

E-Log: a web graphics log viewer

Technology: PHP, MySQL, JavaScript, JGraph, etc

Development period: July 25th 2003 – now

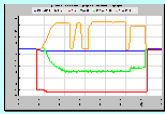
Releases: more than 105 versions

Nothing really new:

There are plenty of plotting applications

Only at Elettra there are two other web applications

The only piece of news is hidden in the implementation details



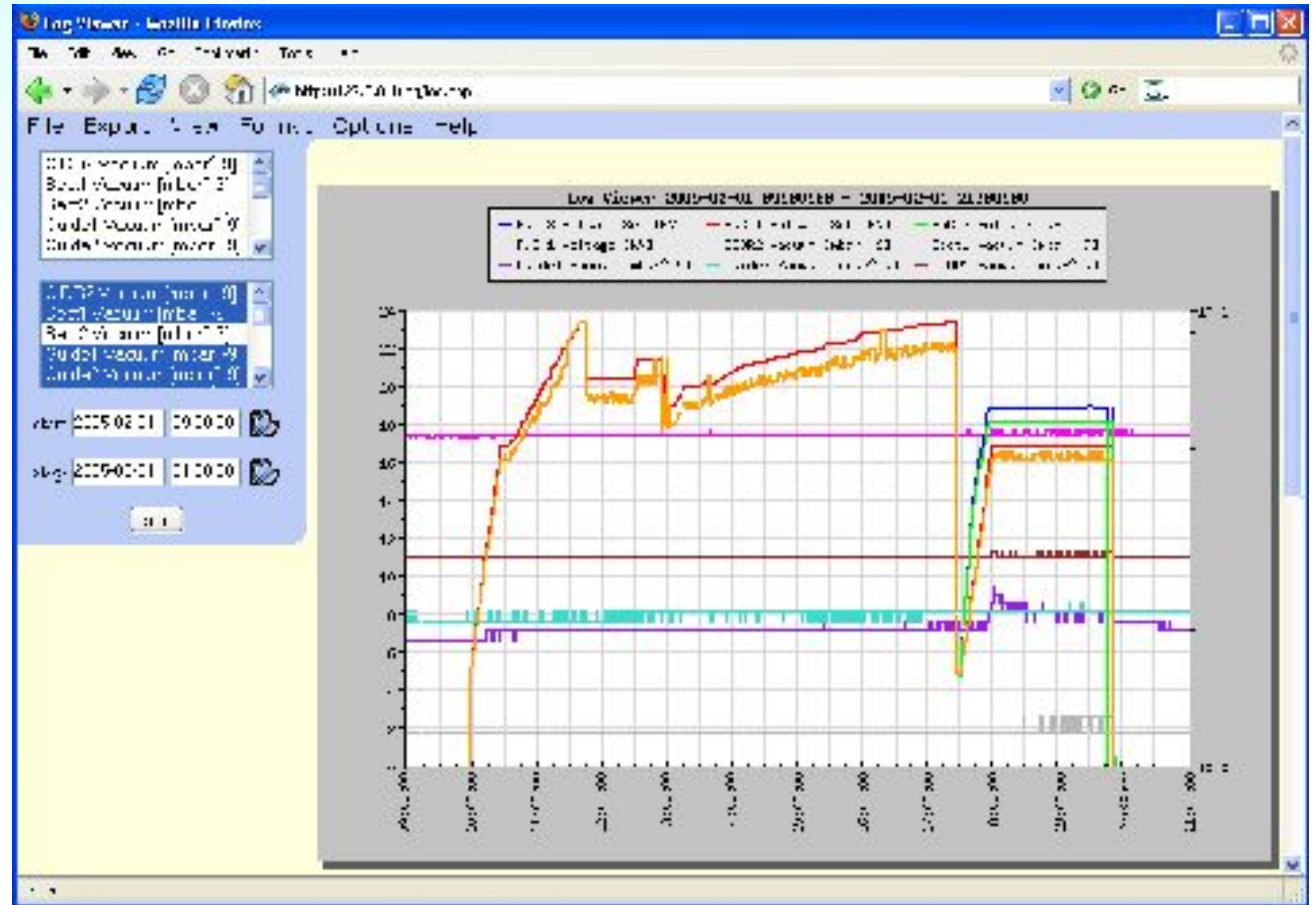
Single page design

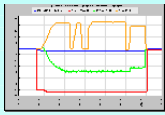
Requirements:

Web browser

Pop-ups

Cookies



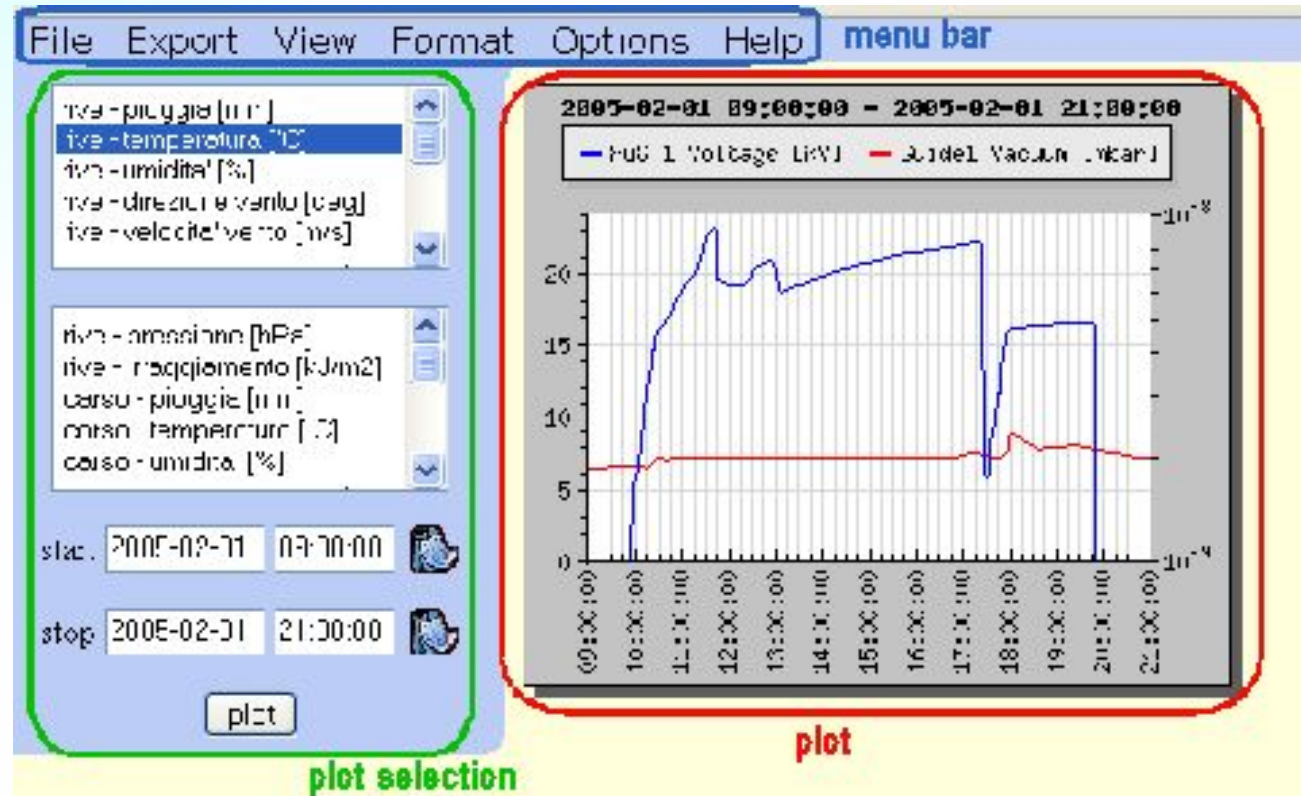


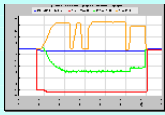
Main areas

Plot selection

Plot

Menu bar





Plot selection

Select variables for Y1 axis

Select variables for Y2 axis (optional)

Select variables for multi state signals (optional)

Select variables for ON/ OFF signals (optional)

Start date and time + calendar

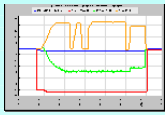
Stop date and time + calendar

Zoom out button

Plot button

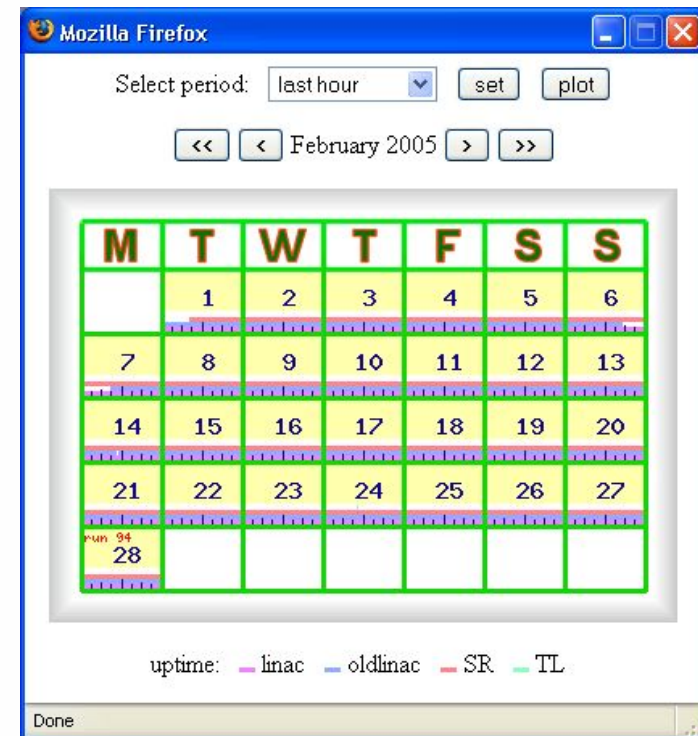
The screenshot shows the plot selection interface with the following elements:

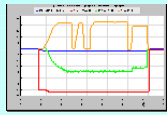
- Two lists of variables for Y1 and Y2 axes, each containing:
 - //tom:20000/sr/DCCT/S4/current
 - //tom:20000/sr/DCCT/S4/lifetime
 - //tom:20000/sr/DCCT/S4/injrate
 - //tom:20000/sr/DCCT/S4/energy
- Start date and time field: start [last 24 hou] [] [calendar icon]
- Stop date and time field: stop [] [] [calendar icon]
- Plot button: plot [] [zoom out icon]



Calendar

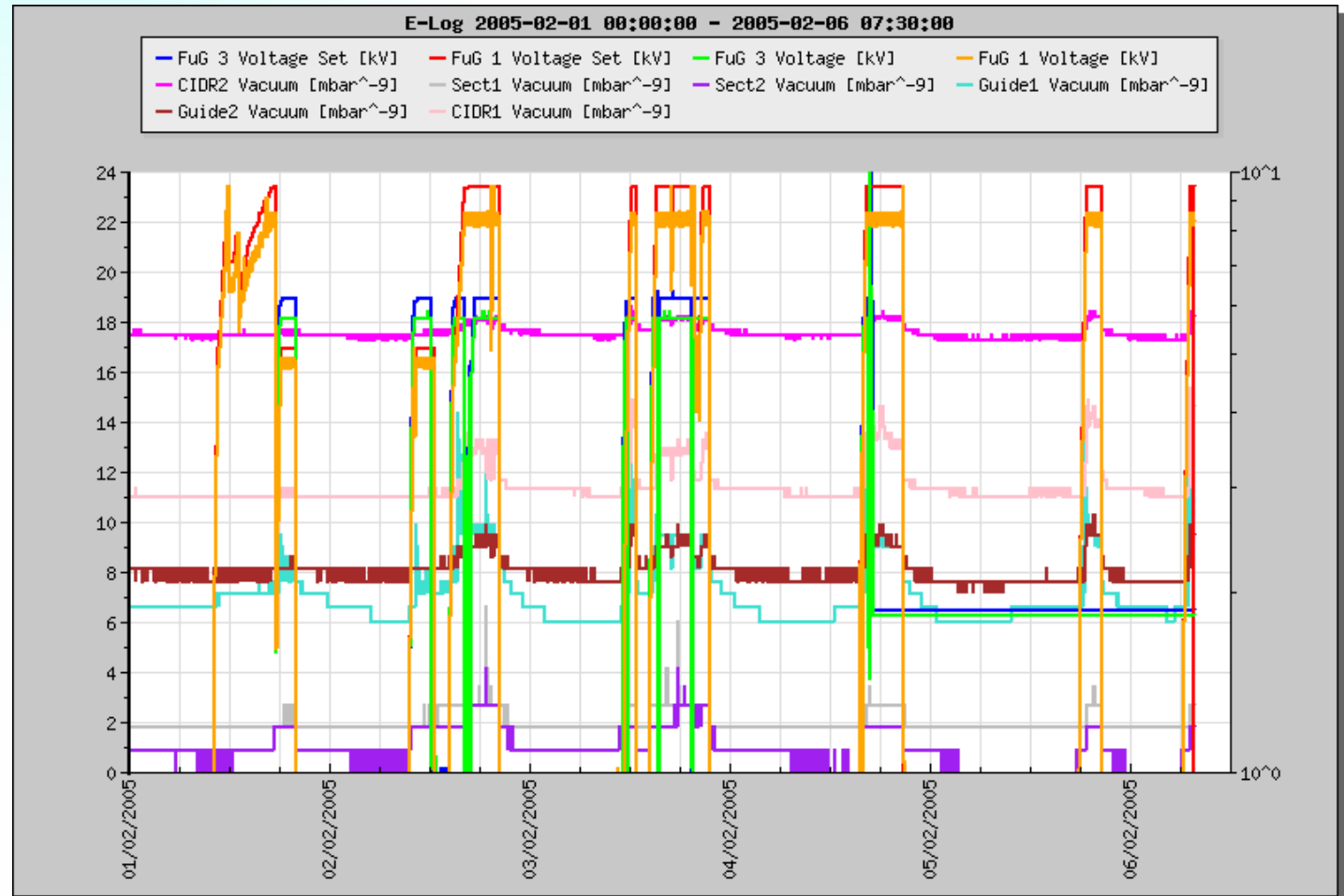
- Date and time selection
- Run and run number
- Loggers' uptime
- Last minutes / hours / months / months

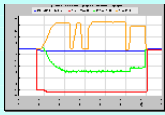




Plot

Click on
image to
zoom





Menu bar

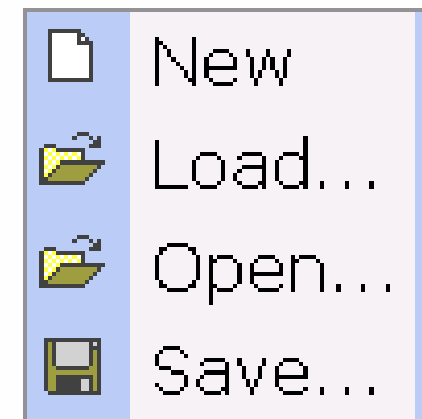
File

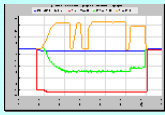
New clear all settings saved on cookies

Load... read settings from a file on server side

Open... read settings from a file on client side

Save... save settings into a file on client side





Menu bar

Export

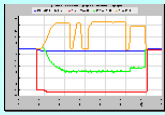
PDF show all plots in A4 or A3 format

XLS use XML for Office XP or 2003

CSV comma separated values

Mail multipart mime protocol





Menu bar

Bookmarks

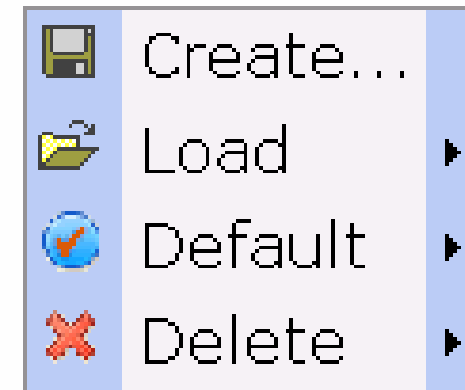
Bookmarks are saved on cookies

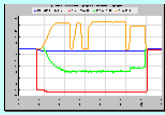
Create save all settings as a bookmark

Load some settings from a bookmark

Default set a bookmark as default

Delete destroy a bookmark





Menu bar

Format

Hide Events don't show the event plot

Plot size modify the plot size

Zoom switch between two zooming modes

Style switch between step, linear or scatter

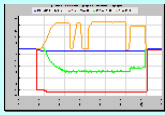
Y axis set label, max/ min and log scale

Y2 axis set and disable Y2 axis

Correlation set correlation or time domain

Show Raw Data show all data in table





Menu bar

Options

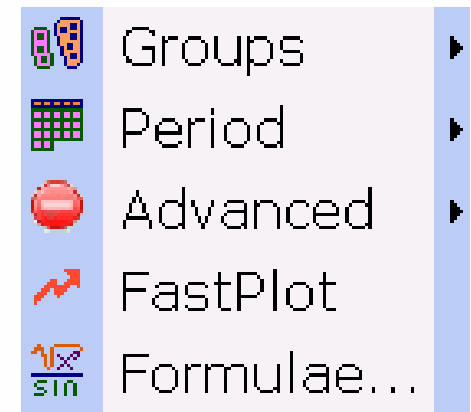
Groups restrict to some sets of variables

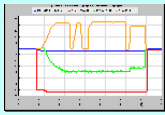
Period restrict to a limited period

Advanced for advanced users only

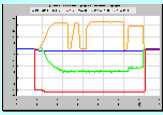
FastPlot use JGGraph 1.17 fast plot

Formulae... edit formulae





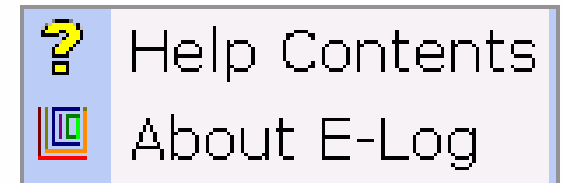
- Formula editor
- Compose
- Load
- Delete
- View MathML
- Variables
- auto-completion

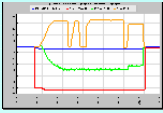


Menu bar

Help

Help Contents a not-so-short help
About E-Log credits and version





Conclusions

Developments

Debugging: nobody is perfect

Add variables popup: change the color of variables etc

Add users: save user account and configurations on server side

Add multi-plot: view more than one plot in a single page

Thanks

I've utilized seven open-source PHP and JavaScript classes

Many people have contributed with suggestions and debugging