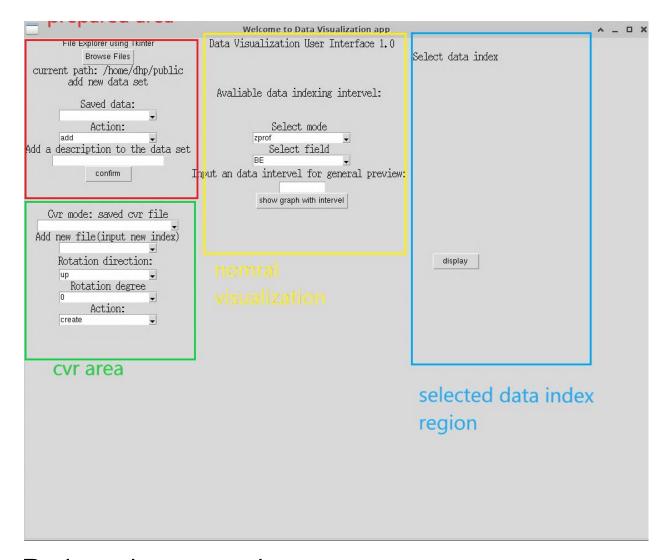
# This is how it look like when open the notebook:

		W	elcome to [	ata Visual	lization ap	р				^ _	пх
curr	File Explorer using Tkinter Browse Files ent path: /home/dhp/pu		ualization	user Int	terface 1		elect dat	a index			
	add new data set Saved data:	Avalial	ole data i	ndexing i	ntervel:						
Add a	Action:  add description to the dat	a set	zprof	field	•						
	confirm	Input an dat	BE		▼ eral pre	view:					
	vr mode: saved cvr fil	<b>*</b>	show graph	with interve							
Add	new file(input new inc	lex)					displa	у			
	Rotation degree  Action:										
	create										

There are four zones in this notebook:



Red one is prepared zone
Yellow one is normal visualization
Blue is selected data index region
Green is cvr area

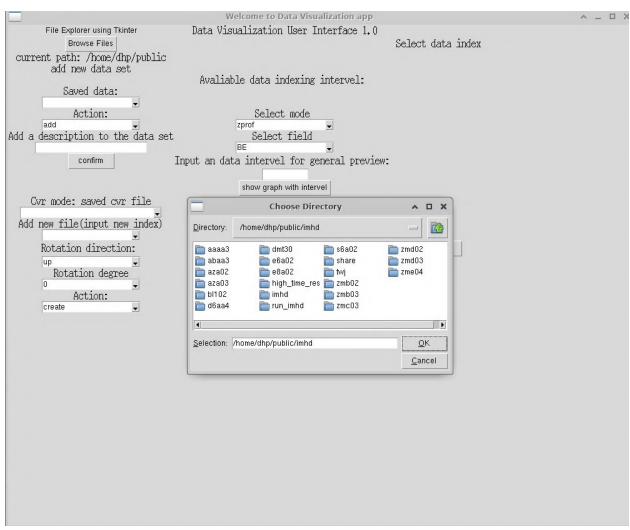
### The correct order for using it is

visualization for interval: Prepared zone-> normal visualization visualization for specific data: Prepared zone-> normal visualization->selected data index

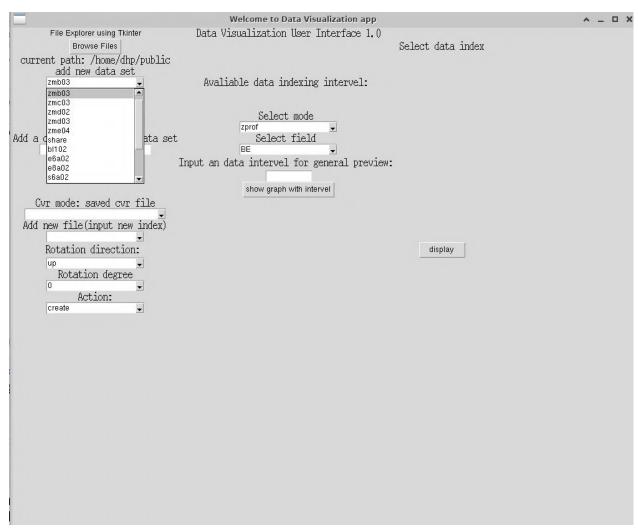
Cvr mode: Prepared zone-> normal visualization -> cvr area

#### For prepared zone:

First you need to select a directory, which includes a list of data directory. For example, in this case, we choose /home/dhp/public/imhd. In imhd directory, it contains all the dataset with five characters. After choosing the directory, then click Ok.



Then all the data is loaded into "add new data set". In ComboBox, there is a list of options you can choose.



Then select one and click "add" in the action box and click confirm

We			^ _	o x					
File Explorer using Tkinter  Browse Files  current path: /panfs/roc/groups/11/jonestw/jiz	an0250/test1		isualizatio	n User I1	nterface 1		elect data	a index	
add new data set s6a02 Saved data:			iable data :	indexing	intervel:				
Action:    Action:   add     Action   Add a description to the data set			zprof	ct mode t field	•				
confirm		Input an o	BE fata interve		▼ neral pre	view:			
Cvr mode: saved cvr file			show grap	h with interv	el				
Add new file(input new index)  Rotation direction:							display		
Rotation degree  Action:									
create <b>y</b>									

Then in the saved data box, s6a02 is shown. It will save here even if you open the program next time.

	W	elcome to Dat	a Visualiza	tion app			^ _	o x
File Explorer using Tkinter  Browse Files  current path: /home/dhp/public add new data set  \$8a02  Saved data: \$8a02  Action:  USE  Add a description to the data set  confirm   Cvr mode: saved cvr file  Add new file(input new index)	Data Vis Avalia t	ole data inde 0-659 1637 Select of Select f BE ta intervel in	exing inter- exing inter- 7-1900 mode	eface 1.0	t data index			
Rotation direction:  up  Rotation degree  0					display			
Action: create confirm								

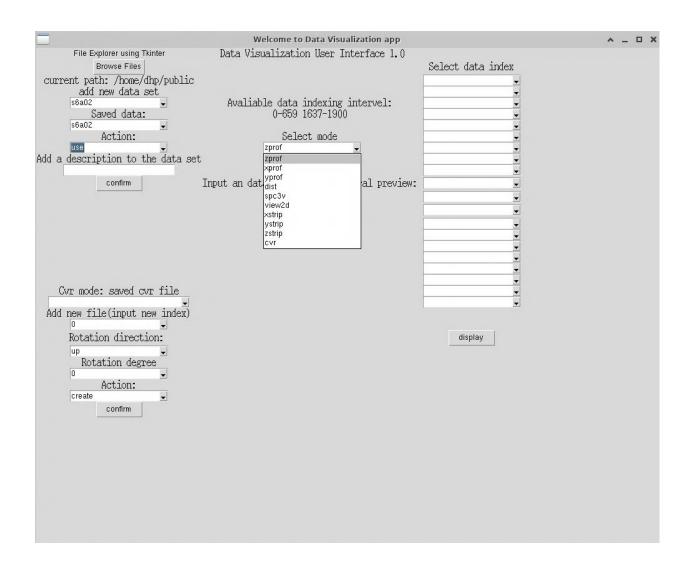
At this point, you may want to use this dataset. Select "s6a02" from saved data, then choose action "use". This is what is look like after clicking "confirm".

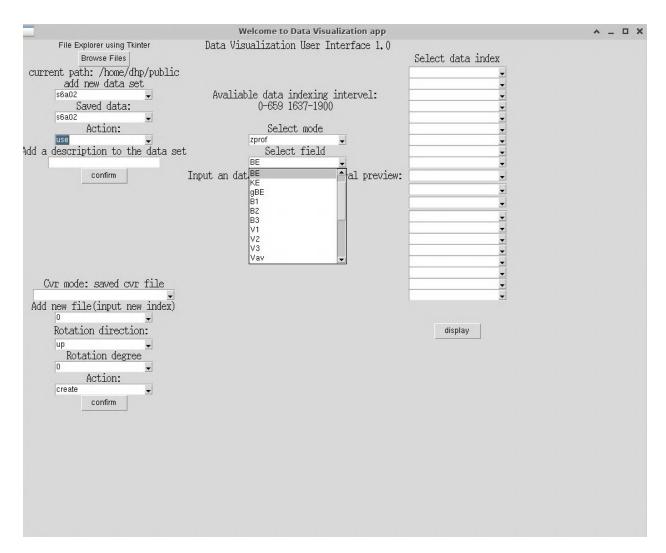
w	elcome to Da	ta Visualizati	on app			^	_ D X
File Explorer using Tkinter  Browse Files  current path: /panfs/roc/groups/11/jonestw/ji  add new data set  s6a02  Saved data:  s6a02  Action:  use  Add a description to the data set  confirm	an0250/test	Data Vi 1 Avali	sualization able data i 0-659 1 Select zprof Select BE ata interve	ndexing int 637-1900 t mode t field	ervel:	Select data in	
Cvr mode: saved cvr file  Add new file(input new index)  Rotation direction:  up  Rotation degree						display	
0 ♣ Action: create ♣ confirm							

The available data indexing interval appear below the text. It means what data index is available from this dataset. In s6a02, you can only choose data index 0-659 and 1637-1900, or you will get a segmentation fault.

	V	Velcome to Dat	ta Visualizat	ion app				^ _ D X
File Explorer using Tkinter  Browse Files  current path: /home/dhp/public  add new data set		sualization (			Select	data index		
s8a02 Saved data: s8a02 Action:	Avalia	ble data ind 0-659 163 Select	7-1900	rvel:				
Add a description to the data se		Select 1 BE ta intervel	field	l preview:				
		show graph w	ith intervel			5		
Cvr mode: saved cvr file								
Add new file(input new index)  Rotation direction:  up  Rotation degree					di	splay	and the second	
Action:								

The next step is select mode and field: There are a few options which are fixed.

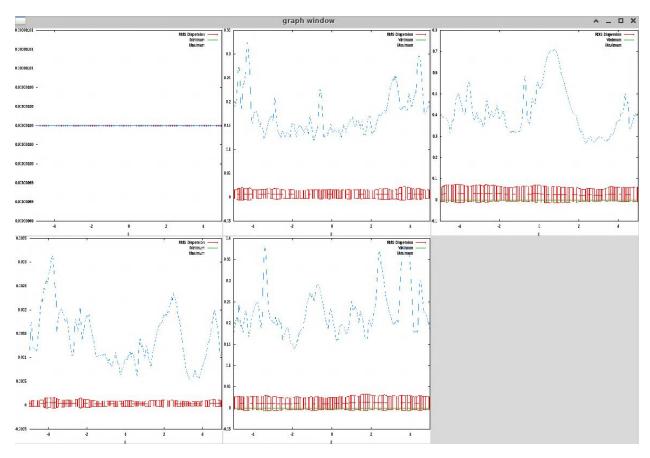




After selecting the mode and field, this is what is look like:

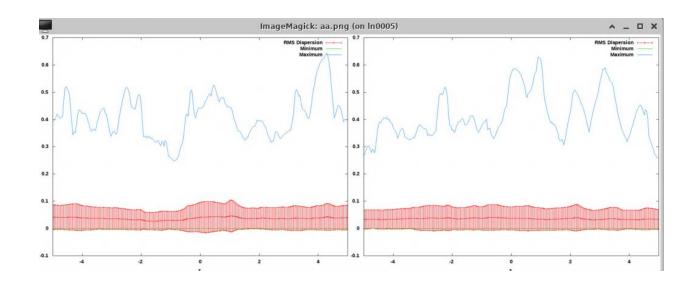
Welcome t	to Data Visualization app	^ _ D X
File Explorer using Tkinter  Browse Files  current path: /panfs/roc/groups/11/jonestw/jian0250/-  add new data set  s6a02  Saved data:  s6a02  Action:  Use  Add a description to the data set  confirm	Data Visualization User Interface 1.0	Select data index  1800  1900
Cvr mode: saved cvr file  Add new file(input new index)  Rotation direction:  up  Rotation degree  Action:  create  confirm		display

You can choose "interval mode" or "select data index mode". For interval mode, simply input an interval number in the text box. It will sample over all the data interval by this value. In this case (s6a02), if we input a interval value of 300, it will demonstrate figures of 0,300,600,1800 Here is an example:



For the selected mode, input a number in the interval or choose from the combo box. You can choose up to 20 images at the same time. Then the figures will be displayed.

Here is an example: choose 1800 and 1900:

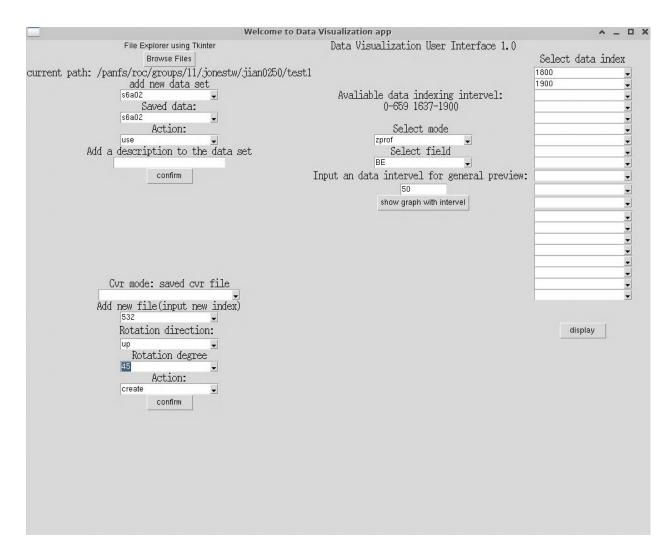


## Then If you want start with CVR mode:

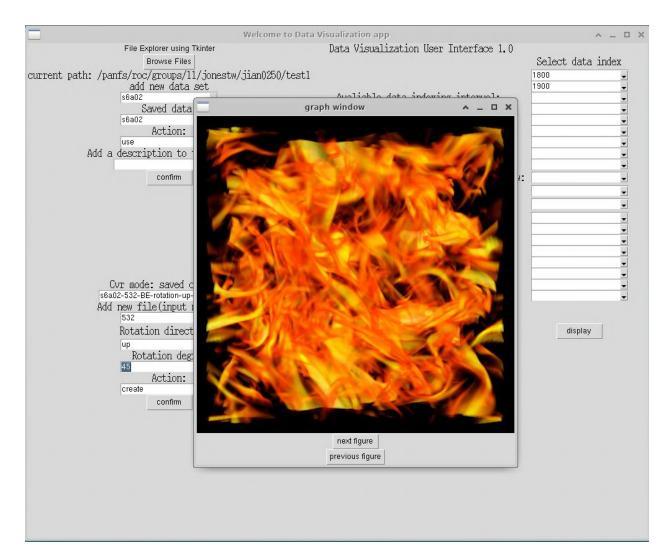
## Three parameter will need:

- 1.Input new index, the data index you want manipulate
- 2. Rotation direction, up, eye or horizontal
- 3. Rotation degree, range from 0 to 360.

  Rotation degree affects the frame number. If you select a degree of 90, then there will be 4 frames. If selected 30, it will have 12 frames.



After filling three parameters, choose "create" and click "confirm".



An extra window will appear, you can simply click the next figure or previous figure to rotate around 360 degrees. But it will stop if you reach the end of the figures.