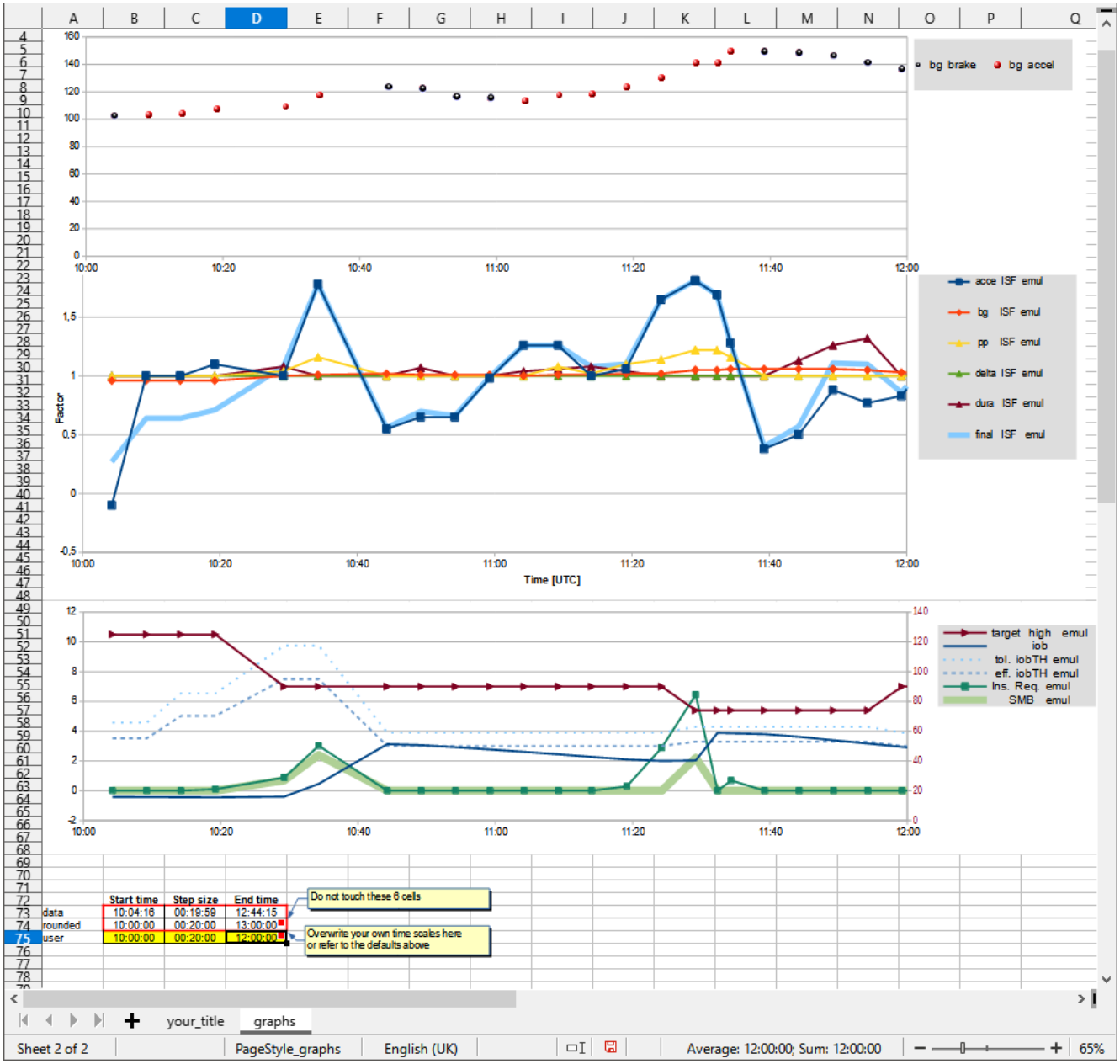
How to create the autoISF factors plot from the CSV file

The CSV-file holds a lot of data. Rather than diving straight into more analysis with spreadsheet methods it pays to first create some diagrammes. The proforma contains 3 such diagrams, namely

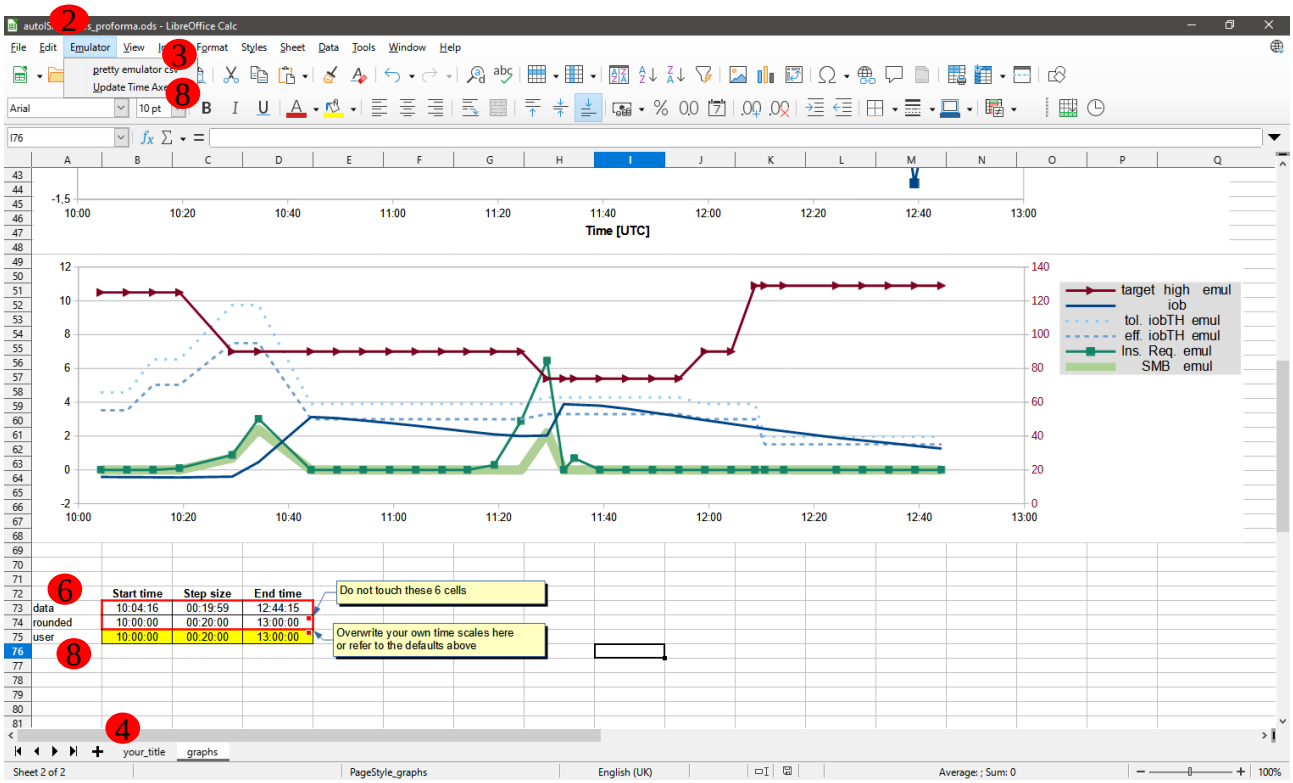
- glucose
- autoISF factors
- iob including threshold and its tolerance, target, insulin required, SMB

More such standard diagrams can be added easily. The data tab also has conditional formating to highlight cells were the emulated value deviates from the original value by up to 2% or even more. Cells unchanged are highlighted in pale green. This gives a quick view of where the emulated case impact shows.

Here are the current diagrams:



Updating the proforma with actual results from the emulator was tredious at best or hard work for less experienced users. With the macros those steps are executed by Libre Office within a few seconds. This screenshot shows the main points of user interaction for such an import:



The sequence of actions is

1. Load the CSV file from the emulator run into an empty spreadsheet document. Note that column "B" is not imported as text but as time/date. With LibreOffice it helped to mark the format of the 2nd column as "US English". Generally COMMA is used here as decimal separator, i.e. it does not work directly everywhere in the world at the first attempt.
2. Open autoISF_factors_proforma.ods and take note that there is a new tab **Emulator** between the Edit tab and the View tab
3. In that Emulator tab click **pretty emulator csv**. This will cycle through all CSV-files currently loaded like your one from above. You confirm the one you are interested in.
4. This will update the proforma with the data from the CSV-file and rename the sheet from the generic “your_title” to the name of the imported CSV-file.
5. Next it will go to the sheet “graphs” showing the updated standard charts. The picture above just shows the bottom chart with IOB related information.
6. The time axes are auto-scaled as shown in cells B73:D:74. Please do not change those cells. The actual scaling information is taken from cells B75:D75 marked in yellow which by default pick up the auto-scaled content of cells B74:D74.
7. The last action from the macros system is to open a dialog to confirm saving this status as an ODS-file in the same folder und with the equivalent name the original CSV-file had. This avoids overwriting your master autoISF_factors_proforma.ods file later by accident. Nevertheless it is a good idea to keep a backup copy of the master proforma in a separate place.

8. You can adapt the time axis scaling any time later by editing cells B75:D75 to your own needs or preferences. After editing you click **Update Time Axes** in the new Emulator tab.

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