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/ 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.)