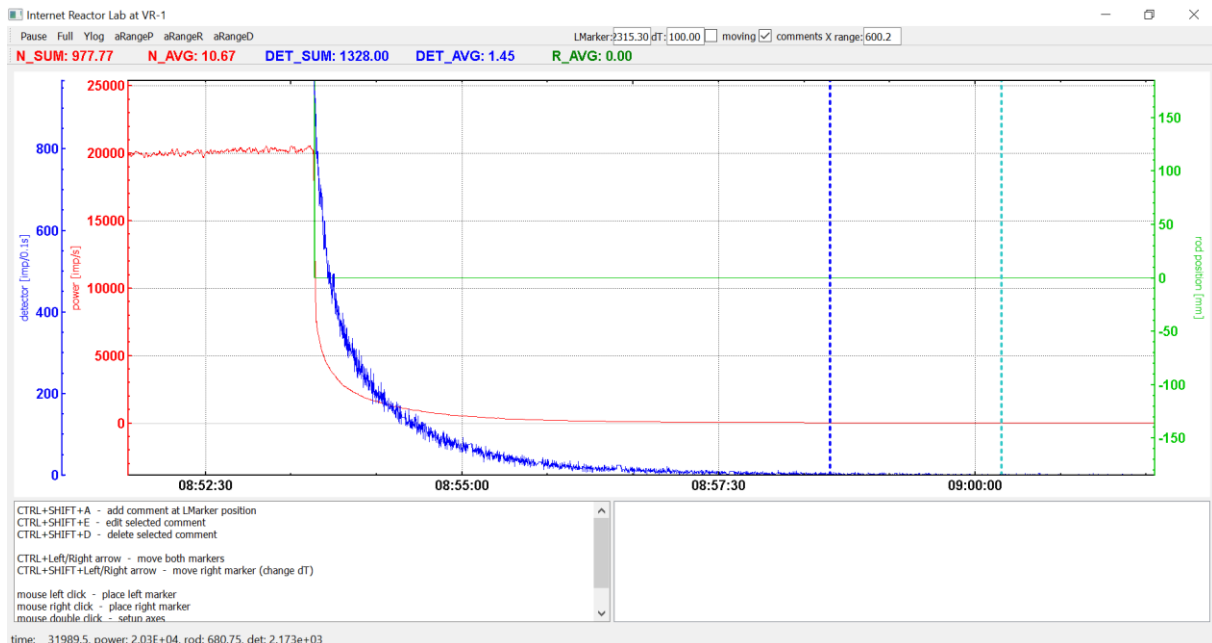




Manual for SWIRL installation and control

Installation and running the SW

1. Download the IRL-release.zip from <http://monter.fjfi.cvut.cz/IRL/>
2. Unzip it in arbitrary folder in your computer
3. Run the file **IRL.exe** in the folder **IRL-release**. You should see the application window as shown below:



Application control

The application automatically receives data from the server on which selected operational and experimental data are logged in steps of about 0.11 s. From the application it is not necessary (and it is not possible) to influence whether the data are being receive or not. This is controlled from the server side of the broadcasting institution.

The application is designed to display several selected variables - typically three, namely reactor power, rod position and detector response. Using the application, it is possible to monitor and read the evolution of variables in time. The application automatically logs the displayed data to the local file YYYYMMDD.csv in the IRL-release directory. The log file can be used later by the user for data analysis.



Control buttons in top panel:

- Pause – screen pause (new data is still being received, but the image does not move; this makes it easier to read the data from the application)
- Full – unzoom of the time scale so that all data since the start of the application are visible
- aRange P – automatic scaling on the "Reactor power" axis with respect to the currently selected time range
- aRange R – automatic scaling on the "Rod position" axis with respect to the currently selected time range
- aRange D – automatic scaling on the "Detector response" axis with respect to the currently selected time range

Additional fields in the top panel:

- L-marker – left cursor position
- dT – ROI (region of interest) width. Note: you can select the ROI using the left and right cursor, or using the left cursor and the width of the interval.
- moving – option whether or not the ROI interval should move automatically in time
- x range – time range (s)

Variables in the top panel:

- N_SUM – the sum of the power measurement response between the left and right markers (the width of the interval is given by the dT value)
- DET_SUM – sum of detector response between left and right marker (interval width is given by dT value)
- R_AVG – average value of the rod position between the left and right marker (the width of the interval is given by the value dT)

Mouse control

Axis set-up and marker positions can be controlled by mouse:

- left click in the data area – selecting position for the left marker
- right click in the data area – selecting position for the right marker
- double-click on any of the axis – form will be displayed for set-up of the lower and upper limits of the given axis
- use of the mouse wheel with cursor placed on one of the axis - zooming in/out of the selected axis
- drag the mouse while holding down the left button and having the cursor on the selected axis – shift of the axis range