How to use myView2

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1. Introduction

"myView2" is a successor model of "myView". It has been extended colors for the map, and added more flexible zoom function. However, this new model "myView2" has <u>NOT</u> compatibility to load the configuration file from the older system "myView".

2. Operating environment

The myView2 is a Python script, installing Python 2.6, or 2.7 is necessary to run this program. We recommend Enthought Canopy as the analysis environment to explore, develop, and visualize on. https://www.enthought.com/products/canopy/

After downloaded the Enthought Canopy, it came in a zip file. This zip file comes with a setup program, so you need to unzip the file.

Confirm that your system needs the system requirements before starts as fallows;

wxPython is for GUI, and matplotlib is for drawing graphs.

Operating system support

- CentOS 6.5 (x86_64)+ Enthought Canopy 1.4.0
- Windows 7 64bit + Enthought Canopy 1.5.1
- MacOS X 10.9.2 + Enthought Canopy 1.6.1

If you are on MacOS X, please update the wxPython at Package Manager on Canopy application.

3. Start-up

You have all done with processing completed until gets here. Find a mVview2.py file, double click the file will setup the Canopy program. From the *editor Canopy*, go to the *menu bar, Run > Run File* will start-up *myView2* file.

From the command prompt as follows:

For Linux, MacOS

python myView2.py [option] [layout file]

- -d / --debug: debug ON
- -l / --log: create a log file
- -m [12345] / --message-level=[12345]:

A small number brings more details in a message.

☺ -a:

A parameter to use when the program has the ABEND (automatically used CallAfter).

(e.g.)

python myView2.py -I -m 1 C:¥TEMP¥myView2¥samples¥wp.mvd

4. Basic usage

4-1. Menu Bar - Basic usage

When the application start running, click is to open up a data file. A graph

sheet is set in an initial layout file "plot_default.txt".

*Initialization files and setting printers are set in "config.txt".

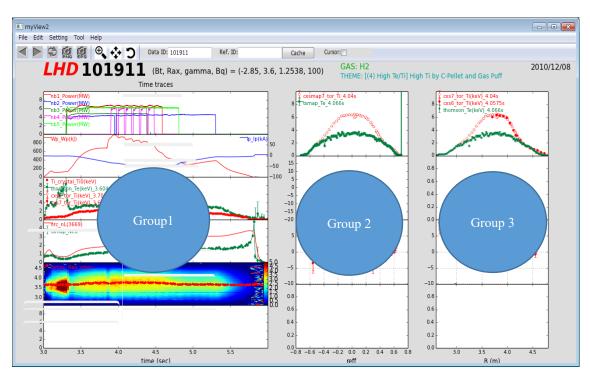


Figure 1 Menus and Dialog Boxes

In a main screen, a default layout shows that there are three groups of figures. Each one of group can be divided into small panels for drawing graphs. In this default screen, it shows that there 3 groups, 14 panels, and 25 graphs (see Fig.1).

These groups have a constant value with the horizontal axis, and they can be divided into a plurality of panels of <u>*n* rows × *m* columns</u>. Groups, panels, and graphs are numbered in order they appear by define data. Numbers for the graphs are developed in the order defined, graphs are described as traces on this system. These are useful for when you want to set the vertical axis, and specify whether you want to draw for the graph.

☺ Input the shot number

You can choose a shot number (Data ID) on the tool bar, and for reference number too. This is to determine whether to plot the data of any shot number.

🏘 🗐 🕸 🞜 💶 💿 🕺 📑 🔔 🔔 🔄	□ egcalc1.lhd.nifs.ac
MyView2 [ver.373] (plot_default.txt)	_
File Edit Setting Tool Help	
SHOT Current: 126960 Ref: Mode:ON-line	On/Off Cursor:
LHD 126960 (Bt, Rax, gamma, Bq) = (2.5385, 3.9, 1.2538, 100) Time traces	GAS: H2 THEME: [(2) Plasma Phys. Eng.] Detach

Figure 2 Shot Number

③ Drawing

Reloading button / rotating two arrows

This is a basic function that you need to press this button every after time when you enter the shot number.

8	. \$	2 = 1 0 8 🗟 🚬	e egcalc1.lhd.nifs.ac
		MyView2 [ver.373] (plot_default.txt)	_ 🗆 :
File	Edit	Setting Tool Help	
\triangleleft	\triangleright	💭 🕅 📴 🗣 🛟 💙 SHOT Current: 126960 Ref: Mode:ON-line Or	/Off Cursor: 🗌
	Ĺ		<mark>AS: H2</mark> IEME: [(2) Plasma Phys. Eng.] Detach

Figure 3 Drawing

☺ Mode: ON-line

& , , , , , , , , , , , , , , , , , , ,	□ egcalc1.lhd.nifs.ac 📗
MyView2 [ver.373] (plot_default.txt)	_ 🗆 :
File Edit Setting Tool Help	
A D SHOT Current: 126960 Ref: Mode:ON-line	On/Off Cursor: 🗌
LHD 126960 (Bt, Rax, gamma, Bq) = (2.5385, 3.9, 1.2538, 100)	GAS: H2 THEME: [(2) Plasma Phys. Eng.] Detach

Figure 4 Mode ON/OFF

This is to change the operation for acquisition of the data location. Each time when you press this key, changes acquisition operation into a cache folder or into an analysis server to find a data.

You might want to restore the updated data to the cache folder, you need to access to the analysis server by pressing its ON. The cache folder will be overwritten and erase the previously existing data, and save it automatically. However if you are not connecting to the LHD-LAN (the analysis server), OFF mode will be useful to run the program.

Each operation is as follows;

- ON Line to get a data in the analysis server, connecting to the network (the analysis server)
- OFF Line to get a data in the cache folder, not connecting the network.

☺ Cache folder

You need to access to the analysis server by pressing it ON when you want to restore the latest data to a cache folder. It will be overwritten and save it automatically.

However if you are not connecting to the LHD-LAN (the analysis server), OFF mode will be useful to run the program.

③ Other Settings

File>Open	Open up a layou	ut file

File>Export Outputs a data in txt.

A profile name@shot number-module name_Z axis variable name.txt

(e.g. cxs7_tor_map@129755-cxs7_tor_Ti.txt)

- File>Print Save the graph in PostScript format.
- File>Quit Quit a program
- Edit>Copy Copy a graph to the clipboard.

Setting > Group and Trace

Customize setting for Group, panel, and drawing data.

Setting > Legend

Setting the legend objects of the graph.

Setting > Folder Path Set the path

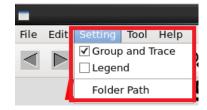


Figure 5 Setting menu

MyView2 Setu	p Folder Pa	th x
Extra Command Path:	bin	F
Data Module Folder Path :	DataModul	F
Label Module Folder Path :	LabelModul	F
Cache Folder Path:	cache	F
Temp Folder Path:	temp	F
Export Folder Path:	user/export	F
Print Folder Path:	user/print	F
Notify File Path:		F
OK Cancel		Set Default

Figure 6 Path setting

Batch Processing

Tool > Batch

Specify the shot number for drawing continuously.

Data ID:Shot numberCreate PDF:To make PDFPrint:To print

🔳 MyVi	ew Batch	From To	x
	From:	To:	
Data ID:	126960	126960	
Create PDF			
Print			
ОК		Cancel	

Figure 7 Batch Process

③ Real Time

my\	/iew Realtime ×
	Send to Virtual Printe
Diagnostics	lastshot
Delay	1
Duration (sec)	150
START	Cancel

NOTE:

Please do NOT use "lastshot" when you send to a printer. Choose an acceptable one if you want to use a printer when checked the box for "send to Virtual Printer".

Check the available printer from the following address;

Figure 8 Realtime

http://kaiseki-dev.lhd.nifs.ac.jp/rails/virtual_printer/virtua

Tool > Notify

To run the command of the file which named A <u>Notify.txt</u> of configuration files.

Tool > Server

Change to a client mode that the operating program will be switched.

Tool > Realtime

To get a data when its synchronized the experimental sequence, and draw a graph.

- **Diagnostics:** measuring equipment, devices, etc.
- Delay: specify the number to be displayed later than the current shot.Duration: display duration time

Tool > Recorder

Coordinates will be added to the Recorder dialog when you click.

File > Savesave contentsEdit > Cleardelete contents

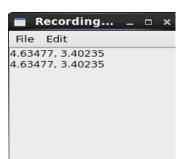


Figure 9 Recording

Tool > Cache Clear	lear Delete the cache folder	
Tool > Module Reload	Reload	
Help > About	Version Information, How to use	

4-2. Layout setting for groups- Basic usage

From the menu bar, <u>Setting > Group and Trace</u> to customize your graph layout. A defined list for groups and panels will be appeared. So you can edit a title's text, size of the group, color, and more.

	MyView2 [v	er.373] (plot_d	efault.txt)	_ 🗆 ×
File Edit Setting Tool Help				
SH		lyView2 Setup	Group ×	I-line On/Off Cursor: 🗆
LHD 126960 (Bt, R	Left: 0.	.05		(100) GAS: H2
	Bottom: 0	.05		, 100) GAS: H2 THEME: [(2) Plasma Phys. Eng.] Detached
Time trace	Width: 0	.4		inene. ((2) hasha hiys. Eng.) beadened
				×
Group:	Height: 0	.85		Redraw
group left bottc wid heigt	Num Rows:	6		
1 0.05 0.05 0.4 0.85		6		iffs typ
2 0.5 0.05 0.2 0.85	Num Cols:	1		.0 ху
3 0.75 0.05 0.2 0.85 2	Gap:	0		0 ху
Add Edit Remove Move Up All 3		<u> </u>		0 xy 0 xy
Panel:	Title:	Time traces	more	0 xy 0 xy
grour pa ymi ymax smin sma		Min:	Max:	
1 1 0 10 -2 2				
1 2 0 1000 -100 100	X:	3	6	
1 3 0 10 0 0	Label X:	time (sec)	more	1
1 4 0 5 0 0	_	:Log Scale X		
1 5 2.6 4.8 0 5		-		
1 6 0 10 0 0		X Link to :	Unlink 🗘	
		:Common Y		
	Y:	0	0	
Edit MoveUp All				Move Up Set Index Set Symbol All
3.0	Label Y:		more	- 0.8 -
		:Log Scale Y		- 0.6 -
8 - 6 -	7	:Show Leggend	Y	- 0.4 -
4-		Y Link to :		
2 -		T LINK to :	Unlink 🗘	- 0.2 -
3.0 3.5 4.0 4.5		к	Cancel	0.0 0.1 0.0 0.2 0.4 0.6 0.8 0.0 3.0
time (sec)			cancer	reff

Figure 10 Setting group and trace

Add / Edit: Add.> OK > Redraw: To add a new group.

If you want to copy a layout design from a one of them, *Choose one that you want to copy from the list > Add > OK. > Redraw* And then, arrange whatever you like. Press *Redraw* to confirm the review.

- **Remove:** Remove a group from the list
- **Move Up:** Move up a group on the list
- All: Select a whole list
- **Redraw:** Redraw the graph

Please make sure to **Redraw** to see the result every time you edit or change (layout, changing values for axis, etc.)

Customize layout

The edit dialog is to configure the display area which is specified a rectangle of the coordinate graph from the lower-left to the upper-right corner. The coordinate graph is a relative in the whole screen which has lower left (0.0 and 0.0) to the upper right (1.0 and 1 position.0). Within the group area can be divided into a plurality of panels.

MyView2 Setup Group ×	Num
Left: 0.05	Num
Bottom: 0.05	
Width: 0.4	Gap:
Height: 0.85	Title:
Num Rows: 6	X:
Num Cols:	
Gap:	
Title: Time traces more	Label
Min: Max:	
X: 3 6	Log S
Label X: time (sec) more	5-
Log Scale X	
X Link to : Unlink 🗘	X Lin
Common Y	
Y: 0 0	
Label Y: more	
:Log Scale Y	
Show Leggend Y	
Y Link to : Unlink	Comr
OK Cancel	Y axis

Figure 11 Add and edit

Num Rows:	A number for rows			
Num Cols: A number for columns				
Gap: A	space between the panels			
Title: A	title for a group / panels.			
X : X	axis values			
Label X:	X axis label			
Log Scale X:	Logarithmic scale			
X Link to:	Link to the other group to represent the graph to be on the same X axis values when you set min and max of X value.			
Common Y:	If you checked this box, value of the			

Common Y: If you checked this box, value of the Y axis for all the panel of this group will represent into the same Y axis values.

Change Font Typefaces, Weight, Style, Color and Sizes in title, Fig.11 will be appeared when you select **More** of the title.

_		6 - 1 -1		
Left:	0.05	Setup Grou	p ×	
Bottom:	0.05			
Width:	0.4			
Height:	0.85			
Num Rov	/5:	6		
Num Col:	5:	1		
Gap:		0		
Title:	Time t	races	more	
	Min:		MyView2 Setup La	abel ×
X:	3	Text:	Time traces	
Label X:	time (s		sans-serif	\$
	:Log Sca	Style:	normal	٥
	X Link t	o : Weight:	normal	0
	:Comm	on Y Size:	medium	v
Y:	0	Color:	medium	*
Label Y:		Rotatio		
	:Log Sca	ale Y	n: 0	~
V	:Show L		center	\$
	Y Link t	o : VAlign:	bottom	\$
	ОК		ок с	ancel

Text: A title Family: font family Style: character of style Weight: thickness of the character Size: size of the character Color: color of the character Rotation: to locate a title HAlign: display position for a title (the horizontal direction) VAlign: display position for a title (the vertical direction)

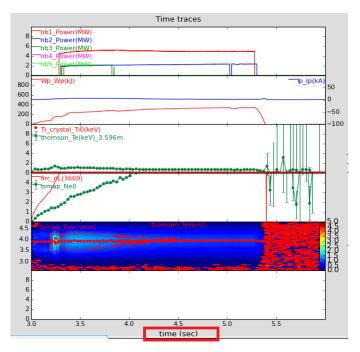
Figure 12 More for a title

Press OK > Redraw

Change X axis label; this example shows how to change the style (font size, color, etc.) of X axis label.

	Mv	View2 Setu	p Group	×		
Left:	0.0					
Bottom:	0.0	5				
Width:	0.4					
Height:	0.8	5				
Num Row	s:	6				
Num Cols	:	1				
Gap:		0				
Title:		Time traces		more		
		Min:				
X:	_	3		MyView2 S	etup Label	×
X:		2	Text:	Time trace	es	
Label X:		time (sec)	Family:	sans-seri	f	\$
		:Log Scale X	Style:	normal		0
		X Link to :	Weight:			
		:Common Y	-	normal		\$
Y:		0	Size:	medium		~
Label Y:	_		Color:			
		:Log Scale Y	Rotation:	0		~
2		:Show Legger	HAlign:	center		\$
		Y Link to :	VAlign:	bottom		\$
	ок			ок	Cancel	

Figure 13 Change X axis label





The myView2 shows stacking multiple plots, vertically with the same X axis with different Y axis.

When you set the same values for X min and X max, the drawing data will automatically set to match the graph.

As you see this example below, it's a stacked on separate graphs with the same X axis, but each panel has unique values for Y axes.

Change X axis Tick Values; this example shows how to change the details (font typefaces, locations etc.) for the x-axis when you select X.

When the X-min and X-max to the same value, the graph will automatically plot to match the data.

	MvView	2 Setup G	iroup	×		
Left:	0.05					
Bottom:	0.05					
Width:	0.4					
Height:	0.85					
Num Row	s:	6				
Num Cols	:	1		\neg		
Gap:		0		\neg		
Title:	Time	traces	more			
inde.	Min:	_		_		
X:	3	Family:	/iew2 Set		ck Label	×
		-	sans-seri	f		\$
Label X:		Style:	normal			\$
	:Log s	Weight:	normal			0
	X Linl	Size:	small			
	:Com	Color:				
Y:	0					
Label Y:		Rotation:	0			~
	:Log s	HAlign:	center			\$
V	:Shov	VAlign:	top			\$
	Y Linl	Trim First:				
	ОК	Trim Last:				
		0	ж		Cancel	

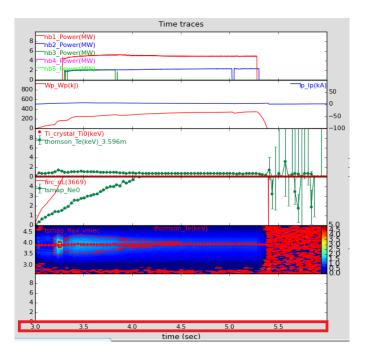




Figure 14 Change X axis Tick Values

Trim First:	First data point will be hidden
Trim Last:	Last data point will be hidden

Press OK > Redraw

<	SHOT Curre	nt: 126960 Ref:	Mod	e:ON-line
LHD 126960 (E		lyView2 Setup P Min:	anel x Max:	538, 100)
Time t	X:	3	6	
Group:	LabelX:	time (sec)	more	
grout left bottc wid heigh		:Log Scale X		
1 0.05 0.05 0.4 0.85 2 0.5 0.05 0.2 0.85 3 0.75 0.05 0.2 0.85	Y:	0	10	index 33_3.596m 4 3.7079m(7)
Add Edit Remove Move Up All	LabelY:		more	10_3.6189m(7)
Panel:		:Log Scale Y		
group paymi ymax smin sma		:Show Grid Y		
1 1 0 10 -2 2	✓	:Show Leggend Y		
1 2 0 1000 -100 100 1 3 0 10 0 0		:Common Y		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	● xy	○ xy-y2	○ xy-z	
1 5 2.6 4.8 0 5	Y2:	0	0	
1 6 0 10 0 0		Minor:	Major:	
	Interval:	0	0	
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3.0		:Log Scale Y2		
8-		:Show Legend Y2		
6 - 4 -	Y Link to :	Unlink	\$	
★ 2 -	0	<	Cancel	
0	(sec)	5.5		8 -0.6 -0.4 -0
	isec)			

4-3. Y-axis setting for each panels- Basic usage

Figure 15 Set Y-axis for each panels

If you did NOT set Y axis values when you customized the layout of the group

(see fig. 10: common Y), the Y-axis of each panel must be set individually.

Choose one of the group > choose a panel > Edit

A sub-window for setting of Y-axis will appear as Fig.15.

Or, you can just double click directly on the graph of the main window (Fig. 16).

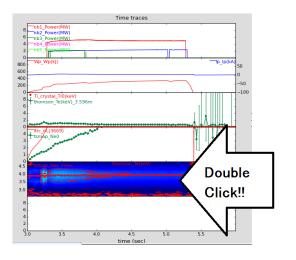


Figure 16 Double Click on the graph

The group is a multiple columns representing Y values each against a specific X value. When plotting each series, you can easily select the Y values as they are present in columns but the X value is constant for each column. When the X-min and X-max to the same value, the graph will automatically plot to match the data. If you checked in the box for "Log Scale X", it will be a logarithmic scale.

You can specify the min value and the max value for the Y-axis. When you set the same value for min and max of the Y-axis, the graph will automatically plot to match the data.

X: LabelX:	MyView2 Setup I Min: 3 time (sec)	Panel x Max: 6 more	Show Grid Y:	To set a square grid graph.
	:Log Scale X		Show Legend	Y:
LabelY:	0 :Log Scale Y :Show Grid Y	10 more	Ū	To displays the legend of the graph.
• xy	:Show Grid Y :Show Leggend Y :Common Y O xy-y2	O xy-z	Common Y:	To set constant Y-axis values to all panels of their group.
Interval: LabelS:	Minor: 0 cbar	Major: 0 more	xy:	Create a xy dimensional graph.
	:Log Scale Y2 :Show Legend Y2 Unlink K 7 Set up	Cancel	ху-у ^{2:}	Create a chart with two Y-axis and one shared X-axis. You can also set the min and the max values for added Y-axis.
			xy-z:	Create a three-dimensional graph

Log Scale Y2: To set the log scale graph for Y2.

Y link to: Link to the other panel to represent the graph to be on the same Y-axis values. Choosing a panel can be selected even from the same group, and other groups.

4-4. Drawing style setting- Basic usage

Tips for an easy way to create a drawn graph that you can also use "Add" to make a copy of a plot data, and set some details as you want. Press OK to put a new drawing data on.

						MyVie	w2 [ver.	373] (pl	ot_default.txt	:)					_ 0 X
File Edit	t Settin	g Too	l Help												
	Ŷ	PNG PNG	E PS	Ð, -))	SHOT Cu	rrent <mark>:</mark> 126	960 R	ef:	Mode:ON-li	ne	On/Off	Cursor:		
	LHI	D 1	126	596	O (Bt Time tra		amma,	Bq) = (2	2.5385, 3.9,	1.2538, 3	100)	GAS: THEME	H <mark>2</mark> E: [(2) Plasma Ph	iys. Eng	.] Detache
-					Time ere	1005	my۱	/iew Gro	ups						_ 0 ×
Group:	1.6.1					Trace:							Redraw		
groupid	0.05 0.0		0.4	height 0.85	:	traceid	aroupid	panelid	modulename	dataidc	varx	vary	va ini op factor	offset	type
-	0.5 0.0		0.4	0.85		1	1	1	nb1	С	time	Power	1.0	0.0	ху
	0.75 0.0		0.2	0.85		2	1	1	nb2	С	time	Power	1.0	0.0	xy
Add	Edit	Ron	nove	Nove Up	All	3	1	1	nb3	С	time	Power	1.0	0.0	ху
			love	NOVE OF		4	1	1	nb4	С	time	Power	1.0	0.0	ху
Panel:						5	1	1	nb5	С	time	Power	1.0	0.0	ху
groupid	panelid		-		sma										
1	1	0	10	-2	2										
1	2	0	1000	-100	100										
1 1	3 4	0	10	0	0										
1	4 5	0 2.6	5 4.8	0	0 5										
1	5 6	2.0	4.8 10	0	5 0										
Edi	t	Mov	veUp		All	Add		Edit	Remove		Move	Up Se	et Index Set Sy	mbol	All
3.0									1:0	0.8 -					- 8.0
8					the state of the state				0.0	0.6					0.6 -
6	_									0.4					0.4 -
4	_								-						
2	-								-	0.2					0.2 -
0 L 3.	0	3.5		4.0	4.5		5.0	5.5		0.0 -0.8 -0.6	-0.4 -	0.2 0.0	0.2 0.4 0.6 0	.8	0.0
We	lcome to	Canop	v	_	time (s	ec)	_					reff	no apa	ates tou	nu.
	come to		<u> </u>	Edit/	or - Canop	V	M	//iew2 [v	ver.373] (pl	myVie	W Grou	Inc		F	
- viki	come to	cariop	y		л - сапор	у		yviewz [v	ei.373] (pi	myvie	w Grou	ips		_	

Figure 18 Customizing Individual plot data

		MyView2 Setup Trace ×
1	Group:	Group No.1(1)
1	Panel:	Panel No.1(1)
	Module:	nb2 > more modules
1	Shot:	Current 126960 O Ref O Add F
	X:	time 🗘
1	Y:	Power 🗘
	Z:	0
	Index:	~
	Option:	
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	Size:	0 ~
	Style:	- 🗸
	Width:	1 ~
1	Color:	
✓	ColorMap:	
1	Offset:	0
	Factor:	1
	Туре:	
	Show:	
		OK Cancel

Figure 19 Set up Trace

In the sub-window for setup trace, you need to fill out the form from the top to the bottom with specific details how you want to display.

Group / Panel: A location to be displayed.

Module: A diagnostics module name

Shot: Specify the shot number

- **C:** A current number from the main screen.
- **R:** A Ref number from the main screen.

Add: A file that you want to plot a data.

X :	An object for X-axis. Generally, T is for time and R is for distribution for drawing a graph.
Y:	An object for Y axis.
Z:	An object for Z axis

Index:

(See Fig 20) If the plot data has more items (time-slices, location information, etc.), choose one of the multiple selected list from the dropdown. *For example, if you chose the Time (Time-slices), a dropdown list comes up so you can specify whether to plot the time variation of any position. If you chose the R (distribution), you can specify whether to plot the distribution of any time.*

Option: The items appears if there're more information of the plot data. Choose one of the item that will be changed by selected items at Module.

Symbol:	A symbol style.
Size:	Size for control symbol or a plot line thickness.
Style:	Line Style
Width:	Linewidth
Color:	Plot color
Offset:	Stacked lines by Y offsets graph. (See Fig 19) (Y-max - Y-min)=1, so please use less than 1
Factor:	Multiple axes
Туре: ХҮ: А ху с	limensional graph.

- **X-Y2:** A chart with two Y-axis and one shared X-axis.
- **XYZ:** A Three-dimensional graph

Show: To check for display

Offset: Using this feature prevents the curves from overlapping and ensures that each curve can be wiewed clearly.

Make sure that the number shoud be less than 1.0 because the limited number is the Y-max. e.g. (Y-max - Y-min) = 1

Color:	
🗸 ColorMap:	
Z Offset:	0.4
Factor:	1
🗹 Туре:	● X-Y ○ X-Y2 ○ XYZ
Show:	

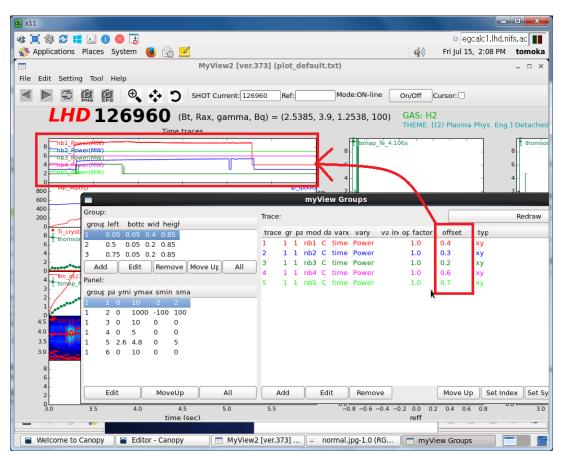


Figure 20 offsetting

Remove:	Remove a data	set this
Move Up:	Move up a data on the list.	up If the
Set Index:	This is only for a milited	module
	mesurement modules. You can	has

Start:Initial value set pointStep:Step size

🔳 MyView Set Inde: 🗙							
Start:	Step:						
0	0						
ОК	Cancel						

Figure 21Set Index

Set Symbol: To change the look of a line shape.

Check in the box > change the categories > OK > Redraw

- Symbol: Data marks
- **Size:** Size of the symbol (data marks)
- Style: Line design
- Width: Line thickness
- Color: The symbols and a line

MyView2 Setup Trace × Symbol: о ¥ Size: ٦ 0 ¥ Style: ¥ Width: 1 ¥ Color: $\overline{\mathbf{z}}$ OK Cancel

Figure 22 Set Symbol

All: Select all the items on the list.

Or, select a one of the list from the trace, and press this "All" button.

e.g. You can indicate the data(s) that are based on the same module. This is useful to plot the time slice data if the module has more information in index. (See Fig 22)

Trace:		Redraw	
trace gr pa mod da varx vary	va in op fact offs typ		
1 1 1 nb1 C time Power	1.0 0.0 xy		
2 1 1 nb2 C time Power	1.0 0.0 xy		
3 1 1 nb3 C time Power 4 1 1 nb4 C time Power	1.0 0.0 xv 1.0 0.0 xy		
5 1 nb5 C time Power			
26 1 1 nb4 C time Power	Trace:		Redraw
	trace gr pa mod da varx	vary va in op fact offs typ	
	1 1 1 nb1 C time	Power 1.0 0.0 xy	
	2 1 1 nb2 C time	Power 1.0 0.0 xy	
	3 1 1 nh3 C time	Power 1.0 0.0 xy	
		Power 1.0 0.0 xy	
	5 1 1 nb5 C time		
	26 1 1 nb4 (time	Power 1.0 0.0 xy	
Add Edit Remov	/8		
	Add Edit	Remove Move Up	Set Index Set Symbo All

Figure 23 "All" button to select the data based on the same module

4-5. Set graph legends- Basic usage

From the menu bar, Setting > Legend > add, edit, and remove > Redraw

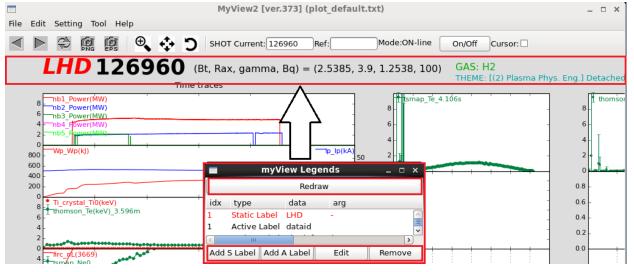


Figure 24 Set Graph Legends

Static labels are labels that are not bound to the data which is "LHD" in red writhing on this screen. In other words they are statically drawn on the axis and don't interact with the data in the viewport. You can set

the horizontal and/or the vertical static labels, and you have the option to define a custom label formatter for the labels.

Active Labels are that changes depending on the data to be displayed.

	ew2 Setu	p Stati	c Label	×		
PətsitiBin x	:: [O		Set			
Position Y	0		Set			
Text:						
Family:	sans-serif	:		\$		
Style:	normal					
Weight:	normal					
Size:	medium					
Color:						
Rotation:	0			~		
HAlign:	left			\$		
VAlign:	bottom			٥		
	ж	C	ancel			

>Add S Label (for a static label)

Figure	25	Add	S	Label
--------	----	-----	---	-------

	MyView2 Setu	p Active La	bel		×		
Position X:	0			Set			
Position Y:	0			Set			
Module:					\$		
Data ID:	• C • R • A	uny		F			
Arg:							
Family:	sans-serif				\$		
Style:	normal						
Weight:	normal						
Size:	medium				~		
Color:							
Rotation:	0				~		
HAlign:	left				٢		
VAlign:	bottom				٥		
	ОК		Cancel				

Figure 26 Add a Label

- > Add A Label (for active labels)
- Position X:Place for a labelPosition Y:Place for a label
- Module: Set a module

Data ID:

- C: Data ID for a main screen
- R: RefNo for a main screen
- Any: Shot numbers

Arg: A title name (reserved words included)

5. About configuration file(config.txt)

Initialization files and setting printers are set in "config.txt". There are only a few basic constructs allowed in the initialization file. Blank lines are ignored. Lines beginning with a "#" are comments, and will be ignored too.

For example PlotDefault = plot_default.txt	A layout file for initial start-up
PrinterIP = 133.75.51.200	Specifies the PostScript-compatible network printer
vPrintPath = vprint	Specify the location of the path where you want to output the generated PostScript file.

6. Configuration File (Directory environments)

myView2.cnf is the configuration file for the directory. For example

"cachefilename": "cache.txt", "cachefoldername": "cache", "commandfoldername": "bin", "config_version": "1.0.0", "datamodulefilename": "datamodules.txt", "datamodulefoldername": "DataModules", "exportfoldername": "user/export", "labelmodulefilename": "labelmodules.txt", "labelmodulefoldername": "LabelModules", "notifyfoldername": ".", "printfoldername": "user/print", "tempfoldername": "temp"

7. Layout file

In the layout file, setting the drawing size, the group, the graph, the trace, also other text display settings are available.

Let's see how they go on the file using a"plot_default.txt" as follows; (Each parameter is separated by TAB after the key)

7-1. Canvas size setting- Layout file

For example: canvassize 1024 780

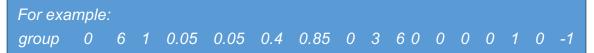
7-2. Shot number setting - Layout file

For example: dataid 101368 105999

7-3. Others - Layout file

For example;	
	facecolor #dddddd
	realtime_printer lastshot
	realtime_delay 1
	realtime_duration 150

7-4. Group layout - Layout file



- 1. groupid : A group number belongs to the graph.
- 2. nrows : Numbers of rows that divisions in the vertical direction
- 3. ncols : Numbers of columns that divisions of the horizontal direction.
- 4. left : The left edge for the entire group.
- 5. bottom : The lower end position for the entire group.
- 6. width : The width to draw the entire group.

- 7. height : The height to draw the entire group.
- 8. gap:

The space that specifies the gap between the panels to each other.

*Position, width, height, spaces are specified at a rate of the canvas size 1. So you need to set a number in between 0 to 1.

- 9. xmin : X-axis lowe limit
- 10. xmax : X-axis upper limit.
- 11. logx : X-axis logarithmic scale. 0 / NO, 1 / YES.
- 12. comy : A common Y-axis、0 / NO, 1 / YES.
- 13. ymin : Y-axis lowe limit
- 14. ymax : Y-axis upper limit
- 15. logy : Y-axis logarithmic scale 0 / NO, 1 / YES
- 16. legy : Grid display designation, 0 / NO, 1 / YES
- 17. linkx :

X-axis synchronization. To provides controls to link layers so that the child layer can resize and move with the parent layer. Synchronize by specifying the number of 1 to 7. Please put a "-"(dash) before the number If you do NOT want to link layers.

18. linky :

Y-axis synchronization. To provides controls to link layers so that the child layer can resize and move with the parent layer. Synchronize by specifying the number of 1 to 7. Please put a "-"(dash) before the number If you do NOT want to link layers.

7-5 Label setting for a Group- Layout file

For example; glabel 0 x time (sec) sans-serif normal normal medium #000000 0 center top

- 1. groupid : group: A group number belongs to the graph. 2. text : Location Specify a title(t), X-axis(x), Y-axis(y), or Y2axis(s). 3. at : A string of the label for the label. 4. family : A Font family 5. style : A character of style. The thickness of the character 6. weight : 7. size : A text size 8. color : A text color A hash mark "#" followed by three pairs of hexadecimal digits, specifying values for red, green and blue components in that order. Or letters after the hash mark would be fine too. For example, a color of bright red is #FF0000, white is #FFFFFF, black is #000000. also in letters are r / red, g / green, c / cyan,m / magenta, y / yellow, k / kuro, and w / wite. 9. rotation : A place for a title Display location of the title (horizontal direction) 10. ha :
- 11. va : Display location of the title (vertical direction)

7-6. Tick label setting for a Group- Layout file

For example:											
gticklabel	0	x	sans-serif	normal	normal	small	#000000	0	center	top	0

- 1. groupid : A group number belongs to the graph.
- 2. text :

Specify a location for a title (t), X-axis(x), Y-axis(y), or Y2axis(s).

- 3. family : A font family
- 4. style : A font style
- 5. weight : A thickness of the text
- 6. size : A size of the text
- 7. color : A color of the text
- 8. rotation : A place for the title
- 9. ha : To display position of the title (horizontal direction)
- 10. va : To display position of the title (vertical direction)
- 11. ft :

Display the chart axis start value, 0 / NO, 1 / YES 12. It : Display the chart axis end value, 0 / NO, 1 / YES.

7-7. Coordinate axes setting for a Panel- Layout file

F	or example:															
	pane	el 0	0	0	10	0	1	0	-2	2	0	1	0	-1	-1	
1.	groupid :	A gr	oup	nur	nber	belo	ongs	to t	he g	Irap	h.					
2.	panelid :	A pa	nel	nun	nber	belc	ngs	to t	he g	rap	h.					
3.	ymin :	Y-ax	is lo	we	r limit	to r	ang	e.								
4.	ymax :	Y-ax	is u	рре	r limi	t to	rang	je.								
5.	logy:															

Y-axis logarithmic specified. Specify to a logarithmic scale

specified by 0 / NO or 1 / YES.

- 6. legy : Legend display designation specified by 0 / NO or 1 / YES.
- 7. type : 0 (xy) 、 1 (xy2)、 2 (xy-z)
- 8. smin : Y2-axis lower limit to range.
- 9. smax : Y2-axis upper limit to range.
- 10. logs : X-axis logarithmic specified by 0 / NO or 1 / YES.
- 11. legs : Legend display designation specified by 0 / NO or 1 / YES.
- 12. grid : Grid display designation specified by 0 / NO or 1 / YES.
- 13. linky :

Y-axis synchronization. To provides controls to link layers so that the child layer can resize and move with the parent layer. Synchronize by specifying the number of 1 to 7. Please put a "-"(dash) before the number If you do NOT want to link layers.

7-8. Label setting for a Panel- Layout file

For example; plabel 0 0 y sans-serif normal normal medium #000000 90 center bottom

- 1. groupid : A group number belongs to the graph.
- 2. panelid : A panel number belongs to the graph.
- 3. text :

Specify a location for a title(t), a X-axis(x), Y-axis(y), or Y2axis(s).

- 4. at : A string of the label for the label.
- 5. family : A font family
- 6. style : A font style
- 7. weight : A thickness of the text
- 8. size : A size of the text
- 9. color : A color of the text
- 10. rotation : A place of the title
- 11. ha : Display location of the title (horizontal direction)
- 12. va : Display location of the title (vertical direction)

13. ft :

	To display the chart axis start value,
	0 / NO, 1 / YES
14. lt :	To display the chart axis end value,
	0 / NO, 1 / YES.

7-9. Tick label setting for a Panel- Layout file

For example; pticklabel 0 0 y sans-serif normal normal small #000000 0 right center 0 1

- 1. groupid : A group number belongs to the graph.
- 2. panelid : A panel number belongs to the graph.
- 3. text :

Specify a location for a title(t), a X-axis(x), Y-axis(y), or Y2axis(s).

- 4. family : A font family
- 5. style : A font style
- 6. weight : A thickness of the text
- 7. size : A size of the text
- 8. color : A color for the text
- 9. rotation : A place of the title
- 10. ha : Display location of the title (horizontal direction)
- 11. va : Display location of the title (vertical direction)

7-10. Trace setting- Layout file

For example; trace 1 0 cxmap6_tor C reff Ti 27_4.0575s xy o 4 0 #FF0000 1 0 1

- 1. groupid : A group number belongs to the graph.
- 2. panelid : A panel number belongs to the graph.
- 3. name :

A data name, specify a one of the data (diagname) which recorded in a "diagdict.txt" file.

4. idc :

A shot number, specify a number of the current shot number, or a reference shot number.

- 5. vx : An object for X-axis
- 6. vy : An object for Y-axis
- 7. vz : An object for Z-axis
- 8. idx : index :

If the plot data has more items (time-slice, location information, etc.), choose whichever not specified in the X-axis.

For example:

When you chose the Time (time-slice), you can specify the time variation of any position in the "idx".

When you chose the R (distribution), you can specify the distribution of any time.

9. option :

Specify an available option of which a chosen module has. *For example;*

Within a "tsmap" module, you can set the number of the frames to average as "ntavg-10" for the time direction.

- 10. type : A type of the graph (xy, xy2, or xyz)
- 11. s : A type of the symbol
- 12. ss : A size of the symbol
- 13. Is : A type of the line

- 14. lw : Thickness of the line
- 15. color : color
- 16. factor, offset :

To prevents the curves from overlapping and ensures that each curve can be viewed clearly.

17. show : To display the plot data, 0 / NO, 1 / YES.

* Plot Symbols and Plot Lines Characters

character	aracter description						
========	================================						
-	solid line style						
	dashed line style						
	dash-dot line style						
:	dotted line style						
	point marker						
,	pixel marker						
0	circle marker						
V	triangle_down marker						
٨	triangle_up marker						
<	triangle_left marker						
>	triangle_right marker						
1	tri_down marker						
2	tri_up marker						
3	tri_left marker						
4	tri_right marker						
S	square marker						
р	pentagon marker						
*	star marker						
h	hexagon1 marker						
Н	hexagon2 marker						
+	plus marker						
x	x marker						
D	diamond marker						
d	thin_diamond marker						
I	vline marker						
_	hline marker						

7-11. Active label setting- Layout file

For example; alabel dataid C 0.12 0.97 sans-serif normal bold 32 #000000 0 left center

- 1. name : A module name
- 2. idc : A shot number (current or reference), specify the integer value.
- 3. posx : Display location of the X-axis
- 4. posy : Display location of the Y-axis
- 5. arg :
- 6. family : A font family
- 7. style : A font style
- 8. weight : A thickness of the text
- 9. size : A size of the text
- 10. color : A color of the text
- 11. rotation : A place of the title
- 12. ha : Display location of the title (horizontal direction)
- 13. va : Display location of the title (vertical direction)

7-12. Static label setting- Layout file

For example; slabel 0.05 0.97 LHD sans-serif italic bold 32 #FF0000 0 left center

- 1. posx : Display location of X-axis
- 2. posy : Display location of Y-axis
- 3. text : A title
- 4. family : A font family
- 5. style : A font style
- 6. weight : A thickness of the text
- 7. size : A size of the text
- 8. color : A color of the text
- 9. rotation : A place of the title

- 10. ha : Display location of the title (horizontal direction)
- 11. va : Display location of the title (vertical direction)

8. Server functions

- You will be able to draw the specified drawing data through your client program during the experiment if you set the server mode.
 If you don't specify the shot number (a data-ID or a Ref.ID), a current data of a main screen will plot as a drawing data.
- When the screen comes up blank, there is no data which you specified.

For example;

- Tool > Server > check in the box
 From this setting, the operating system of myVie2 is changed to a client mode.
- There is a sample program named "myViewClient.py" in the folder. You can arrange this program whatever you like.

There're some examples as follows;

a)

C:\TEMP\myView2> python myViewClient.py dataid 101912

Passing a command argument with "dataid" and a shot number which you want to view.

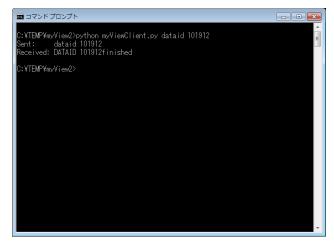


Figure 27 dataid_servermode



Figure 28 server mode screen

b)

C:\TEMP\myView2> python myViewClient.py reload

To draw the specified data with "reload".

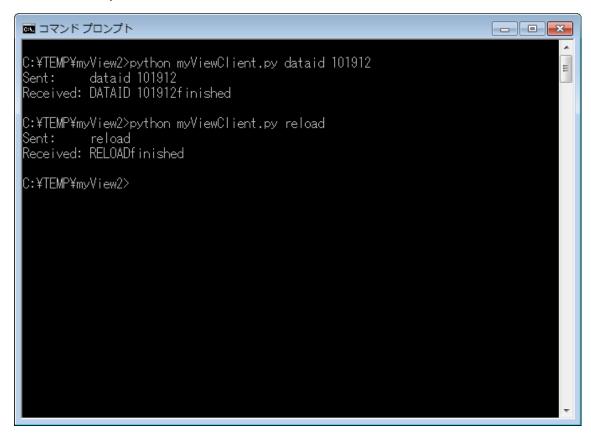


Figure 29 Reload for a server mode

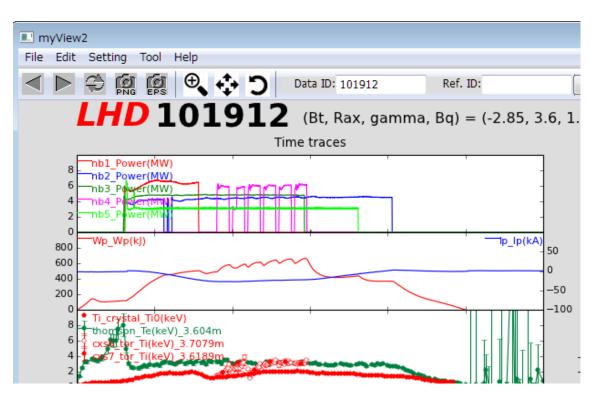


Figure 30 Reload on a Screen

Command	Command Argument	Description
(case insensitive)		
reload		Drawing
dataid	A Shot Number	Update a Data ID
refid	A Shot Number	Update a Ref. ID

*Current Supported Command Reference

9. In conclusion

There is no guarantee that everything you need will work perfectly with myView2. So this user guide explains the ideal operation of the system merely. You may need to the additional work such as making the program ready for execution on the module setting if you needed.