

Start the relevant DataStudio Activity

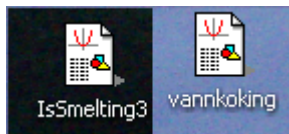


Figure 1. Double-click on the relevant DataStudio Activity on the Desktop.

Start the data-logging.

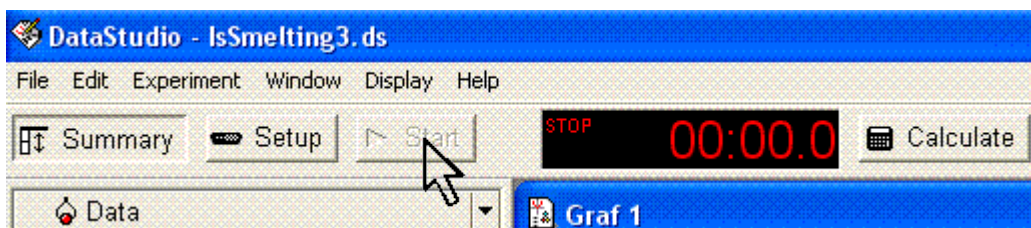


Figure 2. Click on the Start button to start the data-logging.

When measuring the latent heat of vaporization of water the data-logging will be manual. A Register button will appear and only when a steady-state of boiling is achieved should the next data-point be logged by clicking once on Register. When the last point has been logged you should click on the Stop button to avoid logging new data-points by accident.

When measuring the latent heat of melting of ice you can start the data-logging even before turning on the power supply which heats the water during the initial measurement of the heat capacity of the water+calorimeter system. The data and two copies of the data are presented in the graph as three different “runs” – how to apply the three required linear fits to the different runs is described below.

Applying a linear fit to some data-points

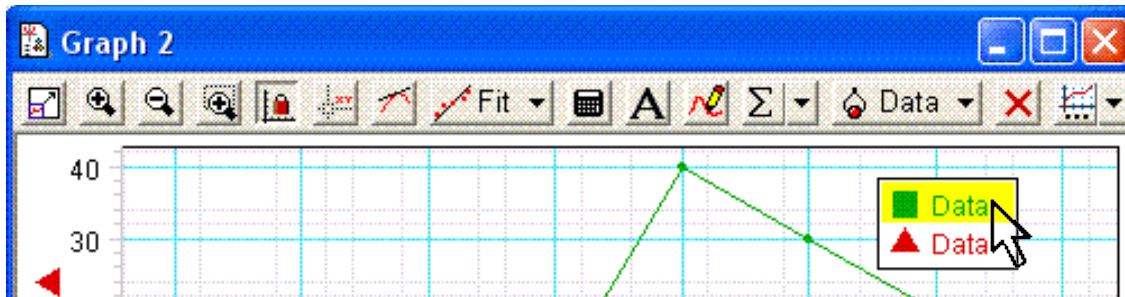


Figure 3. Select the “run” (which in some cases may simply be an additional copy of other data) to which you wish to perform the linear fit in the symbol legend.

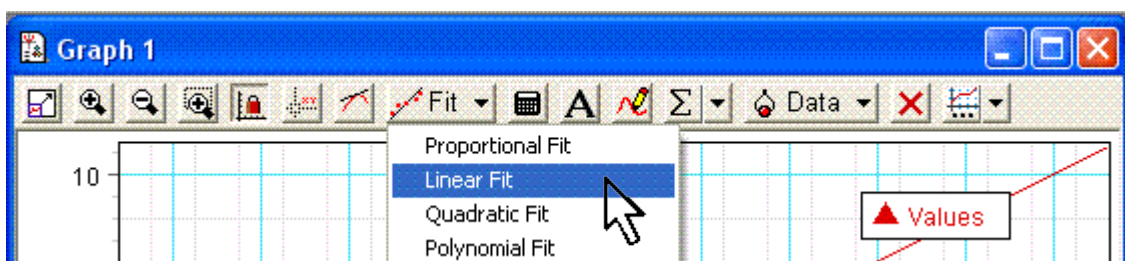


Figure 4. Select “Linear Fit” from the Fit menu.

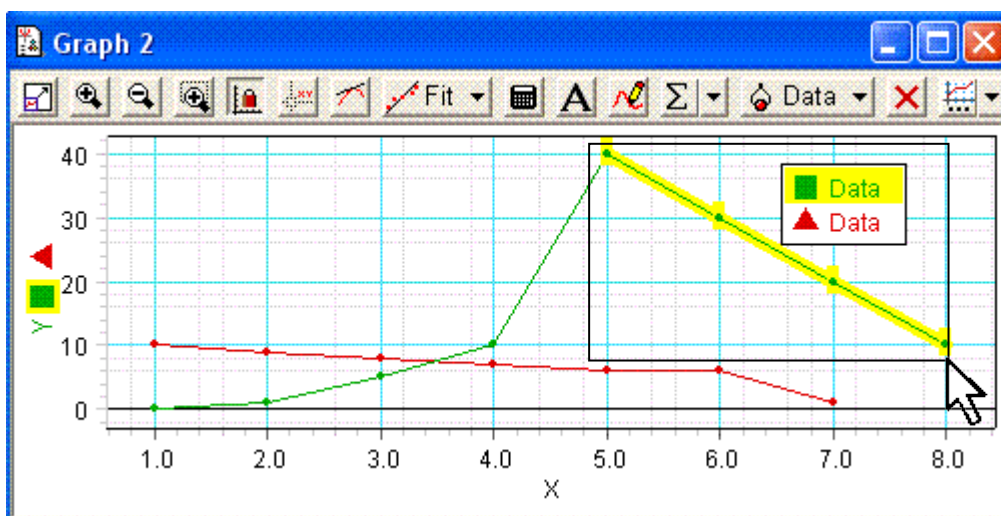


Figure 5. Select the data-points by clicking and dragging to make a rectangle around the points to which you wish to apply the fit.

You can perform only one fit at a time for each data “run”.