

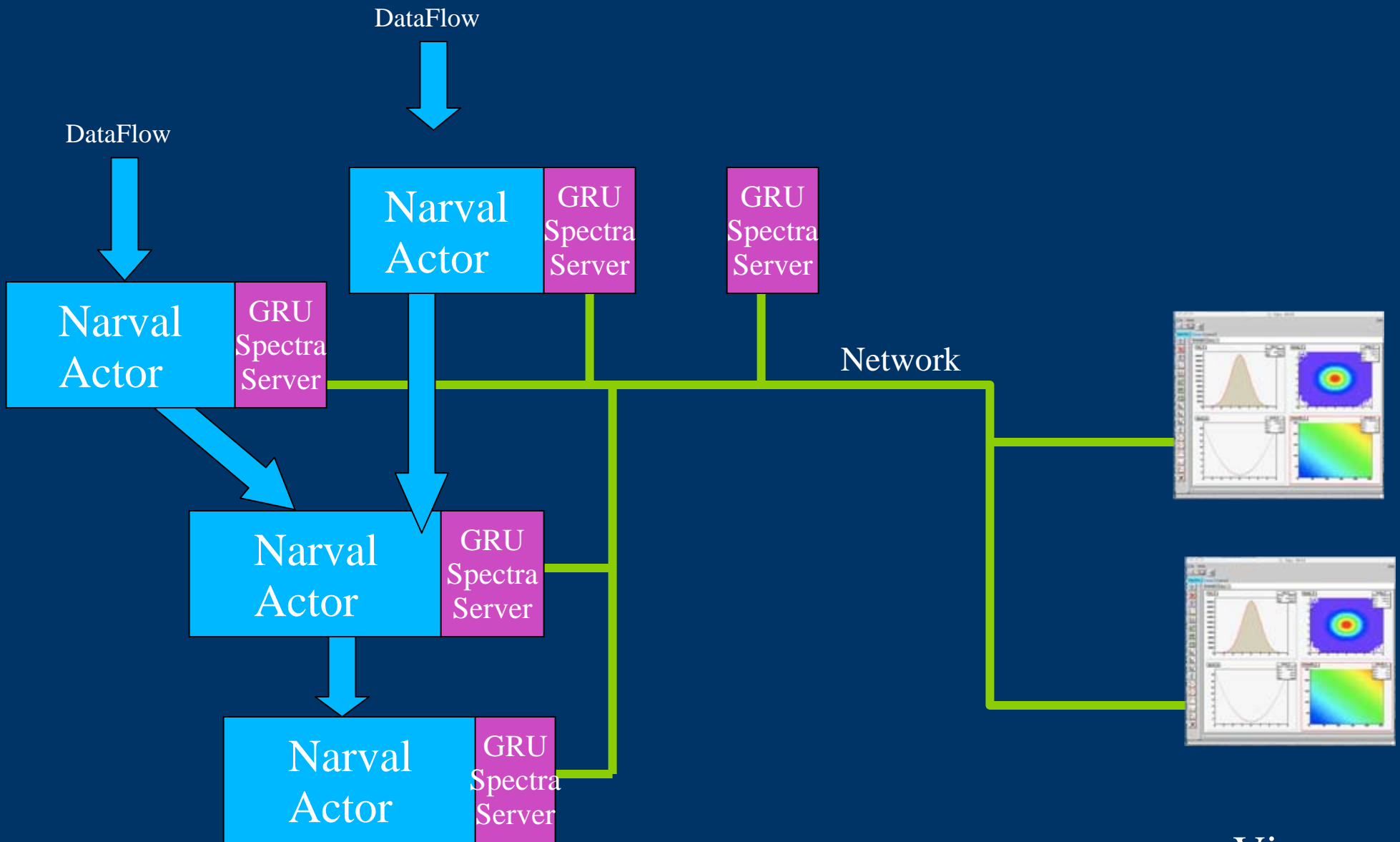
Spectra Server & Vigru

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Overview



Vigru

Server :

- Function : Export ROOT Histograms via Network
- Use library
 - ROOT (Cern)
 - GRU (Ganil Root Utilities)
- In C file easy to use :
 - Declare a Histograms Data Base
 - Declare a Server of this DB
 - Add ROOT histogram in DB

Simple C example of standalone server

```
#include <stdlib.h>
#include « TH1.h »
#include "GSpectra.h »
#include "GNetServerRoot.h »
```

```
main(){
int value1,value2 ;
```

```
GSpectra* speDB= new GSpectra();
GNetServerRoot* serv = new GNetServerRoot(speDB);
serv->SetPort(9099);□
serv->StartGNetServer();
```

« Gru code »

```
TH1S* histo1= new TH1S("Histo1", "histo1", 100, 0, 100 );
TH1S* histo2= new TH1S("Histo2", "histo2", 100, 0, 100 );
```

« ROOT code »

```
speDB->AddSpectrum(histo1, « MyFamily » );
speDB->AddSpectrum(histo2, « MyFamily » );
```

```
while(true){
    value1 = (int)(((float)rand()/RAND_MAX)*100);
    value2 = (int)(((float)rand()/RAND_MAX)*100);
    histo1->Fill(value1);
    histo2->Fill(value2);
    sleep(1);
}
}
```

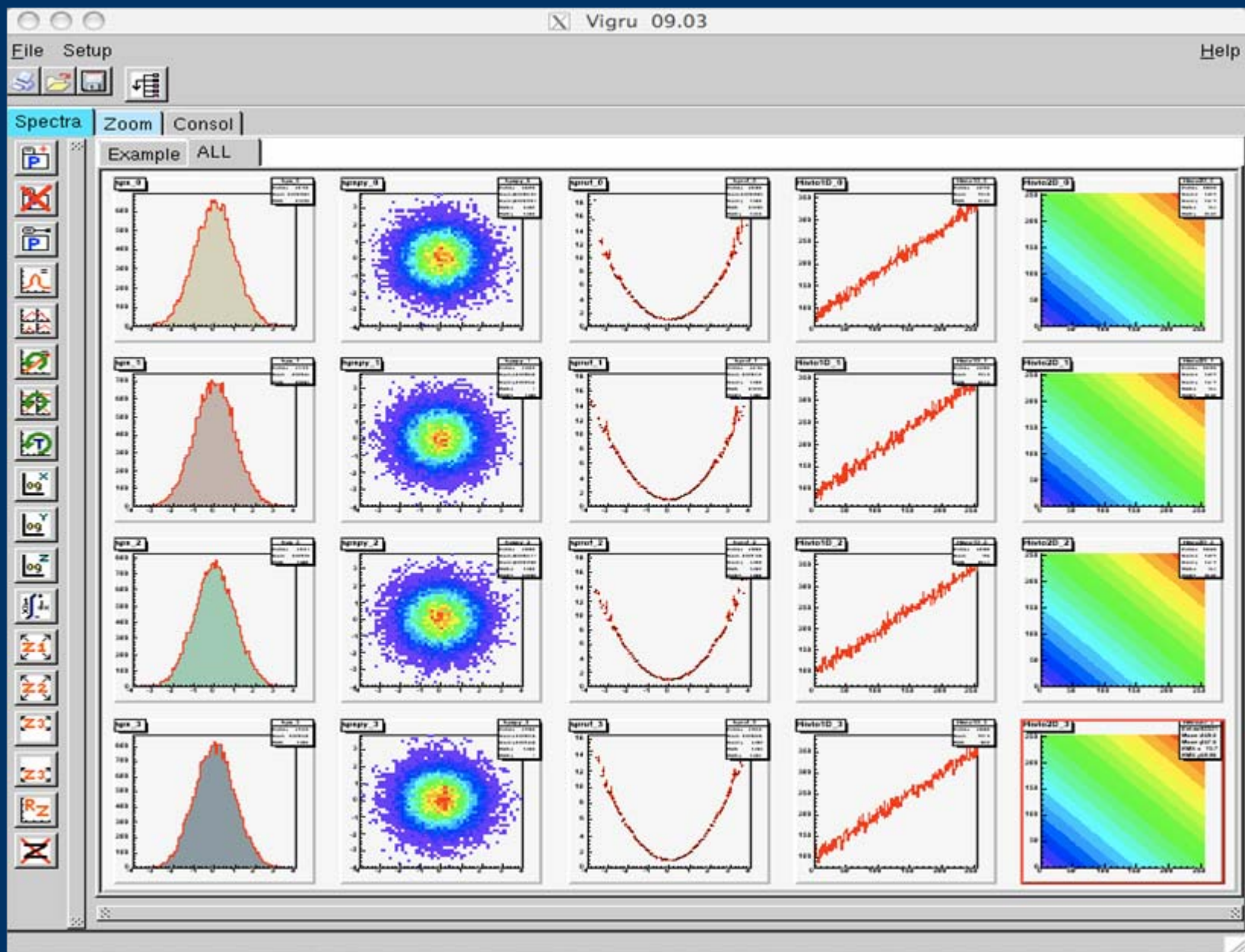
« Standard C code »

Client : Vigru

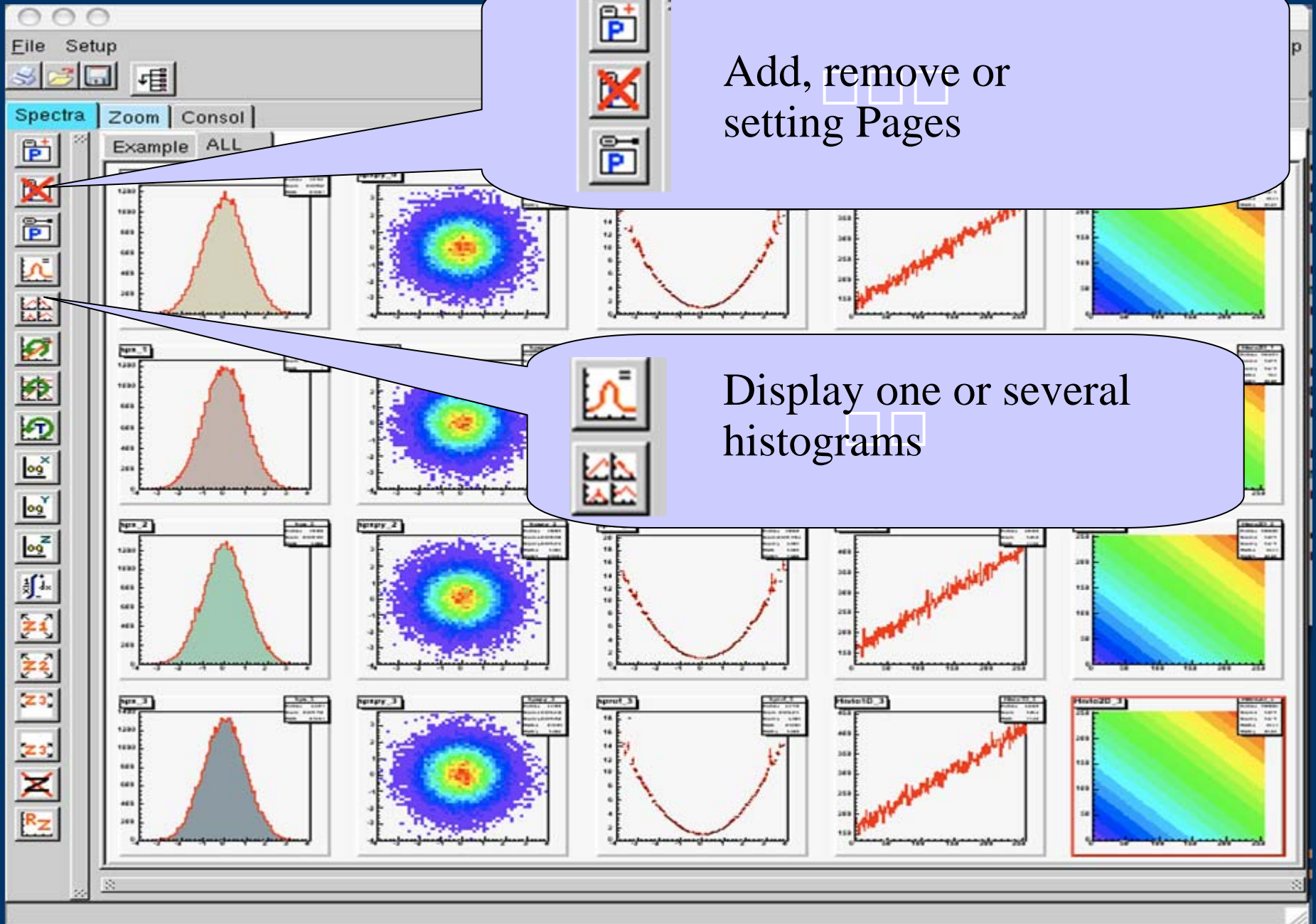
- Function : Display a large number of spectra easily
 - Load list of alive spectra from remote servers
 - Display spectrum or a family of spectra
 - Presentation on multi-pages
 - Save/ retrieve setup
 - Benefit of root powerful functionalities



New look



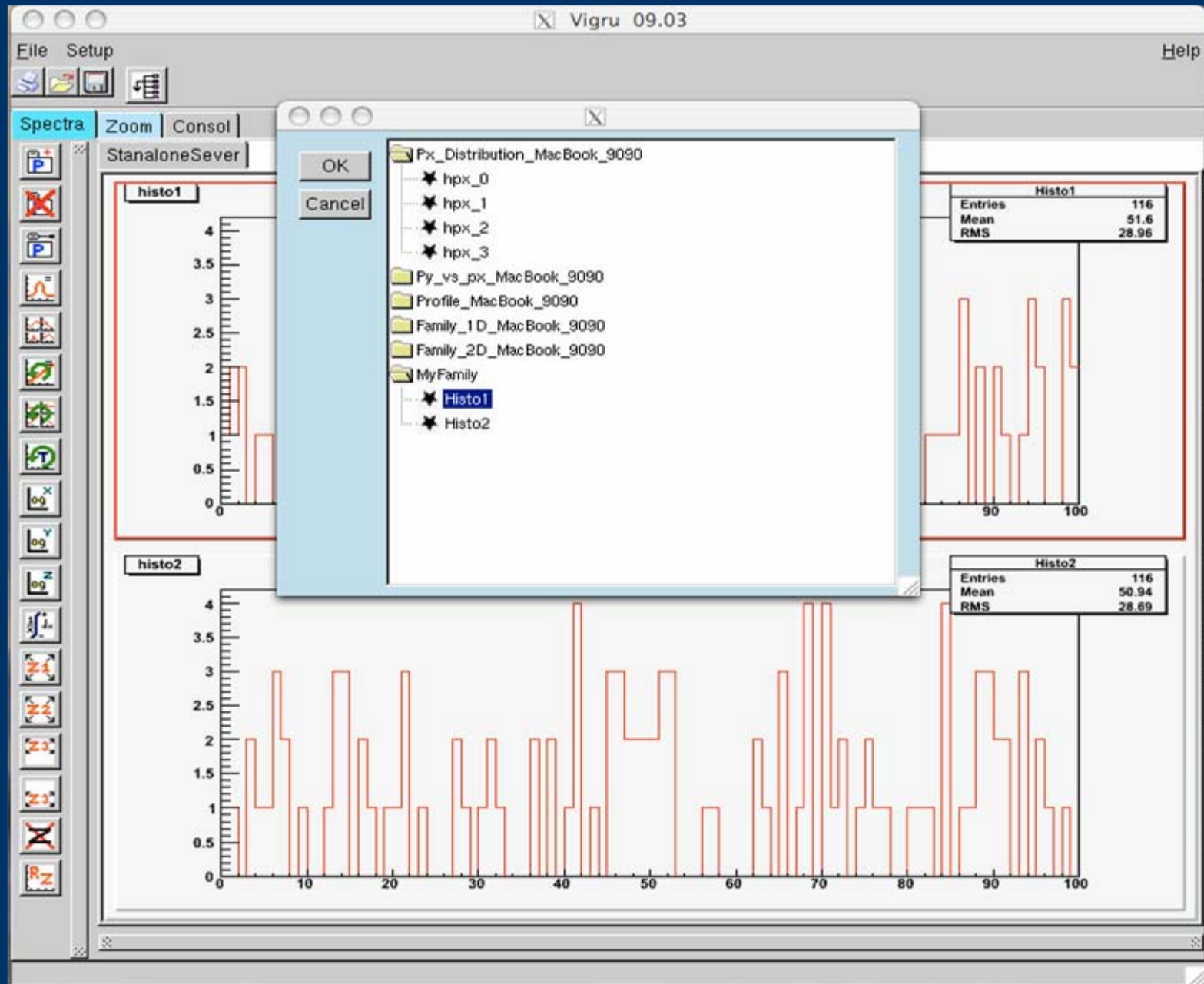
Features



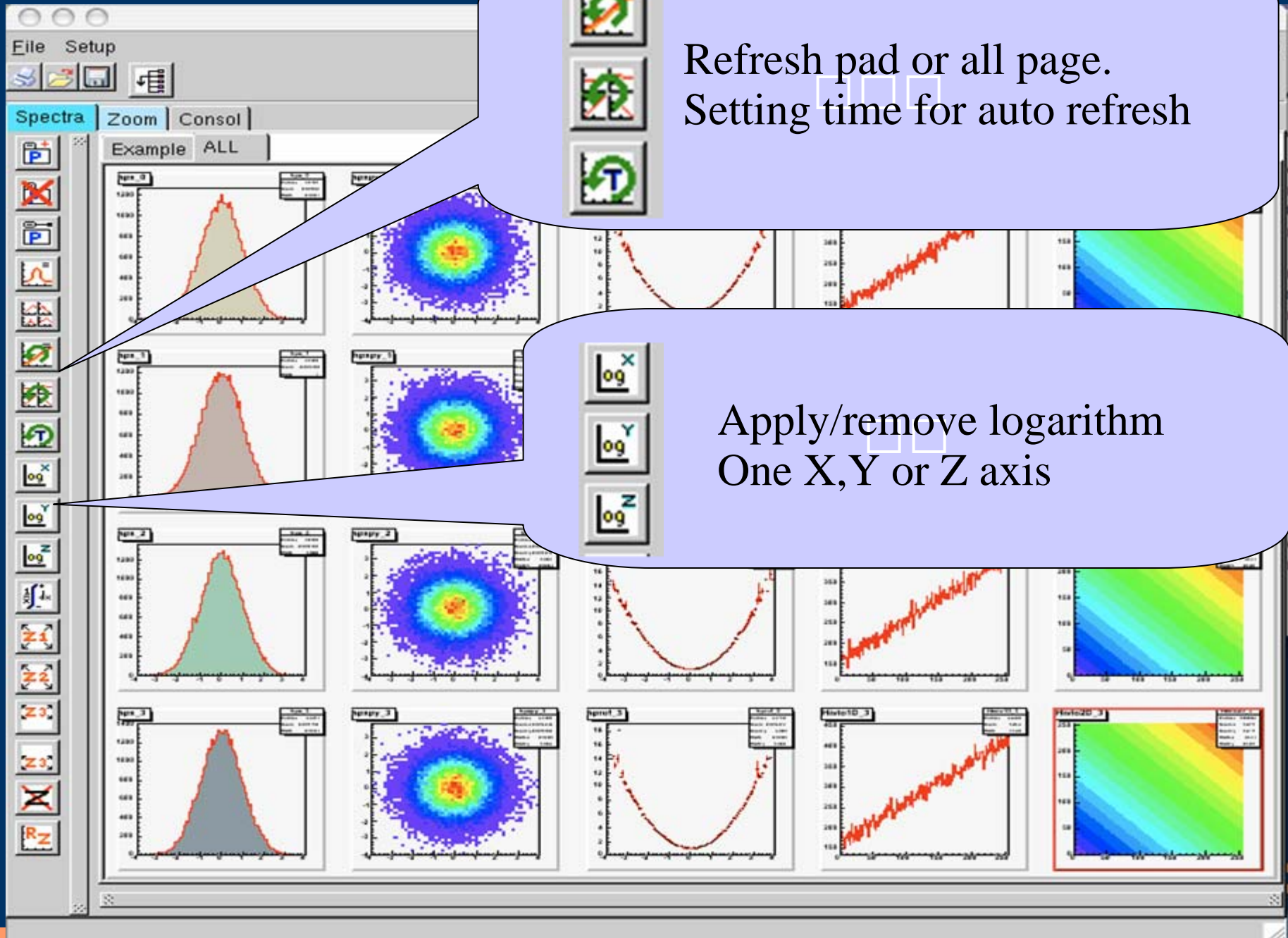
Add, remove or setting Pages

Display one or several histograms

Features



Features

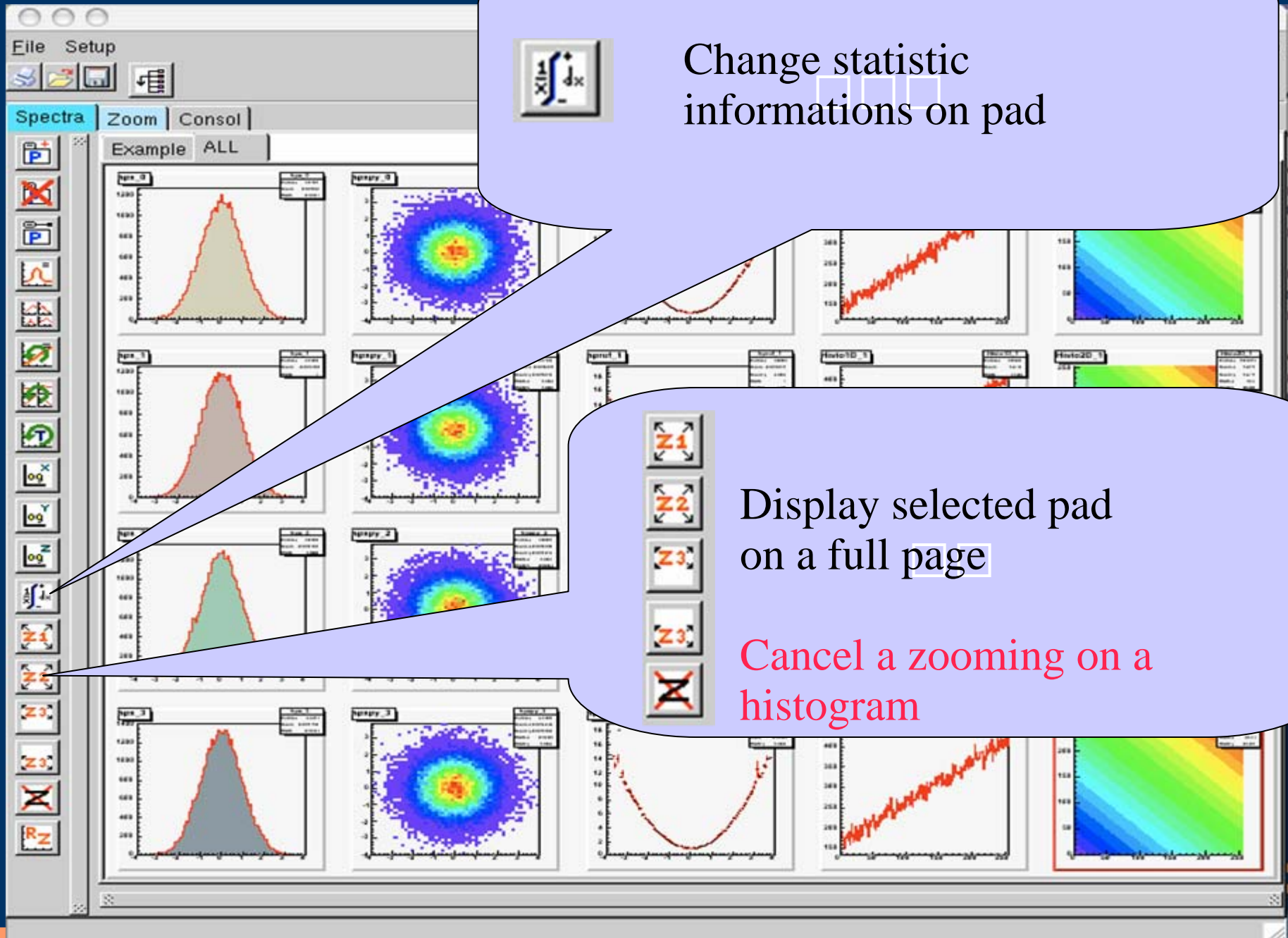


Refresh pad or all page.
Setting time for auto refresh



Apply/remove logarithm
One X, Y or Z axis

Features



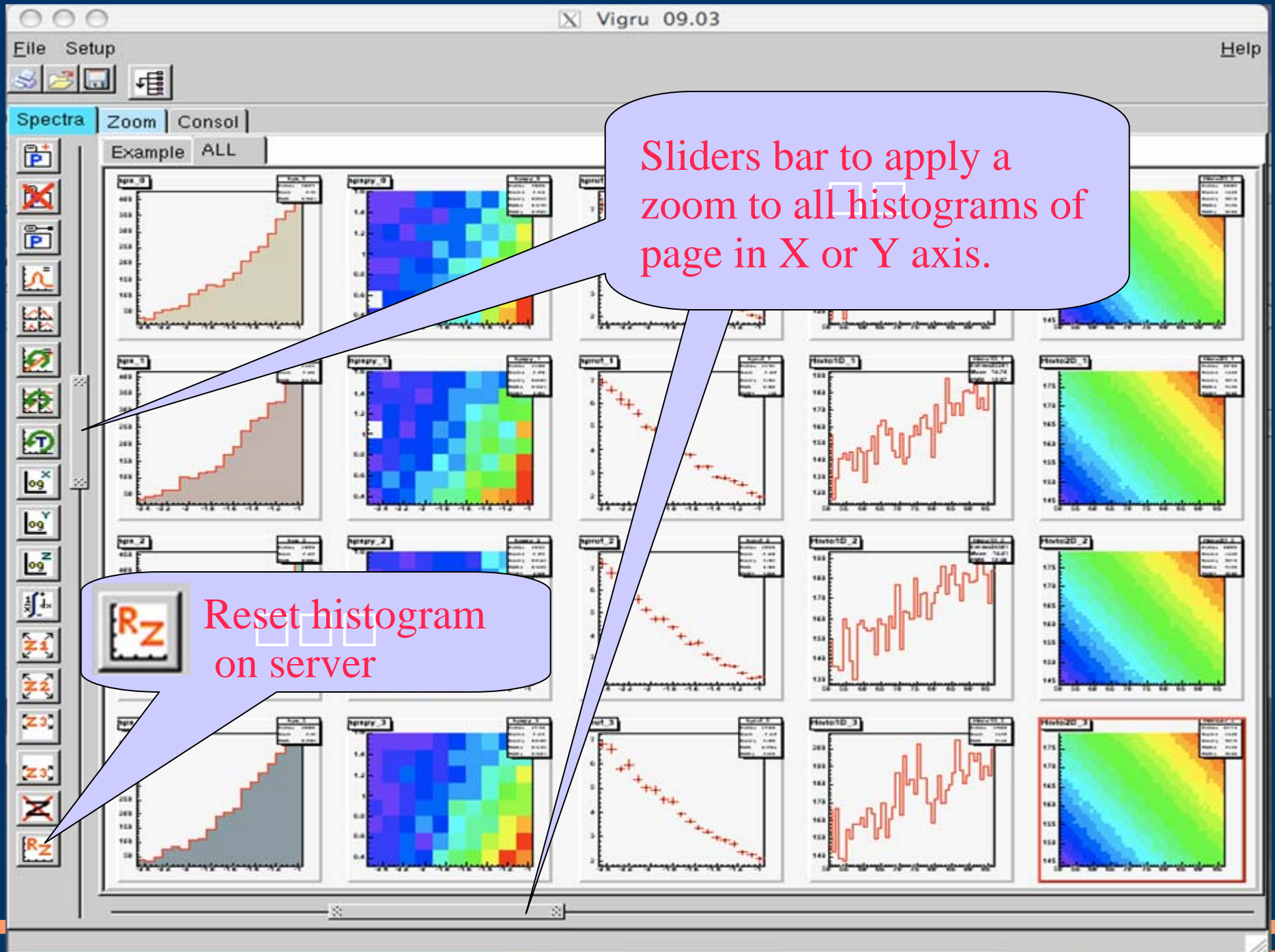
Change statistic informations on pad



Display selected pad on a full page

Cancel a zooming on a histogram

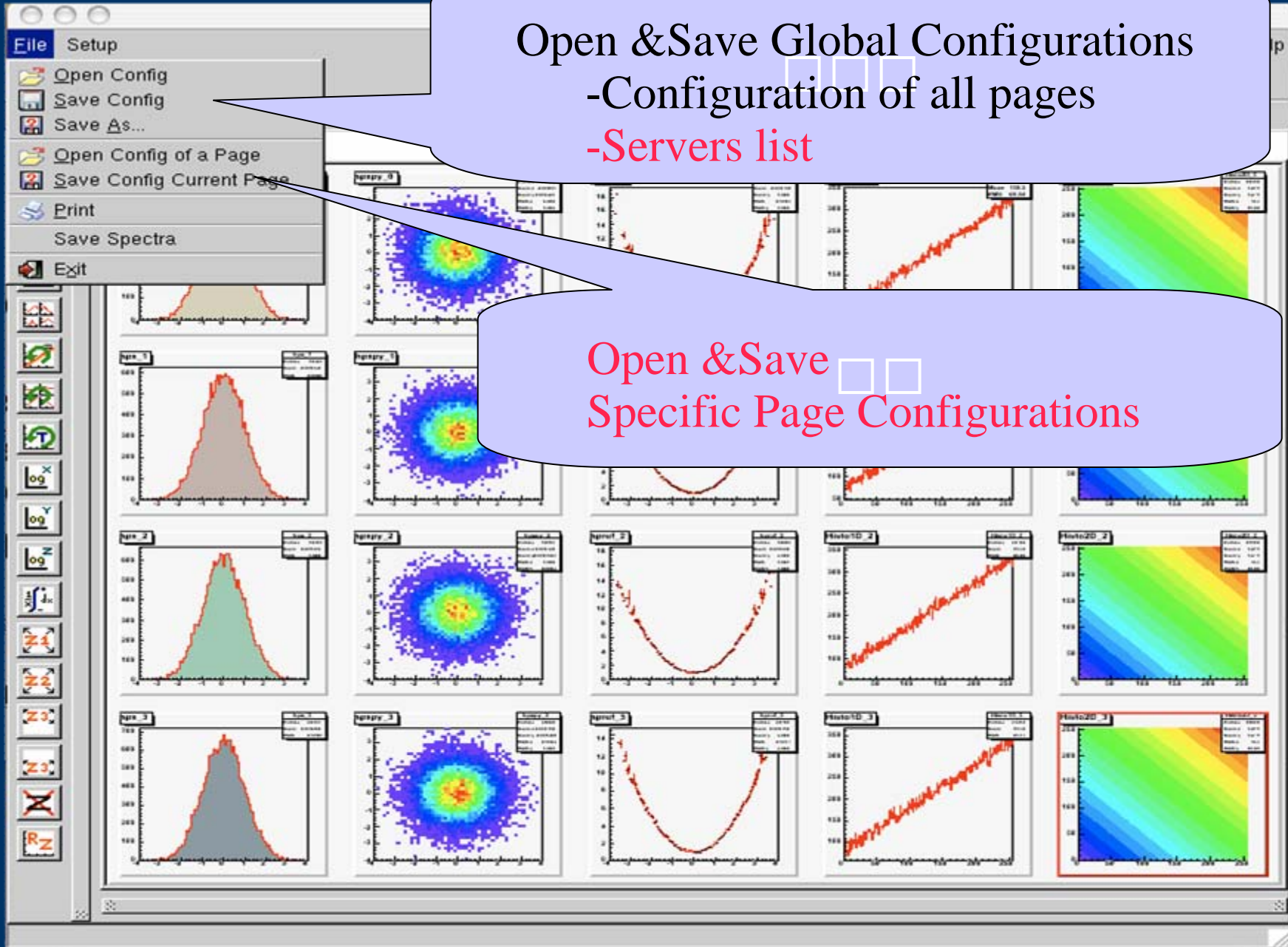
Features



Sliders bar to apply a zoom to all histograms of page in X or Y axis.

Reset histogram on server

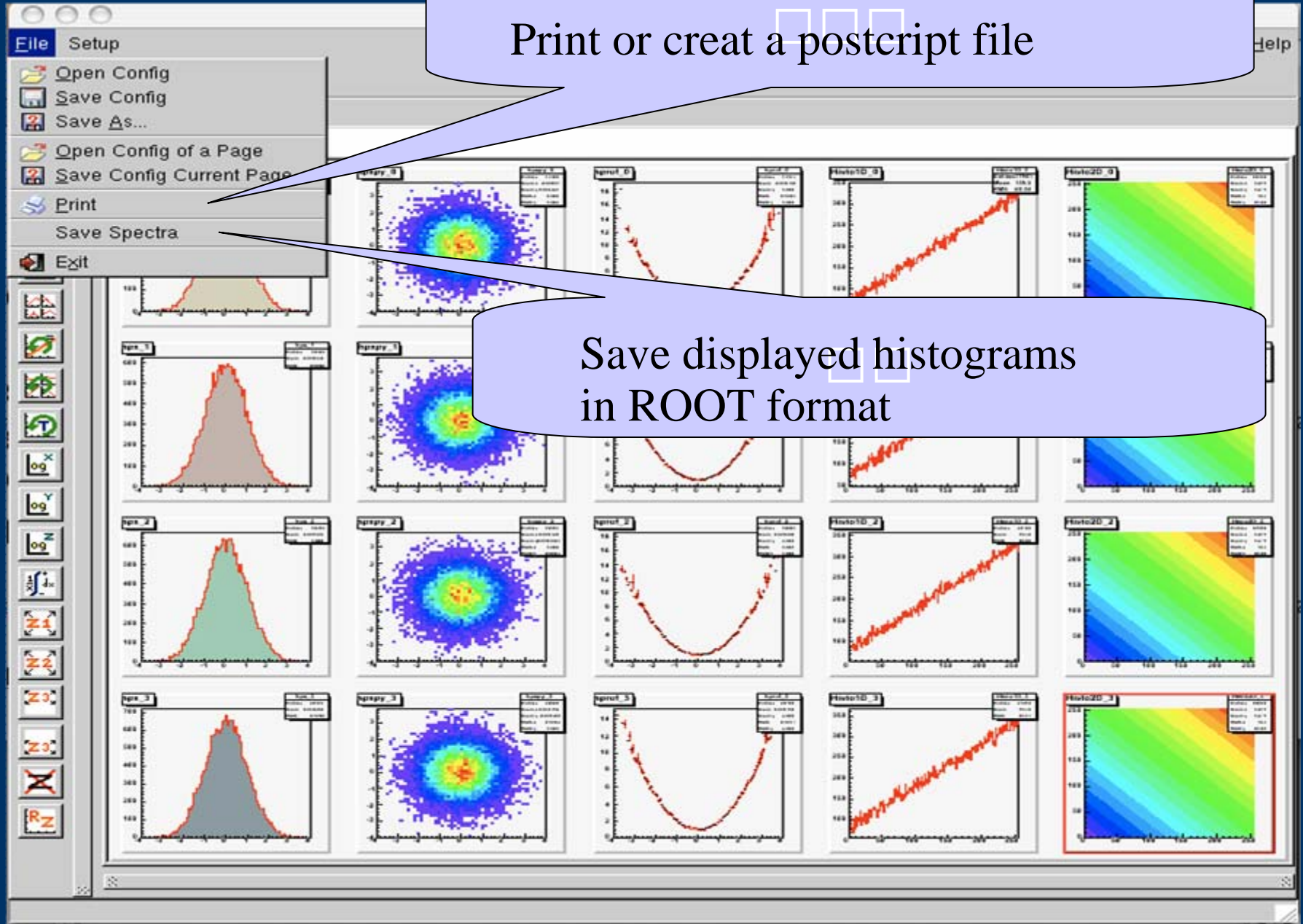
Features



Open & Save Global Configurations
- Configuration of all pages
- Servers list

Open & Save
Specific Page Configurations

Features



Conclusion

- Tested on Linux & MacOSX
- Information / documentation/ Downloading
<http://wiki.ganil.fr/gap/>
- Requests of new features, notice a bug : Put a Ticket
- Demonstration (if time)

