaea.org/nrdc/wsin_2011/) for the practice.
- 3-2. *Drag and Drop* the graph image to the Gsys Window.
- 3-3. Enlarge the Gsys Window by mouse.
- 3-4. Enlarge the graph image by the **Magnify** button.

### **(4) Define X- and Y-Axis**

- 4-1. Click the **Xa** button (The button becomes red).
- 4-2. Select two scales (tics) on the X-axis.
- 4-3. Provide the corresponding two X values to the Axis Manager Window.
- 4-4. Repeat it for Y-axis with the **Ya** button.

### **(5) Mark Data Points**

- 5-1. Click the **Ad** button until the button becomes red.
- 5-2. Click each data point.

### **(6) Adjust Positions of Marked Data Points**

- 6-1. Click the **Ad** button until the button becomes white.
- 6-2. Click a marked data points, and adjust the position by cursor keys (up, down, left, right)
- 6-3. To move to the next data point, try the F7 and F8 keys (depends on your environment).

### **(7) Mark Error Bars (for y-symmetric error bars)**

- 7-1. Click **Yerr (sy)** until the button becomes red.
- 7-2. Mark the centre of a data point, then mark upper (or lower) boundary of its error bar.
- 7-3. Repeat 7-2 for all data points.

### **(8) Adjust Length of Error Bars**

- 8-1. Click **Yerr (sy)** until the button becomes white.
- 8-2. Click the center of a data point, then click the lower (or lower) boundary of its error bar.
- 8-3. Adjust the length of the error bar length by cursor keys (up, down)

### **(9) Output Numerical Data**

- 9-1. Select **Edit**, then **Output Numerical Data**
- 9-2. Click **Write**
- 9-3. Compare with original data (Materials 6b-6c, 7b on the same web page.)