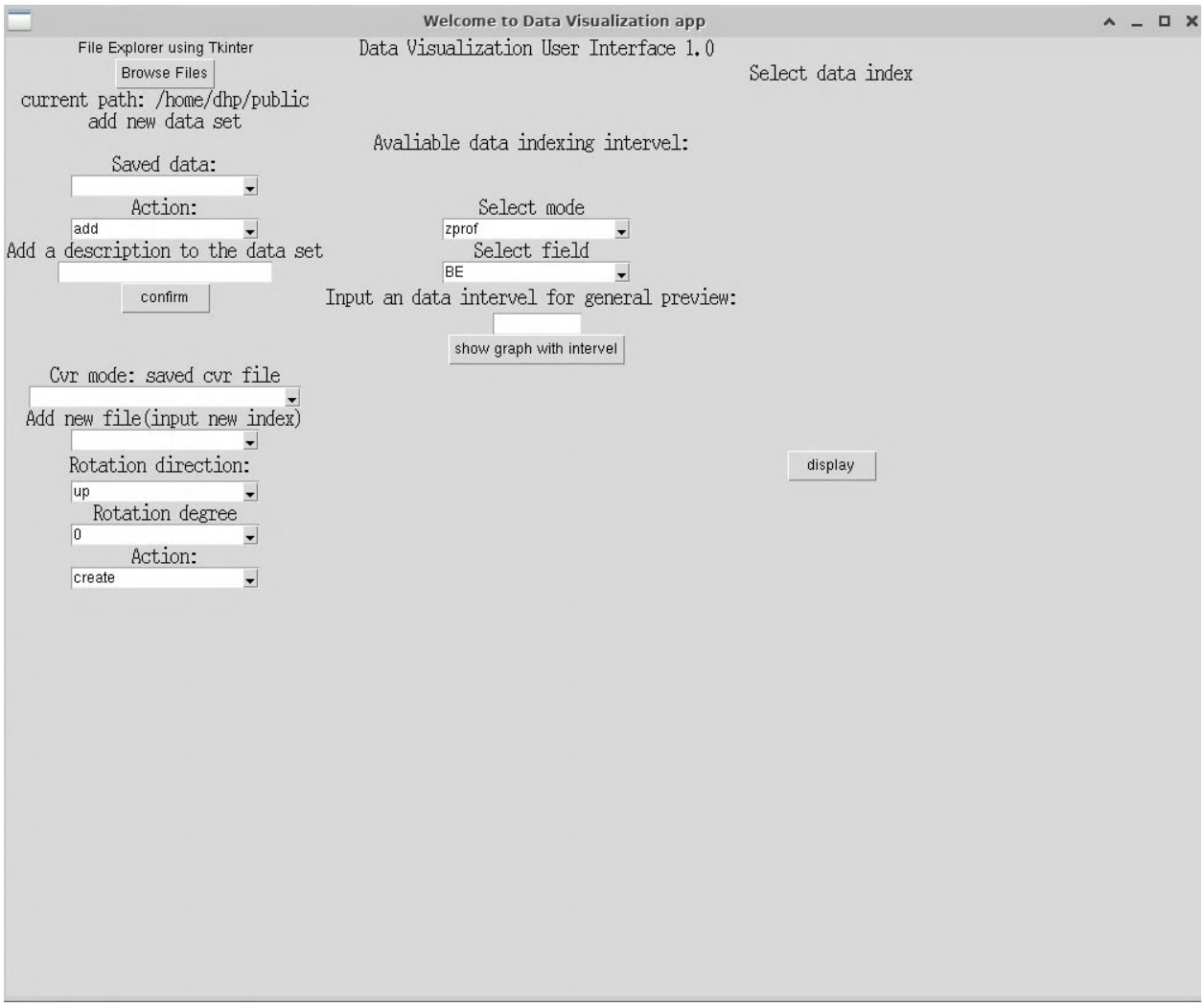
Before opening the program, there is some prepared work to do.
First, download the ee.sh and available.sh. Then put these shell files in the same directory as the user_interface.py or user_interface.ipynb.

Then run the notebook or py file.
This is how it look like when open the notebook:



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

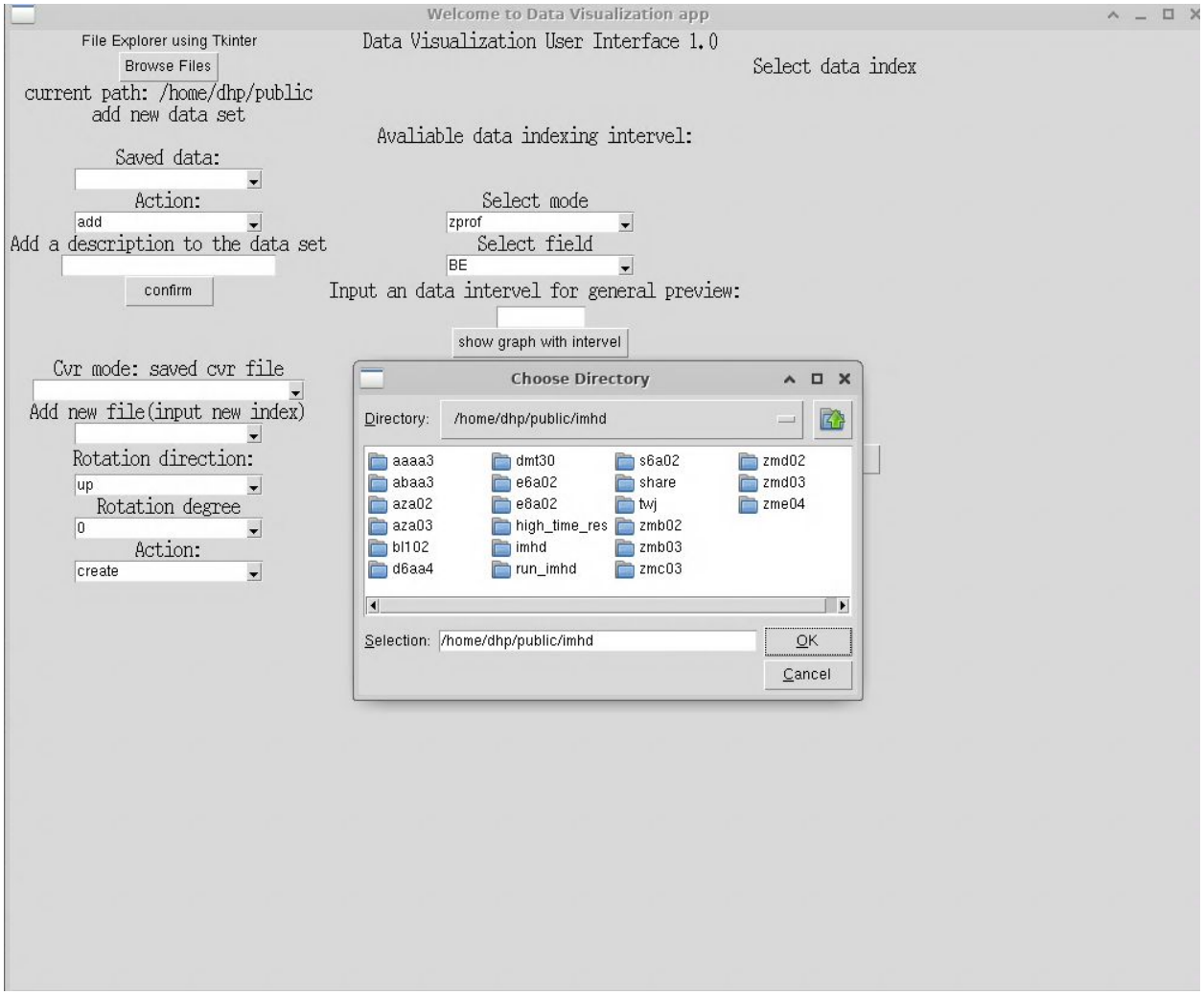
The correct order for using it is

visualization for interval: Prepared zone-> normal visualization

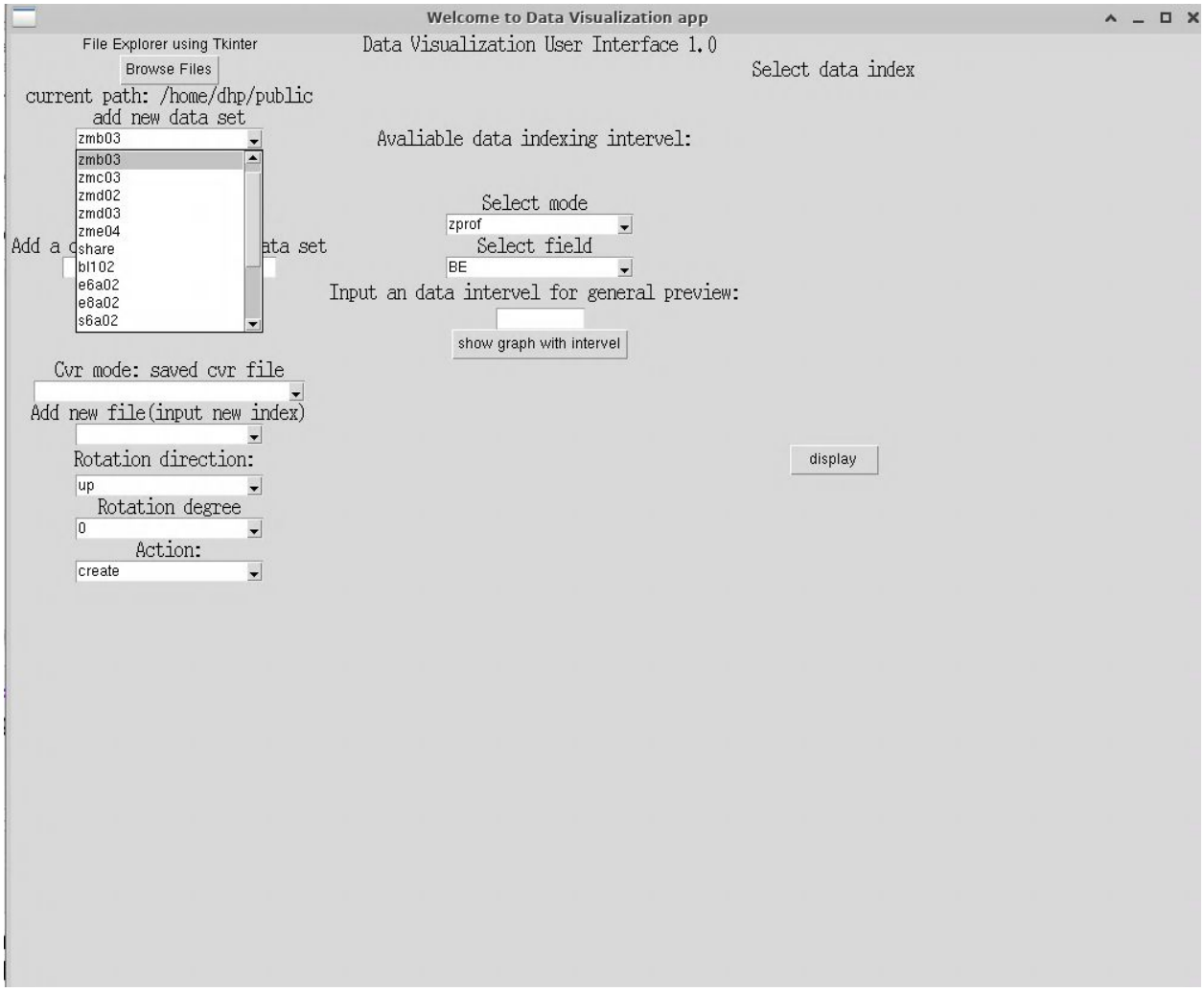
visualization for specific data: Prepared zone-> normal visualization->selected data index
Cvr mode: Prepared zone-> normal visualization -> cvr area

For prepared zone:

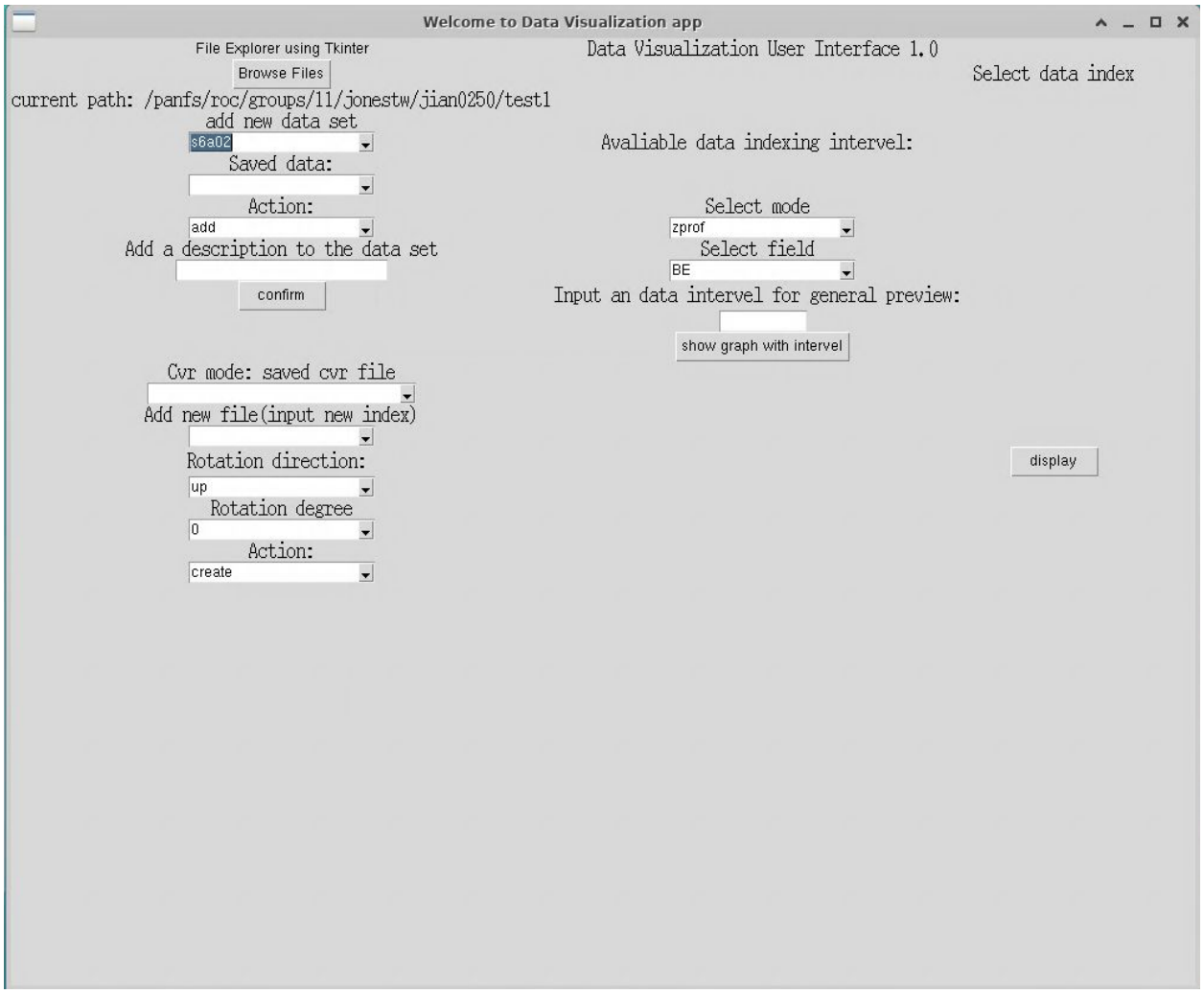
First you need to select a directory, which includes a list of data directory. For example, in this case, we choose /home/dhp/public/imhd. In imhd directory, it contains all the dataset with five characters. After choosing the directory, then click Ok.



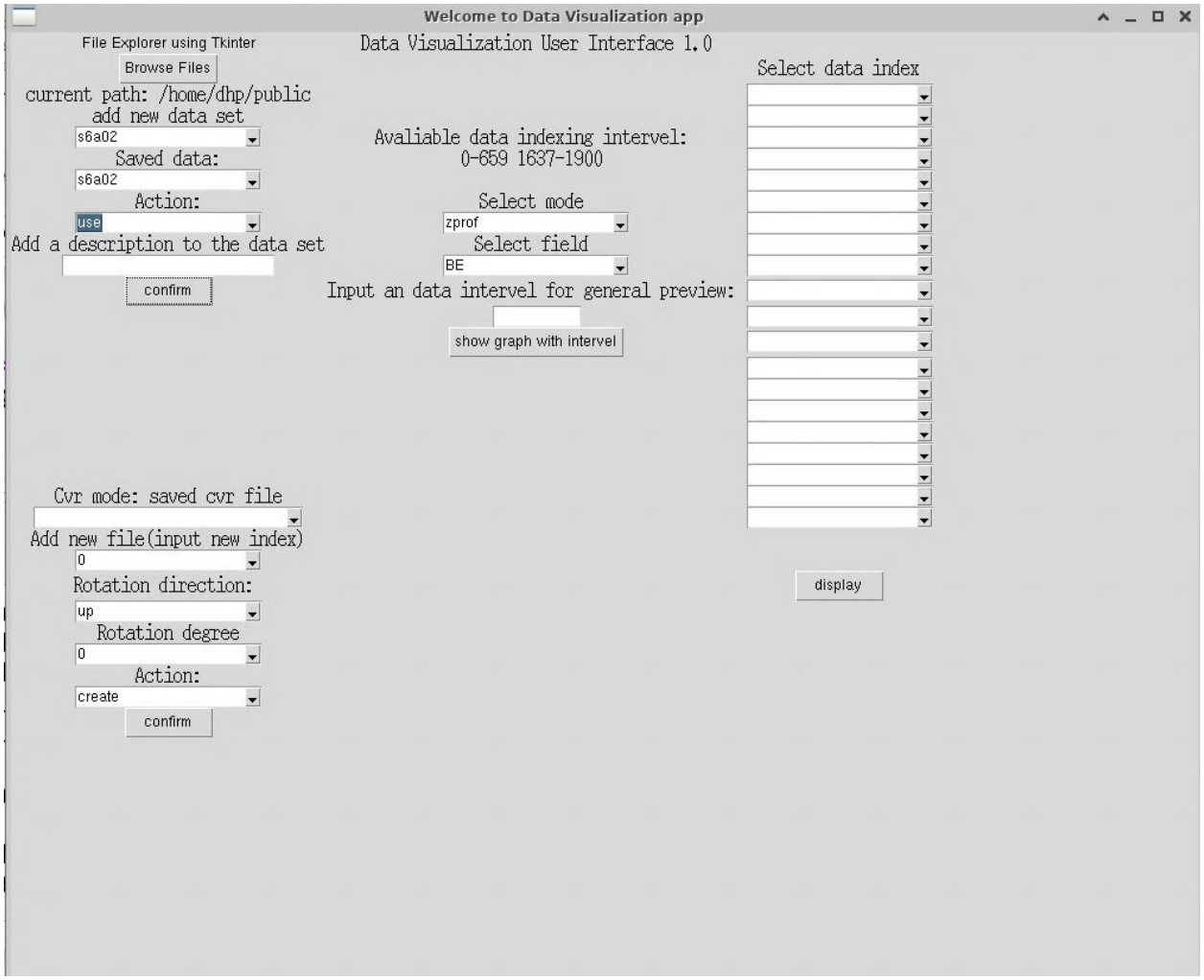
Then all the data is loaded into “add new data set”. In ComboBox, there is a list of options you can choose.



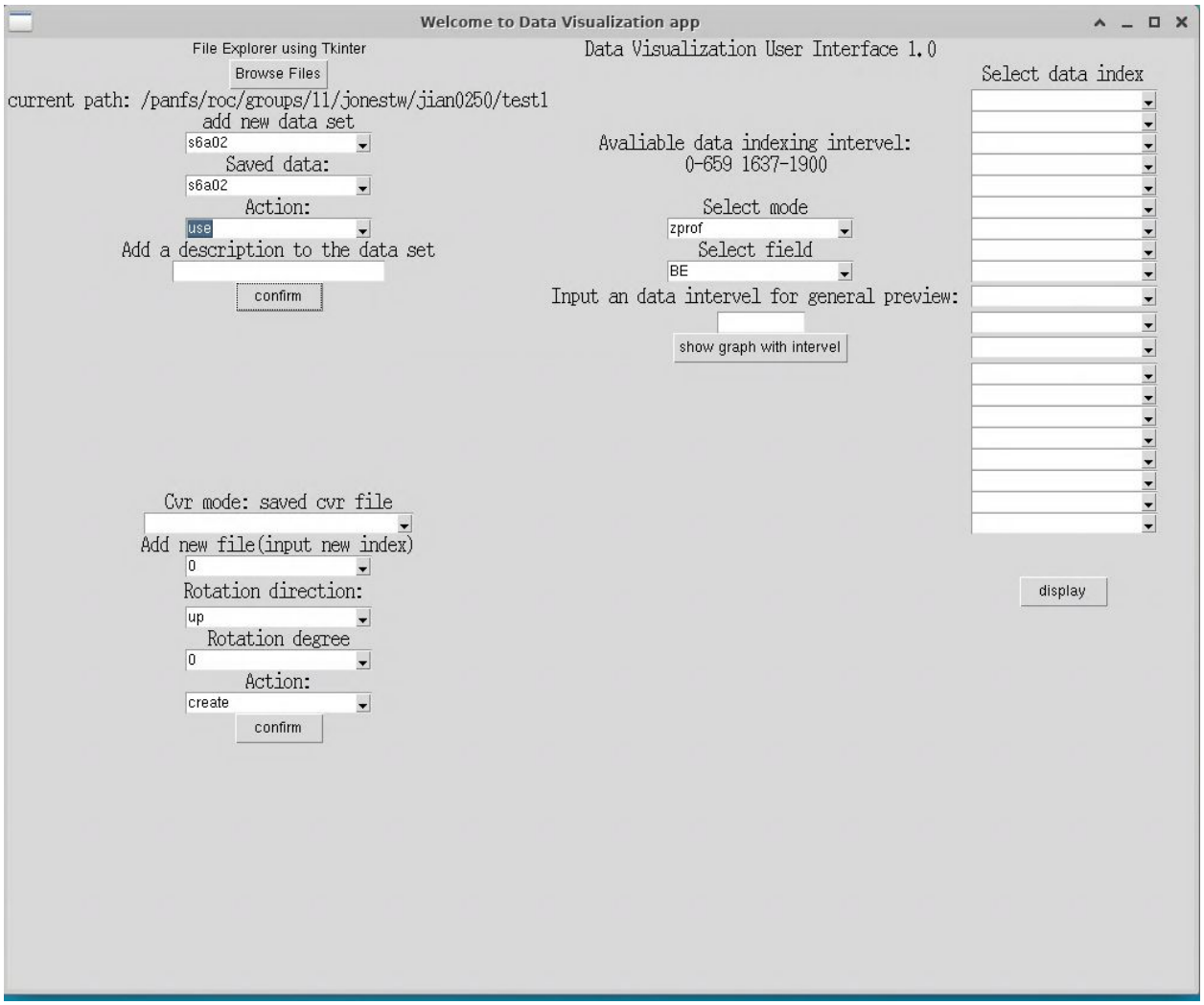
Then select one and click “add” in the action box and click confirm



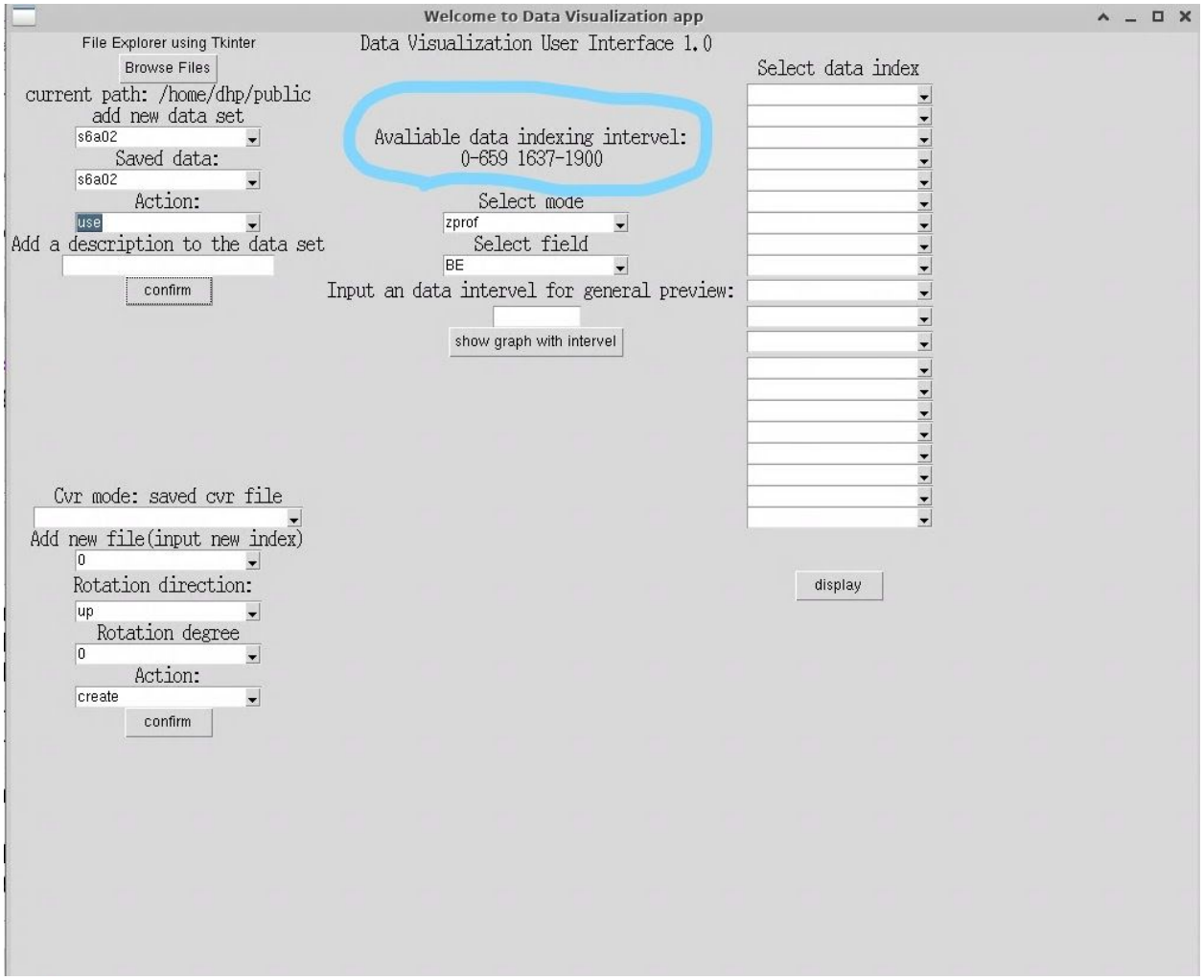
Then in the saved data box, s6a02 is shown. It will save here even if you open the program next time.



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”.

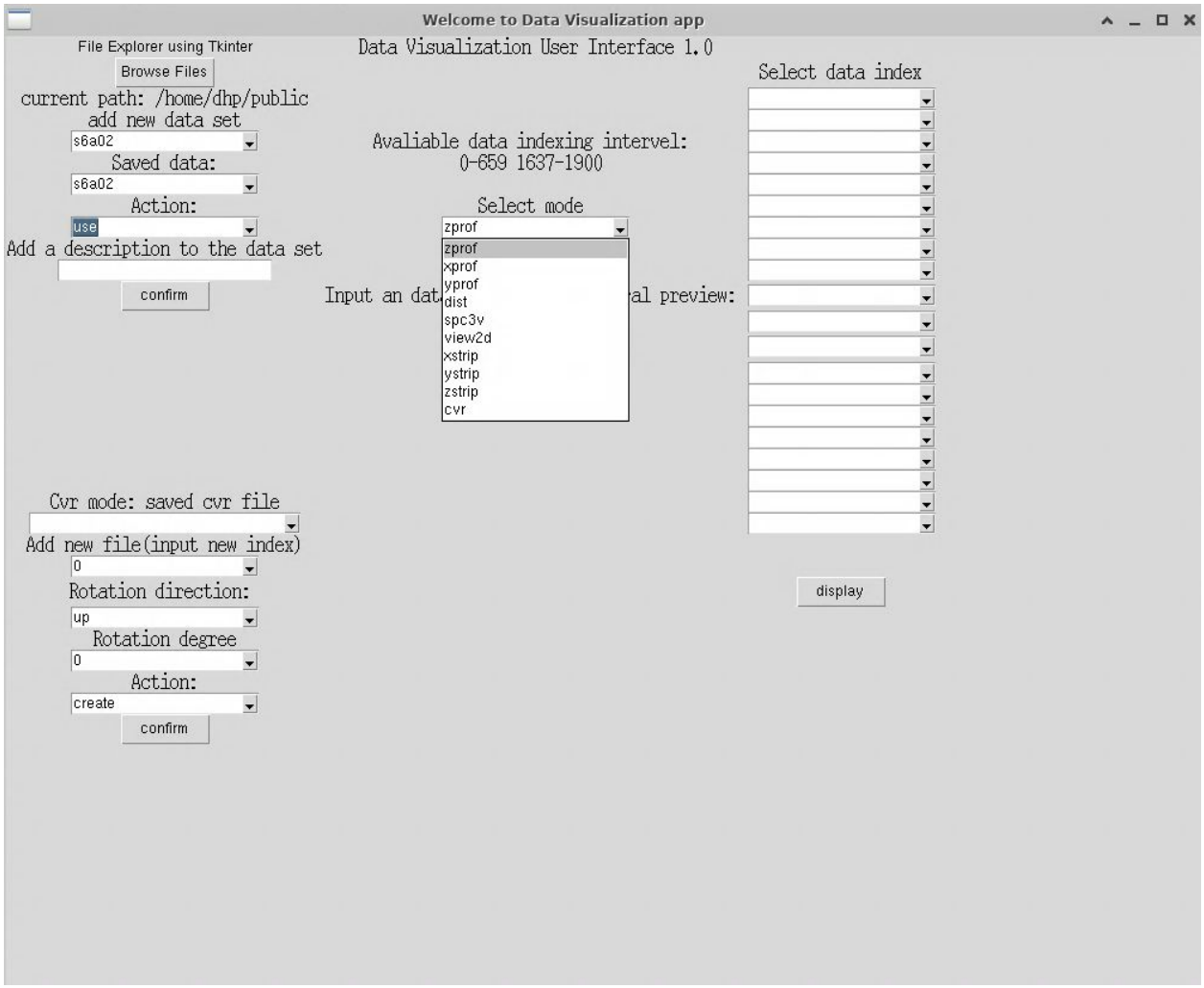


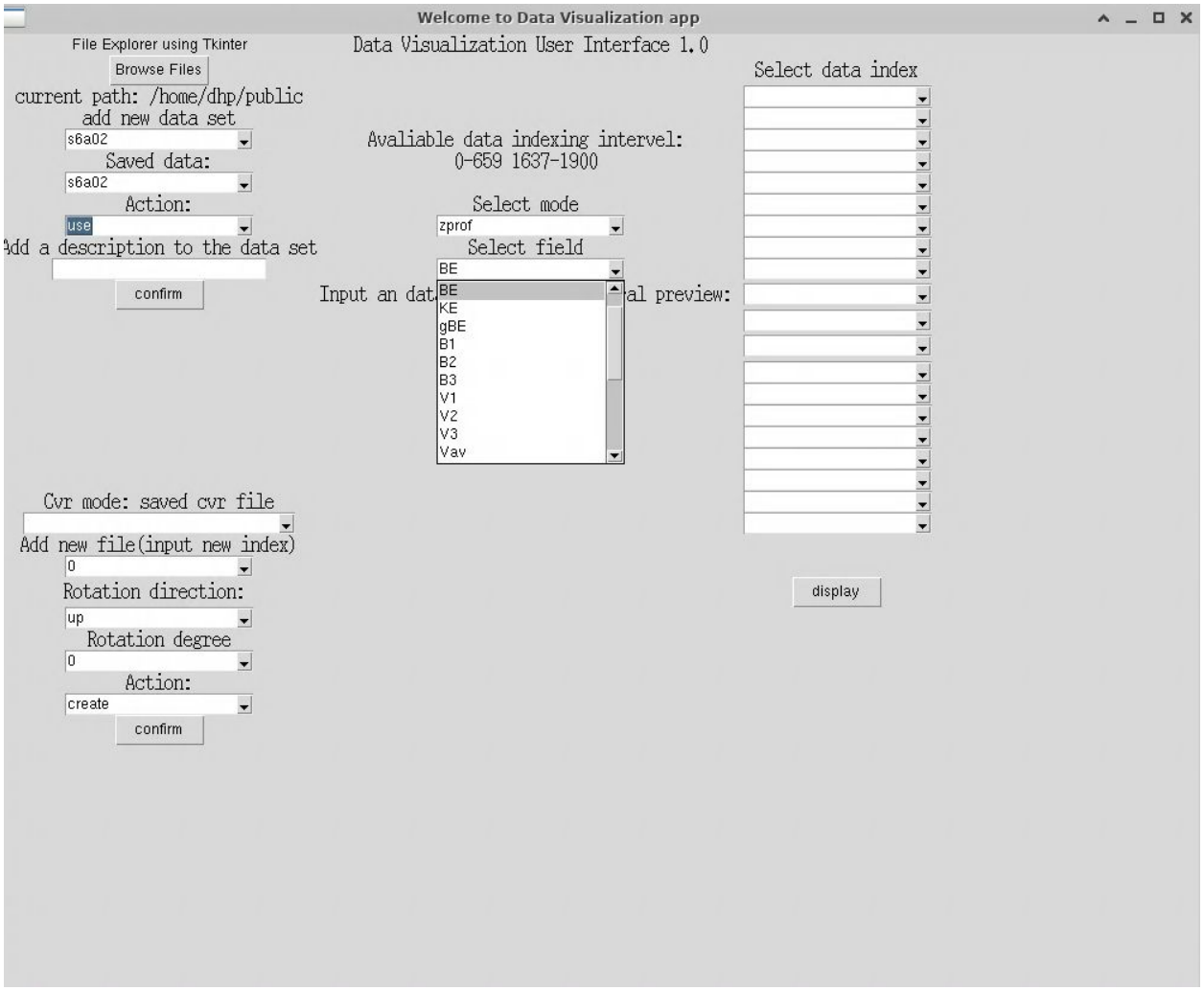
The available data indexing interval appear below the text. It means what data index is available from this dataset. In s6a02, you can only choose data index 0-659 and 1637-1900, or you will get a segmentation fault.



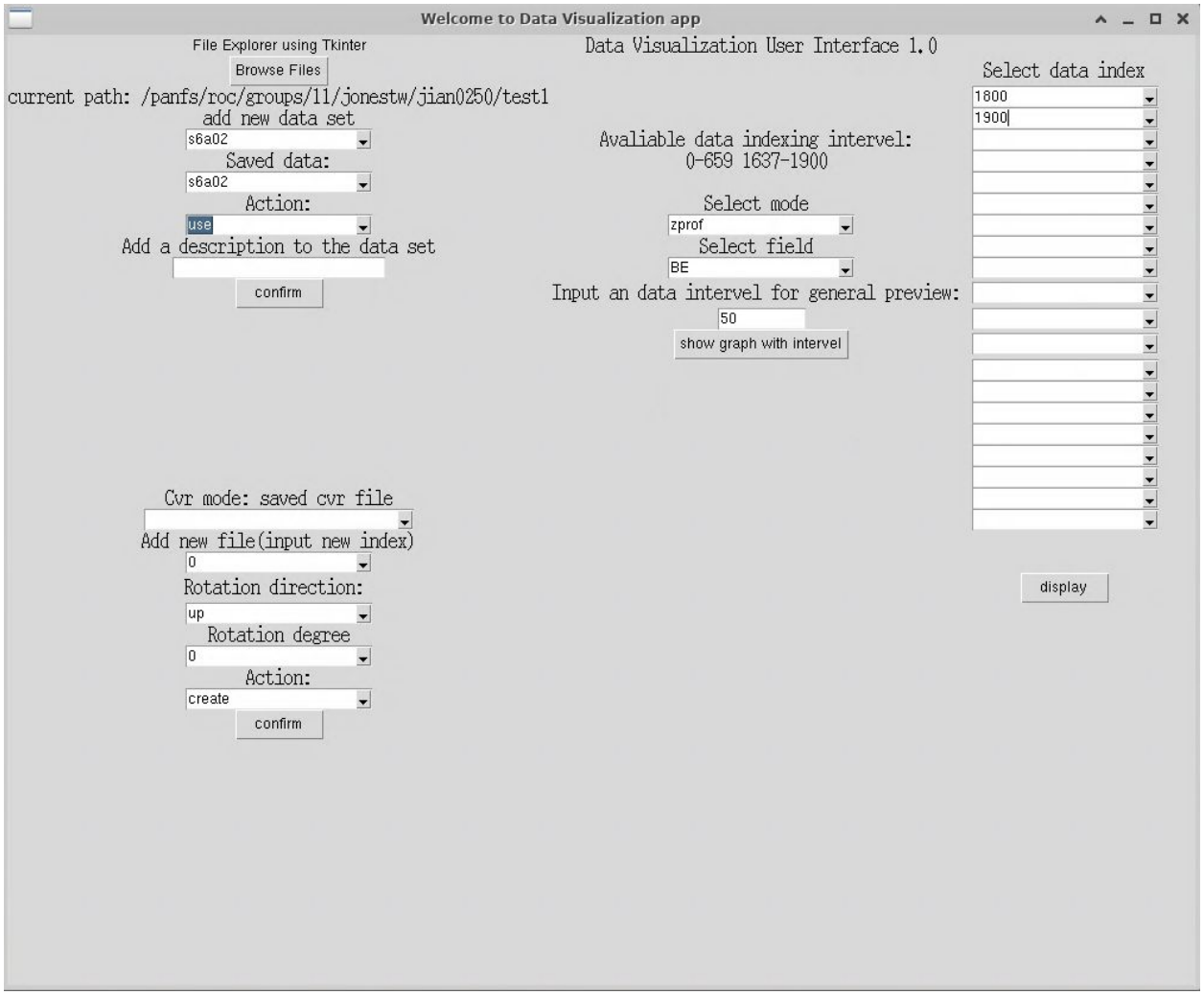
The next step is select mode and field:

There are a few options which are fixed.

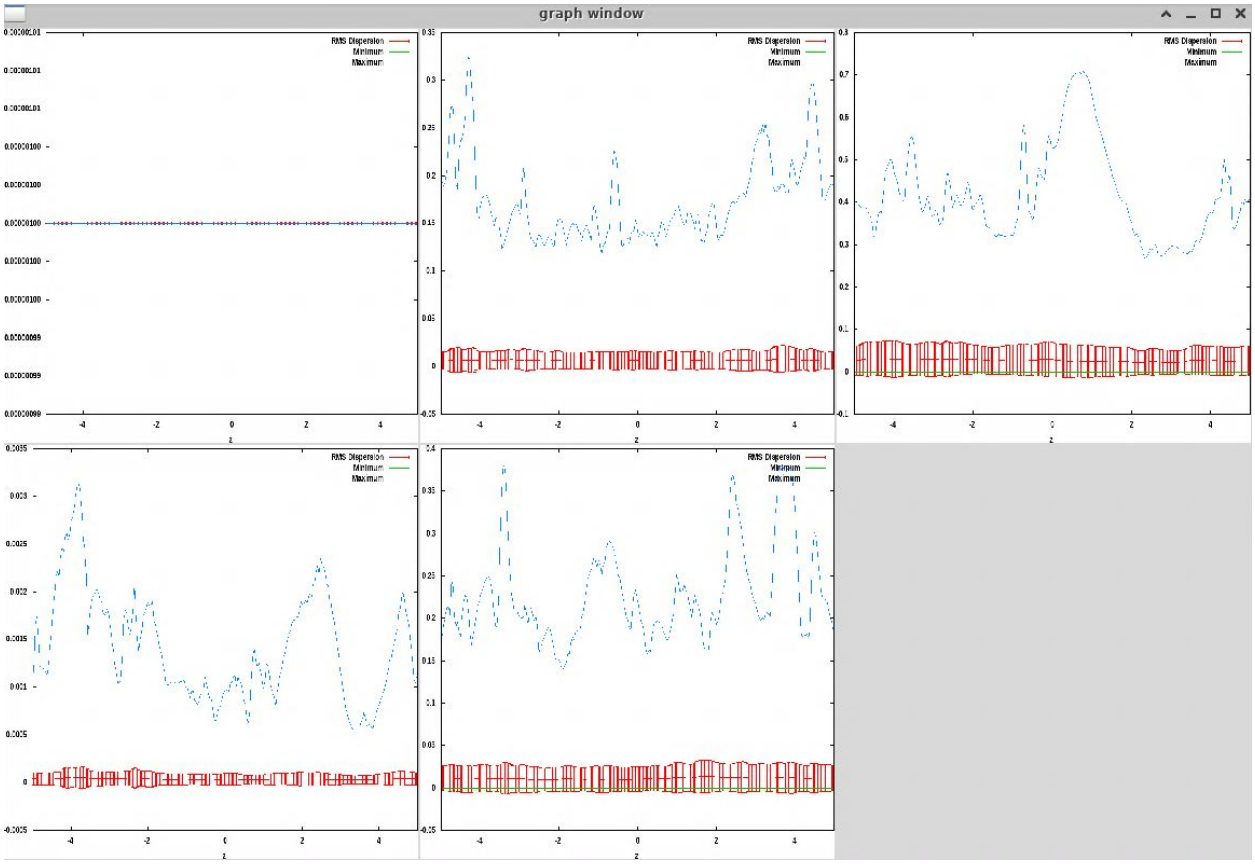

Welcome to Data Visualization app
File Explorer using Tkinter
Browse Files
current path: /home/dhp/public
add new data set
s6a02
Saved data:
s6a02
Action:
use
Add a description to the data set
confirm
Data Visualization User Interface 1.0
Avaliable data indexing intervel:
0-659 1637-1900
Select mode
zprof
zprof
xprof
yprof
dist
spc3v
view2d
xstrip
ystrip
zstrip
cvr
Input an dat
al preview:
Select data index
Cvr mode: saved cvr file
Add new file(input new index)
0
Rotation direction:
up
Rotation degree
0
Action:
create
confirm
display



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

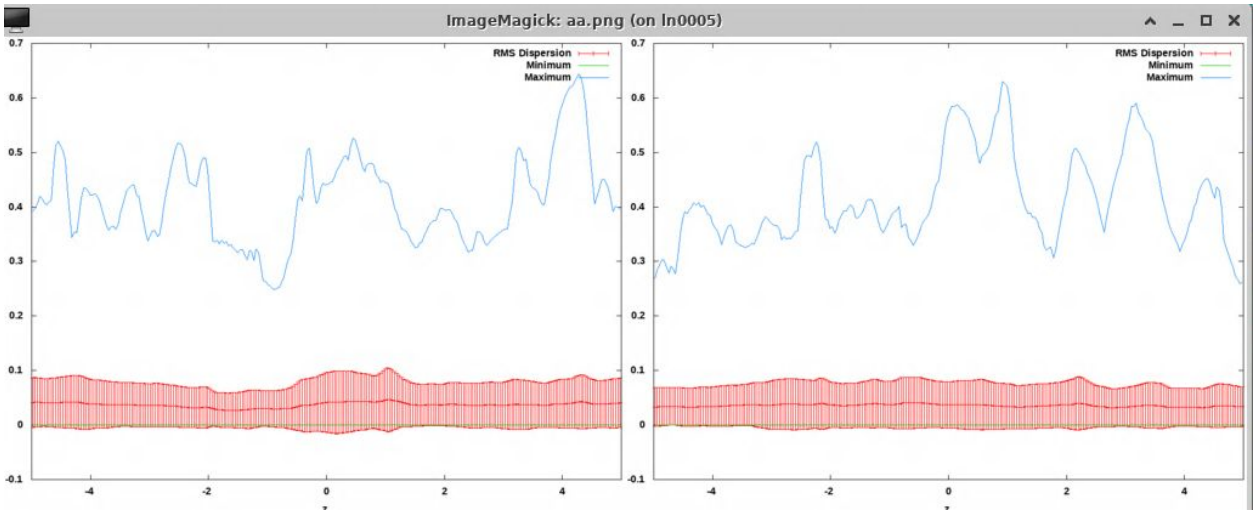


You can choose “interval mode” or “select data index mode”. For interval mode, simply input an interval number in the text box. It will sample over all the data interval by this value. In this case (s6a02), if we input a interval value of 300, it will demonstrate figures of 0,300,600,1800
Here is an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

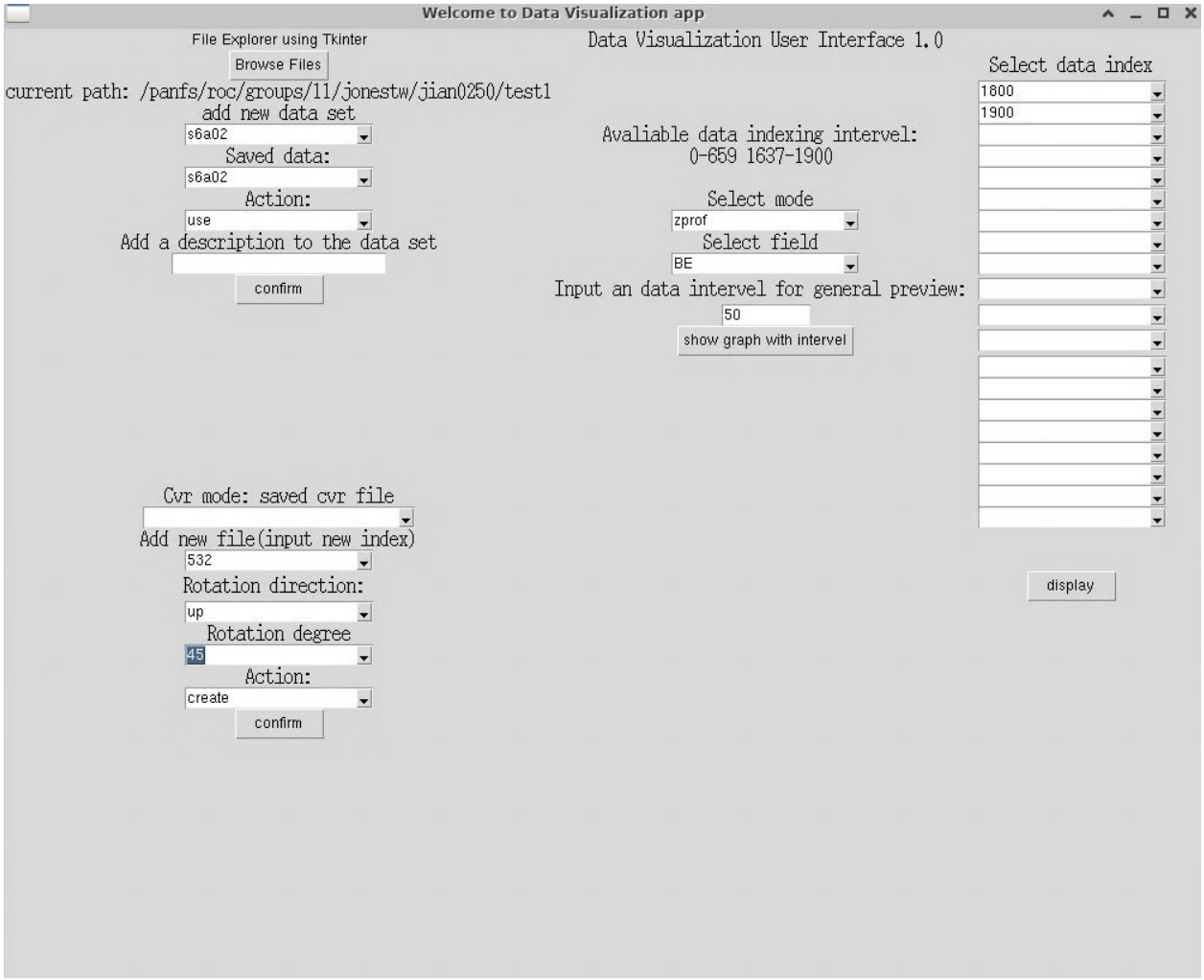
Here is an example: choose 1800 and 1900:



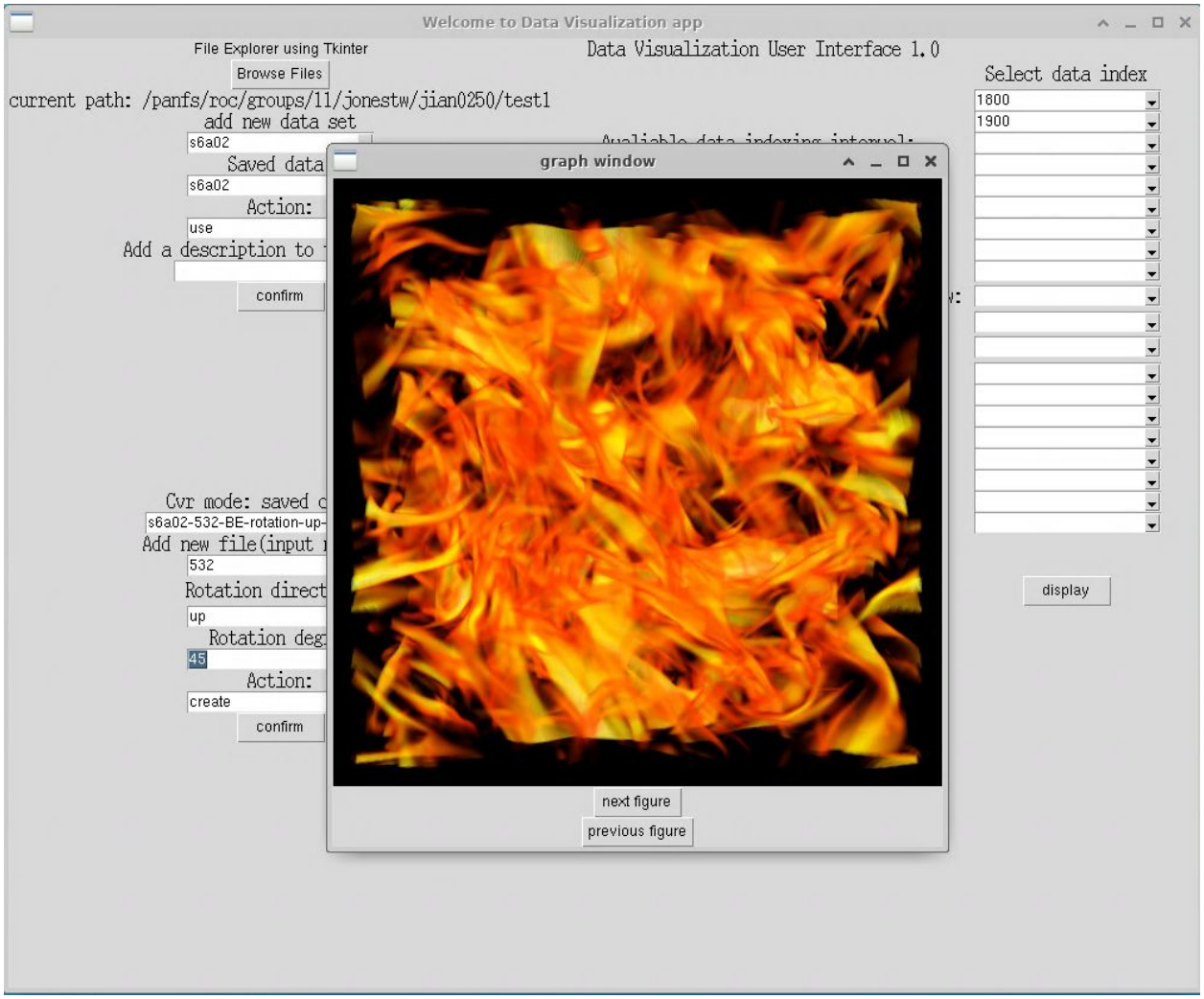
Then If you want start with CVR mode:

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.